EXP™

The Game of Technological Chaos™



MERV ENGINEERING CORP



The Game of Technological Chaos™
Version 4.01

Version 4.01 Copywrite © 1993 by Hugh MacLeod
Version 3.01 Copywrite © 1990 by Hugh MacLeod
Version 2 Copywrite © 1983 by Hugh MacLeod

All rights reserved. No copies may be made, in whole or in part, without the expressed written consent of the author. This includes digitizing onto super computers, or the ink quill copying made by small furry gremlins.

The Game of Technological Chaos, EXP and the EXP logo are all trademarks of MERV Engineering, Inc.

Design Credits:

Written and Designed by H. MacLeod
Editing: Efrosini Drimoussis, Nick Fleming, Afton Lewis, Jason Montgomery, Bruce Murray, Allen Sens, James MacLeod, Patrick Redding, Dave New
Art Direction: Mike Jackson
Rule Testers: Clint Hocking, Jason Montgomery, Bruce Murray, Allen Sens, James MacLeod
Play Testers: Clint Hocking, Jason Montgomery, Bruce Murray, Allen Sens, James Macleod, Ilmar Weemes, Stephen White, Afton Lewis, Derek Krezeski, Nick Lacoumantas, Randy Parris, Anyone that ever complained, Jason Gilley, Nick Langford, Nick Fleming, Nick Kwan, Mark Kwan, Greg Dunn, Jason Liebert, Dave Bulman, John Sirmul, Karl Innes, Joe Jeffries, plus a few more.
Illustrators: Mike Jackson, Patrick Redding, Andrew Brechan, Jim Nelson, Eric Hotz, Peggy Lynn McAasic, Duncan X, Mike Deane, Warren Oddson
Desktop Publishing: Patrick Redding



The Science Fantasy game

H. MacLeod

Copyright 1983

EXP: The Game of Technological Chaos
Table of Contents

Section I: Persona Creation

Ch 1	EXP	1
Ch 2	Players & Personas	7
Ch 3	Attributes	11
Ch 4	Anthropomorphs	21
Ch 5	Robots	39
Ch 6	Aliens	77
Ch 7	Mutations	97
Ch 8	Classes	103
Ch 9	Combat Tables	135
Ch 10	Incidentals	141
Ch 11	Referee Personas	145

Section II Non-Combat Rules

Ch 12	Time & Movement	169
Ch 13	Health	177
Ch 14	Performance Tables	185
Ch 15	Experience	201
Ch 16	Special Rolls	211
Ch 17	Driving	219
Ch 18	Encumbrance	227
Ch 19	Special Terrain	231
Ch 20	Artifact Identification	249
Ch 21	Equipment Damage	255
Ch 22	Negotiation	259
Ch 23	Money	263
Ch 24	Equipment Costs	265

Section III Combat Rules

Ch 25	Introduction to Combat	273
Ch 26	Theatrical Combat	277
Ch 27	Tactical Combat	283
Ch 28	Weapons	289
Ch 29	Armour Rating	295
Ch 30	Grenade & Aerosol Combat	303
Ch 31	Robotic Combat	309
Ch 32	Alien Combat	317
Ch 33	Initiative	319
Ch 34	Ambush	325
Ch 35	Combat Adjustments	327
Ch 36	Hit Locations	335
Ch 37	Non-Lethal Combat	339
Ch 38	Spacevehicle Combat	343
Ch 39	Other Vehicle Combat	359

Section IIII: Hardware

Ch 40	Technology Basics	365
Ch 41	Outline of TOYS	367
Ch 42	Armour	373
Ch 43	Artillery	393
Ch 44	Bombs	401
Ch 45	Grenades & Aerosols	411
Ch 46	Guns	433
Ch 47	Medical Equipment	455
Ch 48	Miscellaneous Equipment	479
Ch 49	Miscellaneous Weapons	513
Ch 50	Pharmaceuticals	527
Ch 51	Random Junque	539
Ch 52	Spacevehicles	549
Ch 53	Treasure	567
Ch 54	Vehicles	573

Section V: Software

Ch 55	Support Equipment	585
Ch 56	Tech Levels	595
Ch 57	Multi-Equipment	599

Section VI: Mutations

Ch 58	Mental Mutations	601
Ch 59	Physical Mutations	647

Appendices

Ap A	Glossary of Abbreviations	683
Ap B	Glossary of Terms	685
Ap C	Pre-Rolled Toys	691
Ap D	Pre-Rolled Personas	715
Ap E	Scenario	757
	The INDEX	765

Chapter 1
EXP

Welcome to the inside of our heads. **EXP** may just be another piece of evidence that obsessive personality traits can result in concrete objects. Regardless, the game is here and all of those people who waited so impatiently for it can now start in on all the errors that managed to slip through this version. We actually left some errors in the production for marketing purposes, but we know that this excuse will only work so often. Anyway, this is it; it is all here. There will be no more 'essential supplements', since we have all gone on to real jobs, real families, etc. etc. It will take all our spare time just to maintain the news letter that we intend to offer.

There is easily enough original and interrelated material in **EXP** for about 2 to 3 years of play. By that time you may have matured, found out about dating, or discovered some other game to play. There are lots of companies that dribble out their ideas in glossy productions, and we recommend that you support these people, if you can afford it.

Why did we do it? Unlike the proverbial mountain, we did **EXP** because it wasn't there. The game is unlike anything that is on the market today. It is a complete game system for one single purchase, it is packed with as much art as we could afford, and it is completely referenced to all the relevant movies/books we could watch/read. If it doesn't appear in here it is either perverted, racist, sexist, or you should publish it yourself.

You are responsible for making up your own campaign. This is one of the essential brain exercises that makes gaming worthwhile. If you have trouble being creative then refer to the hundreds of science fiction scenarios that exist for the dozens of other science fiction role playing games.

EXP, the game of technological chaos, is primarily a game. It is most easily described as an interactive game where the players attempt to solve puzzles that involve simultaneously existing yet highly varied levels of technological advancement.

Any person reading a novel, or simply sitting in class daydreaming, can have vicarious thrills about high tech adventure. These visions cannot be shared amongst friends or acquaintances with any great ease. The rules of **EXP** allow a group to share an experience that can have as intricate a theme as a novel, or as personal an experience as a daydream.

EXP is also a reference book. It could be considered a veritable tome of every imaginable speculative fiction theme that has, will, or could exist. Thankfully the human imagination can still surpass the static nature of any book. There is a system for creating personas that can imitate nearly any pulp fiction protagonist. The technology section is so complete that pretty near (how is that for an exact term) any devious device or planet saving contraption either exists ready made, or can be concocted through multi-equipment.

By now it is pretty obvious that this game has a science fiction bent. However players do not require any science skills what-so-ever to enjoy this game. All the research and mathematical scut work has already been done. Any of those gaming areas where the rules were becoming too complex, a dice roll has been substituted. The most important skills for role playing in **EXP** include your ability to articulate what you are doing, visualize what others are trying to articulate, and the ability to work with others. There is still room for hard science in **EXP** and, reflecting the flexibility of all role-playing games, if your group likes to calculate orbits, trajectories or circuit designs then go to it!

More importantly **EXP** is pseudo-science, science fantasy or even silly science. The races, rules, and technology are tongue in cheek and bordering on the ridiculous. There is an element of randomness that is entrenched into all of the game's systems, especially the technological object yield system (toys), and the persona generation system (aliens, robots, anthropomorphs). This

random factor ensures that **EXP** proudly crosses the border of ridiculous, and wallows in the pink and green light of the absurd. While laughing at the nuclear powered toasters, or combat robots with welcome mats the players also realize that it's these satirical madcap mechanistic devices that are going to help them solve their gaming problems. **EXP** is the game of technological chaos.

Structure of This Book

The sentence that first describes **EXP** is in many ways an understatement. "It is most easily described as an interactive game where the players attempt to solve puzzles that involve simultaneously existing yet highly varied levels of technological advancement." Each component of the sentence represents many chapters in the book. Always remember that these chapters are mostly for reference; the only essential ones are chapters 3, 4, 8, 14 and 27. The remaining 54 chapters are really just embellishments.

It is not an exaggeration to say that the remaining chapters are embellishments. This does not mean that they are not useful, it just means that they are not essential to the game. **EXP** is, above all, designed to be a fun method to demonstrate the follies of technological disparity. The interactive part is described in chapters 12 through 59, where the outlines for players attempting to do out of the ordinary things are given (fly spacevehicles or repair robots). The first 11 chapters are devoted to the creation of a player's persona (a playing piece so to speak). Chapters 12 through 39 detail the weird mechanisms by which the personas get things done. The remaining chapters 40 to 59 of the book are devoted to the random generation of technology, which can present itself in many weird and wonderful ways.

The solutions (if there really are solutions) arise from the synergy of the all the parts, and the skill of the players involved. The fun of **EXP** is in the adventure that the puzzles represent and arises between the players of the game, and it is above and beyond the rules and the book itself.

There will be several kinds of people reading this introduction: The uninitiated (neophytes), concerned parents, and the experienced players. All of whom are after separate kinds of information that is hidden in this introductory chapter.

Neophytes

For the uninitiated this chapter will not teach you how to play **EXP**, or any other role-playing game for that matter. You certainly can learn how to role-play with **EXP**. The game lends itself to considerable fun even in the face of extreme ignorance. The rules are written in a fashion that assumes each new concept is a new concept, and not something that is intrinsically obvious to experienced gamers. Experienced gamers may occasionally find this form of rule introduction irritating. Experienced gamers already know how to hone in on the important information, and probably aren't reading this chapter anyhow.

Newcomers to role-playing must be complimented on picking up such a voluminous tome as this and expect to have fun with it. The book looks and feels very much like a textbook, a feature that would turn away many people. You must be complimented for getting this far. Enough compliments, and time for some information.

EXP is large because it is a reference manual for a fantasy world that its players create. No one, least of all the author, has this game committed to memory. The rules are mere guidelines giving direction to the possible outcome of situations that cannot be prepared for.

For instance in most science fiction movies when the protagonist (Tagon is a benevolent emperor) fires her lazer pistol at the antagonist, the antagonist invariably falls down dead. In **EXP**, or any decent role-playing game, the dice will decide whether or not the antagonist will fall down dead. Better yet, the protagonist could talk to the antagonist instead! If you will forgive the sentence fragment, "The limitations aren't."

By now you are several paragraphs into the neophyte section and know absolutely nothing about how to play this game. It is not going to get any easier. Role-playing games are always self

taught. As a neophyte you are part of a recreational revolution, that you are creating. You are creating the adventures; it all depends on your interpersonal skills and your creativity.

If you find that **EXP**'s version of silly science doesn't work for you try another role playing game (there are hundreds out there). Some devote themselves to very hard science, pure fantasy, horror or real life (how dull).

Concerned Parents

If you are a parent that is bothering to read this you are the kind of parent that is conscientious enough to find out what your kids are really up to. For your kids sake this is probably a good thing. The unfortunate thing is that you can't really tell what your kids are up to by reading this paragraph. It would be like reading the rules to basketball, and not knowing your child is on steroids, or reading the television schedule and not monitoring what your child watches. You are actually going to have to join in and play a game or two with them (aah dad do you have to?) to be sure that your child is playing in a healthy fashion.

EXP is a role playing game, and role playing games go where ever the players' imaginations go. There is no way of knowing what your children are thinking about, or what they are role-playing unless you are involved with your kids in general.

Parents can also become concerned with the amount of time that their child is devoting to playing role playing games. Role playing games shouldn't be played 8 hours a day seven days a week. However, no kid should do anything with that level of intensity, whether it be basketball, piano, television, home work or employment. Children need diversity, and the reason that they can play role playing games for such long periods of time is because that role playing games are in themselves extremely diverse. Random dice rolls make each new puzzle, or encounter, a relative unknown, and as exciting as the one 15 minutes earlier.

We all know that children need love and attention. If they get both, and they are lucky, they will probably survive childhood and grow up to be concerned parents like yourself. However they will probably be happy to see their children playing role playing games instead of staring at the new fangled interactive storybooks or whatever. Each new generation of parents encounters some new thing that they will have difficulty understanding while they watch their children charge into it headlong.

Experienced Gamers

What can be said to experienced gamers? Get playing you dolt. Don't sit around being coddled by a sales pitch disguised as a sappy introduction. Grab your dice, your trusty gang of gamers, roll up personas, and find out if this game is for you. The only way you are going to find out is if you play it for a while.

All candor aside, there are some (not many) questions that gamers may want answered in the game's introduction. The answers are going to be brief and candid because in reality the proof's in the pudding, and if you don't have fun playing **EXP** then I have almost wasted my time.

What is **EXP** really? **EXP** is the game of technological chaos. Any tech level device can appear simultaneously with any other tech level device. In fact, it is not uncommon to find two different tech levels' examples of the *same* device coexisting! It is a generic game that has very extensive, completely integrated rules. The rules of persona creation (organics and inorganics) are combined with mutation tables, and technological devices. All systems and equipment are portable amongst each other. For instance you can chase a **space vehicle** (anything hardened to the vacuum of space) with a **school bus**. Personas onboard the school bus could fire their personal weapons at the space vehicle, and it could use its onboard weapons to return fire. Personas on either side could use their mutations. The idea of having to referee such a situation gives me the shudders. I can assure you that the space vehicle would win, usually.

Persona generation is reasonably random: The player can choose amongst anthropomorphic forms, alien forms and robotic forms. There are

many non-redundant attributes that apply to all personas and are comparable between races or species. All mutations improve with experience level.

EXP has a class system, where skills can be performed on a performance table. The table compares experience level and degree of difficulty of the maneuver to determine likelihood of success. Any persona class can attempt any maneuver through a general performance table. Experience points are earned for combat, earning equipment, class maneuvers, and role playing.

I

Combat classes have combat skills as well as technical skills. Combat involves to hit rolls versus armour rating, with successful rolls reducing target hit points. Certain amounts of damage can immediately incapacitate a target without killing it. The to hit rolls are made on a very easy to use d1000, allowing for very fine to hit roll and armour rating adjustments. It is assumed that player personas are hardier, more durable and luckier (much, much luckier) than dribble drabble like you and me.

Why is it so silly? Role playing is supposed to be fun. If you are not laughing at least 3 times an hour when you are gaming you should give your head a shake.

Why should I play something else? You are a gamer, not a soap opera junkie. You game to try new things, why not try new game things? No one can referee two campaigns at once, but people can easily play in two campaigns at once. The only real fear about trying something new is that all the money you spent building your last game system might be threatened. Well it certainly is. You are holding a completed game system. There won't be an expensive and continuous flow of source books that you 'simply must have'.

We think its a tragedy that in the last few years we have met more ex-gamers than active gamers. Most often (actually mostly exclusively) they have retired because they can't afford the reams of glossy schlop that is 'essential' to play the new game systems. We respect that game corporations must do this in order to profit (and survive), however **EXP** is not our livelihood, and we are for gaming and not marketing.

That doesn't mean there won't be support. You can expect an **EXP** newsletter with articles such as Ref's Own Table, or Other Lists. This should allow you to contact other like minded gamers, and see what other things Merv Engineering decides to produce.

Was this really ready to play in 1983? Yes. We were actually playing a version of **EXP** in 1980. The first completion was done on a Commodore 64 in 1983, and nothing but typo corrections and grammatical embellishments have occurred since (well maybe the odd toy was added here and there). It took so long because what you are holding is very expensive to produce, and it took a lot of telemarketing, pasta delivery, and track scholarships to save enough money to do this. Go play, and enjoy.

Introductory Glossary

The following terms and abbreviations will assist the reader in deciphering the arcane language that most gaming systems represent. Remember that there are more detailed glossaries in the appendicies of **EXP**.

Adjusted: 'Adjusted MSTR,' 'adjusted PSTR,' or any other 'adjusted' attributes means that the persona's level is added to the attribute.

Anthropomorph: These are bipedal upright phenotypically humanoid versions of creatures from the animal world. They posess no natural abilities of the creature they resemble.

Area of effect: The number of hexes in which targets are subjected to damage or special effects. The value usually gives a radius for a spherical area of effect.

Armour rating (AR): The armour rating of the persona indicates how well she is protected

from damage in combat. The higher the armour rating value the less likely she is to be damaged.

Attributes: These are the imaginary divisions of a persona's physical abilities. They are also called statistics.

Bonus non-proficient (BNP): This is the to hit roll bonus used when the persona is attacking with an unfamiliar weapon. This value is less than the regular to hit roll bonus used. Each weapon type has its own bonus non-proficient .

Bonus proficient (BP): This value is added to the player's to hit roll if her persona is using a weapon she is skilled in. Each weapon type has its own bonus proficient.

Bot: This is a shortening of the word robot. A bot is a robot that is out of control, and capable of thinking on its own. Only a *crazed* bot can be run by a player.

Class: A class represents the innate abilities of the persona turned into an almost professional pursuit.

Dice: Here are several dice abbreviations.

d4	Four sided die
d6	Six sided die
d8	Eight sided die
d10	Ten sided die
d12	Twelve sided die
d20	Twenty sided die
d30	Thirty sided die
d100	Deci-Die: (10 x d10) + (1 x d10)
d1000	Kilo-Die...

Damage: Whenever a hit is scored in combat the persona loses hit points. The amount of hit points lost is the damage. The more lethal an attack, the more damage it inflicts.

Damage adjustor (DA): This value is added to the damage roll for certain weapon types. The stronger the persona is the more damage she will inflict .

Die roll: A die roll indicates that a random number must be generated. Because the numbers are generated by dice, it is called a die roll.

Exatmo: Anything that takes place in the vacuum of outer space. Short for exterior to atmosphere.

Experience (EXPS): Experience is a quantifiable value of the persona's increase in knowledge from one scenario to the next. The persona earns experience points for being played, and the point total represents the persona's overall experience.

H/U: Hexes per unit: This is the scale movement rate for EXP. It is equivalent to m/s

Hex: A hex, short for hexagon, is a six sided perfect polygon. The hex is also the game scale for measurement. A hex equals 2 meters. Movement of figures is usually carried out on hex paper, a page of interconnected hexes.

HIG: High gravity.

Hit points (HPS): The persona's hit points indicate how much damage she can take. A persona with many hit points can sustain more damage than a persona with few hit points. A persona loses hit points when she is hurt. If a persona loses too many hit points she dies.

Hit: A hit is a combat term that indicates a target has been damaged. When a hit is scored the target usually loses hit points.

Hite: An environmentally correct spelling of the word height. Their meanings are interchangeable.

Inatmo: Anything that takes place in normal atmosphere. Short for in atmosphere.

Initiative: Initiative is a way of determining the order of play between the players. Initiative can include the speed of the personas involved.

Intensity: Intensity represents how dangerous a poison or psionic attack is. The higher the intensity the more dangerous the attack.

Kilodie: A kilodie indicates that a random number between 1 and 1000 must be generated. The kilodie is composed of three ten sided dice, where one die is the hundreds place, another is the tens place, and another is the units place. A roll of 0, 0, 0 would indicate 1000.

Level: The level of a persona represents how skilled they are in their respective class. Experience point totals will indicate a persona's level which will allow her to succeed at more difficult class skills.

Maximum roll (MR): This is highest possible to hit roll that the player can roll. This only applies to her to hit roll. If she rolls higher than this value, she may only announce her maximum roll. Each weapon type has a different maximum roll.

Miss: The miss is a combat term to indicate that a to hit roll did not score any damage. A miss may contact a target, but it cannot cause loss of hit points.

Movement: Movement is the changing of position of personas during combat. Each persona has a movement rate which indicates how many hexes the persona can move each unit. This is the speed of the persona.

Mutation: Mutations are changes in the genetic make-up of a persona which yield imaginary abilities built into the body (physical mutation) or controlled by the mind (mental mutations).

Persona: The persona is the embodiment of all playing features: attributes, race, and class. The players (you) manipulate personas like playing pieces to engage in scenarios. Anything that acts in the game is a persona; personas are also run by referees however the player persona is the most detailed and important. Personas can also be called 'player characters.'

Player: You the reader. The real world persona that controls the fantasy world character called a persona.

Race: The race is the biological representation of the persona. The race is usually a humanoid one, however bots and aliens can be personas and are categorized as special races.

Ref, referee: The player that is responsible for preparing the game for a group of players. The referee is responsible for running all those personas that are not run by players.

Referee persona: A persona that is generated and run by the referee. Includes aliens, anthropomorphs and robots.

Save vs.: Save vs. indicates that a save must be made versus either poison or psionic attacks.

Saves: When the persona's mind or body must defend against an attack she will get a chance to save from the attack. A save is made by having the player roll a twenty sided die. The higher the roll the more likely the persona is going to save. If the persona doesn't save she will be damaged, or affected, by the attack.

To hit roll: A to hit roll is a combat term indicating that an attacker is trying to damage her opponent. The higher the to hit roll the better, because the attacker must generate a number greater than her opponent's armour rating in order to hit .

Toys: Toys are special high tech equipment created on the Technological Object Yield System in the technology book. Hence the abbreviation TOYS.

Type A: This is a classification of weapons. Type A weapons are non-powered thrusting and striking weapons. Examples are swords, clubs, daggers and axes.

Type B: This is a classification of weapons. Type B weapons are non-powered missile weapons. These weapons have a ranged attack, but the attacking forces are generated by the persona. Some examples are bows, rocks, darts, and bolos.

Type C: This is a classification of weapons. These weapons are powered weapons of any sort. Powered weapons required no extensive physical effort by the persona to cause damage. Examples are lazers, rifles, crossbows or aerosols. Weapons listed as type D, E, and so on are type C weapons which attack more than once a unit.

Unit: The unit is the smallest component of combat time. All actions made by the persona during combat are broken down into two second intervals. A unit may take ten minutes, or an hour to play.

Wate: An environmentally correct spelling of the word weight. In **EXP** wate also includes an indication of how difficult something is to move. An object with a heavier wate would be more difficult to move in ZOG than a lesser wate object.

Weapon type: All weapons are classed into different types depending on their combat properties. See also type A, type B, and type C weapons.

ZOG: Zero gravity.

Chapter 2
Players and Personas

According to most dictionaries a persona is a character of fictional representation. In role-playing games the persona is merely a player's tool, something which she manipulates to partake in the game. Each player in the game has a persona, and the personas are played together as a group which attempts to solve the puzzles put forth by the referee.

The referee is actually just another player. She sets up the puzzles for the other players to solve, and enters into the game with special personas called referee personas. Such personas may help, or hinder, the other players, depending on how the referee plays them.

Personas are extensions of the players into the fantasy world of **EXP**. It is impossible for us to clamor aboard spaceships, fire lazer pistols, or experience zero-gravity in our own home, but through our imaginations we can experience anything.

Imaginations tend to wander frantically, and a group of players all visualizing situations differently would soon result in chaos. Fortunately, the persona helps prevent this.

The persona acts as a common thread throughout the changing scenes put forth by the referee. No matter what puzzles the players have to solve, they will always have to work with the same persona. Whether the persona is a human soldier, a maintenance robot, or an eight legged tiger, it remains an unchanging anchor, regardless of how bizarre the surroundings may get.

Essentials of a Persona

The most important part of the persona is the player. A persona will only be as interesting, fun, and descriptive as her player makes it. The player's input into the persona is everything. A persona is nothing but numbers on a page until the player gives it that spark of life.

Even though the player is the single most important part of a role-playing character, there are other moderating factors which are essential: these are the attributes and history of the persona.

The attributes are the physical parameters of the persona: hite, wate, intelligence, race, age, health, speed, etc. These values in themselves are quite boring, but they are the groundwork by which the player gives her persona history and personality.

The history and personality of the persona are determined by the player, but must fall within the guidelines of the referee's milieu. A persona's history will help decide how the persona reacts to various situations, how the persona dresses, how the persona talks, and what the persona believes in.

Three very brief persona introductions will show how easily a persona personality can be reflected: "I'm just a simple God fearing tax collector from the orbiting suburban satellite station." This introduction implies certain ideals, and it is unlikely this persona would attempt to embezzle the emperor. "HI! I'm a happy-go-lucky model QT-1 protocol unit from your local rec center." This introduction imparts the feeling of a sycophantic cyborg that will offer a game of electronic ping-pong or a cherry soda even in the presence of an imminent fusion drive explosion. "Sssssssthp, me Slythris, me chew hoole innards, me catch in tree place." This last introduction alludes to a persona of reptilian stupidity. The hissing words may imply its appearance is sleek, sharp toothed, and camouflaged.

The last "essential of a persona" is that the player be familiar with the persona she's created. Other player characters, especially referee player characters, will react specifically to the persona that the player has created. For example, the first persona described (the tax collector) might not be welcomed by a gaggle of Imperial tax evaders. What the player should know about her character is covered ad nauseam in the remainder of this chapter.

Types of Personas

A persona can be anything imaginable. Once a player decides to play **EXP** she must choose a persona type that's either humanoid, robotic, or alien. The anthropomorphic races are chosen most often because they are the easiest to play. These are detailed in chapter 4, Anthropomorphs. If a player chooses either robotic or alien races they can be almost certain that their character will not have a humanoid form. Not having a humanoid form makes a persona difficult to play, so aliens and robots are not recommended for beginning players.

The decision of choosing persona type is left up to the player. However, the ref may only allow certain types because of campaign restrictions. This chapter gives an introduction on how to create humanoid personas. Both robots and aliens are generated with step by step procedures which are detailed in their respective chapters 5 and 6). Anthropomorph personas may require more time to create, but they are much easier to play.

Attributes

The first step in creating a persona is generating the attributes. The player has no say in how strong, intelligent, or charismatic her persona is going to be. Dice rolling is used to create these vital statistics of the persona.

The attributes are nothing but boring old numbers, yet they should definitely influence how the persona is run. Physically powerful characters will use their brawn, intelligent personas will think, and dextrous characters will pursue more nimble avenues of recourse. Each attribute is covered in detail in chapter 3, Attributes.

Race

After a player has generated her persona's attributes she is ready to determine more tangible aspects of her persona. When the player chooses her persona's race she is choosing her persona's appearance as well. Unless the persona is an alien or a robot, she will be humanoid in shape (two arms and two legs). There are many different humanoid types to choose from: rodents, dogs, cats, fish, and more. Once this is done the persona immediately jumps from an array of digits to a real being. Instead of being a dull persona she's now a dumb rat, a charismatic horse, or a weakling human.

The people types (as in any of the humanoid races) that the player can choose from are all upright bipedal humanoids. A rat would have two legs, two arms, a long snouted rat head, a thick rat tail, and would have a covering of thick rat fur. A horse would have two hooved feet, arms with hands, a fly lashing tail, a horse's fine coat, and a horse's head.

Unfortunately, the players don't get to choose whichever race type interests them. What attributes the player has rolled will determine which of the races she can choose from.

Mutations

After choosing a race, the player must check her persona for mutations. Mutations in **EXP** vary from weird and fantastic abilities to slightly irritating defects. All personas must check for both Mental and Physical mutations. This is done by referring to chapter 7, Mutations. Players that want to run mutated personas can double their chance of mutation for their persona's race. Those players that wish to run genetically pure personas are still subject to the race's base chance of mutation. Mutations are usually rolled in secrecy with the referee, and only the descriptive features of physical mutations are revealed to the other players.

Mutations add character to the persona by possibly changing their outlook on life. E.g., the persona is now a dumb rat with retractable antennae, or a charismatic horse that can read minds.

Mutations can definitely change the way a player intends to portray a persona. In fact mutations can change a persona so drastically that they must roll for mutations before they choose a profession. For example, a player once rolled up an excellent spie (character class) and then rolled two noisy mechanical prostheses for legs. Not all

mutation changes are this dramatic, but the mutations rolled can affect anything from a subtle name change to a the choice of a certain career.

Persona Class

Careers and professions in **EXP** are called classes. The different character classes represent a persona's aptitudes rather than a trained professional career.

Which of the classes a persona can pursue depends on her attributes; physically tough personas can be military types, intelligent personas can be technical types, and personas with no distinctive attributes can be civilians.

A player will often be able to choose from several class types, and the player will usually choose one which best suits her developing persona.

Equipment Etcetera

Choosing the character class is the last step in persona generation. All other developments, such as persona equipment and history, depend on the campaign in which the player character is run. The best kind of persona creation is that which takes place during the play of the game. Personas may develop reputations within the milieu that they play. Certain characters, or maybe even whole expeditions, may gain famous (infamous) notoriety in their city, planet, star system, or universe.

Persona Record Sheet

The most important part of the persona is the player. How the player impresses her persona's personality on her fellow players, and the referee, is of upmost importance. However, the player's persona ultimately is a series of statistics that will determine what the persona can do. For example, if a persona is trying to kick open a locked door, the ref will need to know her physical strength score, regardless of how exuberant her description is. If the player can't remember her strength value, or can't find it on a sheet of paper, valuable playing time will be lost. The players are not expected to memorize an entire persona (this is an impossible task for us mere mortals); however, a legible and organized persona record sheet is expected. An example of such a sheet is given in this chapter.

When players record the attributes, abilities, and equipment of their persona they must remember that they and the referee will frequently refer to this sheet of paper.

Forming Expeditions

The nature of role-playing games are very social. They are designed so that groups of people get together to solve problems and express ideas in fictional situations. The personas described in this chapter are solitary units. Groups of players will usually get together and play groups of personas. The unwritten rule is that each player will run one persona. If the persona is detailed enough it should be all that one player can run effectively.

Since people will play **EXP** in groups the referee will be expected to run (another word for play) groups of players. A group of players is called an *expedition* and the expedition has to work together to solve the referee's puzzles. An expedition should have the abilities necessary to survive in a referee's campaign. No single persona may be able to survive, but the entire expedition might be able to survive if they work together. For instance, the expedition may need to ask the charismatic horse of the expedition to parley on their behalf while the avarian veterinarian tends to the ursidae mercenary that just got beaten up.

Conclusion

The persona, ultimately, is only a sheet of paper, regardless of the player's input. **EXP** is designed as a recreation where people can get together for stimulating fun. The game should be used as a periodic escape into fantasy, not a crutch for reality. Record the important info about your persona while playing, and forget such details in the interim. Use the interpersonal skills learned while role-playing in your everyday life, and be able to jump right back into the fun with a detailed readable character sheet.

I

Chapter 3
Attributes

A persona's attributes (also called statistics) are its natural given abilities. The attributes reflect things like strength and intelligence. Each attribute is determined by dice, and these values represent the first inklings of the persona. Until now the persona has been nothing more than a flicker of the player's imagination. The attributes are the first steps towards the creation of a useful persona.

What Are They?

Attributes are the cornerstones of a persona. The higher the value of the attribute, the better the attribute is. A persona's attribute values determine both her race and her class. Mechanics need high intelligences, spies need high dexterities, and ursidae need high physical strengths.

There are eight attributes that every persona must roll: awareness, charisma, constitution, dexterity, intelligence, mental strength, physical strength, and hit points. The attributes are not listed in order of importance, but in part alphabetical and in part convenience ordering. Each attribute is covered in greater detail later.

Generating the Attributes

Every attribute is generated by rolling dice. All of the attributes—except for mental strength and hit points—are determined by rolling 3d6 (three six sided dice), and totalling the 3 numbers. A single roll is made for each attribute. The values cannot be altered by switching one score to another, nor can they be adjusted by trading points from one score to another. Whatever is rolled the first time through stands, and the rest of the persona must be created from these rolls.

A persona with an 11 intelligence would be brighter than a persona with a 7 intelligence. A persona with a 15 physical strength would be stronger, and could lift more, than a character with a 12 physical strength.

Attribute Limits

The range of normal persona attributes is between 3 and 18. An average attribute roll would be 9. The maximal attribute ranges are between 1 and 25. There are, of course, exceptions to this rule; both charisma and hit points can drop below 1, and physical strength can increase beyond 25.

The upper limit of the attributes grossly exceeds the necessary limit for humanoid personas. The attribute values are universal across aliens, robots, and humanoids. Most tables include attribute ranges greater than 18 because aliens and robots often have attributes that high. The tables do not exceed 18 for the benefit of humanoid races. A value over 18 for any attribute is extremely rare. From my experience less than 10 specific attributes in over 197 personas (that is 1379 attributes) have ever been over 18. The referee will find that watching the players generate their attributes will greatly reduce the average of the rolls.

The lower limit of player attributes is a self eliminating problem. If any of a persona's attributes drop below 1 (except for charisma and hit points) the persona is irrevocably dead. This very effectively places the lower limit for attributes at 1 point.

Attributes and Role-Playing

The players should not get hung up on the values of their persona's attributes. **EXP** is a role-playing game, and a persona's attributes should reflect how the persona is role-played. The attributes are just numbers, and the abilities of persona's should be compared via role-playing as opposed to number comparison. Do not automatically assume that one persona will be able to lift a heavy computer, and another will not, simply because of a difference in physical strengths. The weaker persona may be more inspired at the moment, or the stronger persona may just not be interested. If the weaker

persona role-plays his persona particularly well the referee may let him show up the stronger persona. Obviously this must be used in moderation by the referee, and only with attributes that are very similar. For more information see chapter 31, Attribute rolls.

Bots and Aliens

Attribute generation for robots and aliens is different than from that of people (another term used for humanoid races).

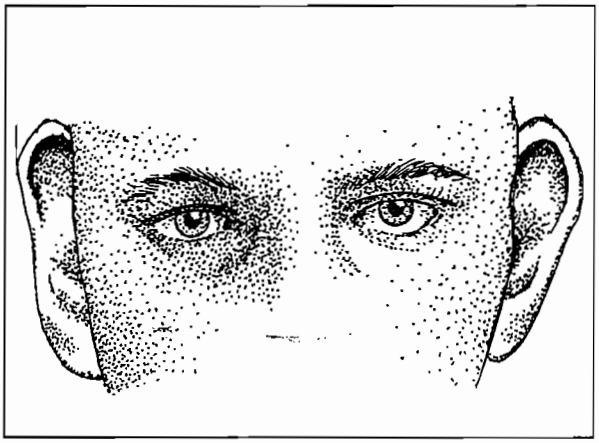
Robots are a combined race and class. Their process for rolling attributes is covered in chapter 5. Even though robotic attributes are mechanical, the values are comparable to those other races. For example, a robot with a physical strength of 12 would be no stronger than any other persona with a 12 physical strength. However, leverage and wate advantages may allow the robot to lift heavier wates.

Alien attributes represent the average values of an entire race, and members of that race may have different values depending on age, sex, or whatever. Like robot attributes, alien attributes are comparable to all the other races.

Awareness (AWE)

Very simply put, awareness is how aware a persona is of her surroundings. The higher the persona's AWE the better she can pick out noises, spot objects, and detect aromas. So a person with a high awareness would be observant, have a fine sense of smell, and have good hearing. AWE would be the most important attribute when trying to locate a hidden object, or search a room.

AWE is generated by rolling 3d6. Giving it an effective range of 3 to 18. If a persona's awareness drops below one, she is dead. Her brain has been cut off from all exterior, and interior, stimuli. This death is representative of a complete disconnection from both the autonomic and systemic nervous systems.



Essay: Offensive Eyes, Defensive Ears

Awareness merely represents the efficiency of the connectors between the brain and the outside world. In the humanoid brain a significant proportion of space is devoted to support of the eyes.

Human eyes are the instruments of sight; they are by far the most elaborate of all the senses. They can transmit signals to the brain which allow for colour differentiation, velocity judgement, depth perception, and size estimation. These skills are important in catching elusive prey, and for picking the right kind of berries. Hunger is the greatest driving force of all organisms, so there is strong evolutionary pressures to develop the eyes to what they are today.

Yet the brain has still devoted a certain amount of grey matter to the ears. Why, with such fantastic contraptions as the eyes, would the brain even bother with the boring old ears? The first reason is a biological one: the ear's alimentary canals are essential for informing the brain about balance (the eyes can do this also). Another, and even more important, reason lies in the physics of sound. Everyone knows that our ears are triggered by sound (waves of air pressure), and that our eyes are triggered by light. What few people know is how these seemingly pedant facts profoundly affect the nature of our senses.

A property of sound is that it bounces, so to speak, around corners, through trees, over rocks, etc. This makes the ears an excellent warning device. They can detect things behind them, above them, and beneath them, without having to move anywhere on the head. When the ears sense something the brain responds by turning the head in order to be able to use the eyes. The eyes give the

brain the information to make the decision whether to fight or flee. Hence the ears are defensive (listening, and detecting), and the eyes are offensive (hunting, and fighting).



Charisma (CHA)

Charisma is charm, looks, and sociability all combined in one value. A high charisma represents a high proficiency at getting along with other personas . This attribute is a universal one, so a reptilian with a higher charisma than a feline would still be more charismatic to other personas.

A persona's charisma is very important during negotiations of any sort (see Chapter 22, Negotiations). The persona with the best charisma will be most likely to succeed in parley. These points are just indicators; CHA should never be used to avoid role-playing. If a persona with a low charisma is run by a congenial player the ref may be forced to overlook her persona's disposition. Charisma can also be challenged by attribute rolls: when attempting to win a promotion, when wooing a lover, when selling a used aircar, or whatever other position a player finds her persona in.

Charisma is rolled on 3d6. The normal range is 3 to 18; however, burns, scars, mutations, limps, etc. may reduce a player's charisma below 3. Note that a CHA below zero is highly irregular, but it will not kill the player. The reaction of RPCs (referee player characters) to personas with negative CHAs may be fatal though.

For whatever reason a player may desire her persona's CHA to drop below the racial minimum (see chapter 4 Races). If mutations make this possible the persona may have a CHA less than the racial minimum, or even negative.

Essay: Attentive Pupils

Charisma is a very subjective, non-quantifiable attribute. Apart from social graces and cultural versions of beauty there are several undercurrents of body language which are found in almost all humanoid cultures. One of the most unconscious elements of CHA is discussed here—this is pupil size.

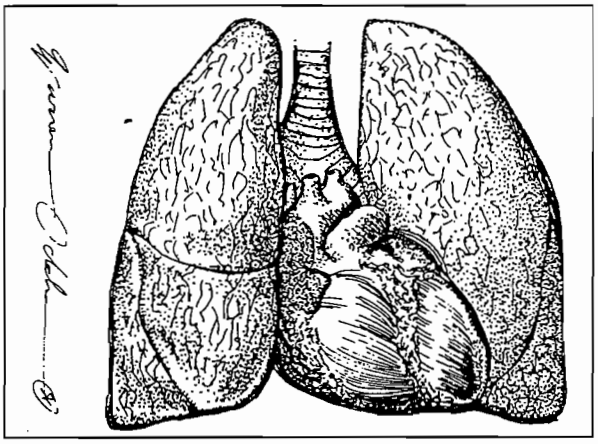
The human pupil is actually the hole in the center of the iris. The iris is a diaphragm which opens and closes to adjust the amount of light entering the eye. In short, the iris is the coloured part of the eye, and the pupil is the black dot.

The pupil size not only varies depending on the amount of light present, but also depending on the amount of emotional arousal. Increased emotional arousal, or interest of any kind, will cause the pupils to enlarge. Because of this effect, persons with enlarged pupils are unconsciously assumed (by an observer) to be in a genuinely interested state.

The results of this physiological anomaly are well documented. Persons with naturally enlarged pupils, for whatever reason, are considered to be nice, kind, interested beings. On the other paw, it is not uncommon to hear of beady-eyed people who are bad, and not trustworthy. Their natural pupil diameter may betray their true personality.

Interest can be mocked by squinting—partial closure of the eyelids. Squinting allows for the pupil to appear larger in the eye, in relation to surrounding eyelids, whether the person is truly interested or not.

Another pupil size pastime is the romantic candlelight dinner. Both parties benefit from fine food and wine, but also from a pupil enlargement due to the darkened room. The iris, which controls pupil size, must open to allow more light for the eye in the darkened room. Hence instant interest/ arousal due to enlargement of the pupil.



Constitution (Con)

Constitution represents a persona's internal physique. This attribute indicates the persona's ability to throw off disease, fight infection, resist poisons, repair damaged tissue, and to survive radiation attacks. The Con roll is a general hardiness roll representing the persona's all round general health. The main components which support a persona's Con are the heart, the lungs, the liver, the kidneys, and the immune system.

A character's Con is directly responsible for her survival of poisonings (Refer to chapter 16, Special Rolls for more information). Constitution would be used to see how well the persona responds to artificial respiration, or to determine if a clone of her body will survive. Persona's with higher Cons are able to endure more physical punishment than players with low Cons. Refer to hit points (Hps), at the end of this chapter, for more information.

The next paragraph deals with the relationship between constitution and hit points. If you are unfamiliar with the nature of hit points refer to those pages before continuing.

A player must make a check to remain conscious whenever more than half her remaining hit points are lost at one time. This check means the player must make a % roll or her persona will lose consciousness, or be stunned, due to trauma. In order to 'make' a damage system shock, the player must roll a percentile dice score that is lower than her damage system shock value (DSS). The DSS roll must be less than 3 times her remaining hit points total. If a player with a 5 Con, and 20 hit points were to take 10 hit points of damage she would have to roll less than 30 on deci-dice, or be knocked out. Failing the DSS roll means that her persona's system could not withstand the trauma that it just received, and the persona has succumbed to unconsciousness. This is explained in greater detail later in this chapter under Hit points.

The Constitution Table shows the duration of time until the player can make a recovery roll. A recovery roll is also dependant on the persona's hit points total. A recovery roll would be required before a persona could recover from a failed DSS roll. The recovery roll is where the player checks to see if her persona has recovered from previous damage. The recovery roll is a deci-die roll less than 5 times her remaining HPS. Let's assume the above player failed her (DSS) roll. Her persona would collapse unconscious from the damage, and remain unconscious unless she rolled less than 5 times her remaining HPS. Which in this case is 50%. However she could only attempt a recovery roll after 16 units (according to her duration), and if she failed it then she would have to wait another 16 units before trying again.

The Con attribute is rolled on 3d6. If a persona's Con should drop below 1 she is irrevocably dead due to combined heart, liver, kidney, and immune system failure.

Essay: Liquid Constitution

Apart from those important organs contributing to a persona's Con, like lungs, heart, and liver, a rather innocuous substance is actually the most important; this substance is the blood.

The blood is a connective tissue jointly responsible for respiration, fighting disease, and repairing damaged tissue. Any substance with all these responsibilities must have a variety of components. These components are discussed here.

The largest component of blood is water. 50% of the body's blood is water, the other 50% contains the working parts of the blood.

Blood is red in colour because of the iron molecules used to transport oxygen, found in the red blood cells (eurythrocytes). Red blood cells

occupy another 44% of the blood's volume. The eurythrocytes carry oxygen from the lungs to every cell in the body. Because every body cell requires oxygen there are a lot of eurythrocytes, roughly 25 trillion. Unfortunately eurythrocytes die at the rate of 2.5 million per second, yes per second. Dying eurythrocytes do not replace themselves, and our bone marrow churns them out as fast as they die. If the bone marrow did not do this we would be dead very quickly.

Another 5% of the blood volume is occupied by salts, proteins, sugars, and organic acids. Such substances are utilized by body cells for cellular division and cellular energy. This is an essential component of blood because no less than 25 million cell divisions occur in the body each second, and every second of its life.

The remaining 1% of blood composition contains leukocytes (white blood cells) and platelets. The leukocytes fight infection by eating bacteria, however they can do nothing to stop viruses. The coloration of pus at an infected wound, or in one's spit (as when you have a cold) is due to the presence of leukocytes engorged with bacteria. Platelets are the blood vessels' primary healing agent. The platelets plug openings by attaching to the torn edges of blood vessels. Platelets can also initiate clotting, which is required for the more severe vessel ruptures. Platelets are constantly called to action, because for every external nick or scratch many more occur, completely unknown to us, within our body.

It's these three components of blood that support the persona's CON for feeding, fighting, and fixing. All three of which are intricately carried out by that homogeneous liquid, the blood.

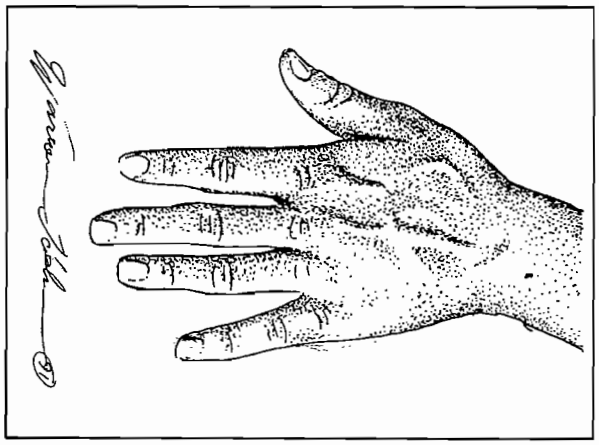


Table 3.1: Constitution & Recovery

CON	RECOVERY DURATION (units)
1	20
2	18
3-4	16
5-6	14
7-8	12
9-11	10
12-14	9
15-16	8
17-18	7
19-20	6
21	5
22	4
23	3
24	2
25	1

Dexterity (DEX)

The dexterity attribute represents many abilities which are collectively referred to as DEX. Agility, balance, eye-hand co-ordination, reflexes, and running speed are but a few components of dexterity. A character with a high dexterity could move faster, change direction better, and have quicker reflexes than a persona with a lower DEX. A player may be required to make a DEX attribute roll when her persona attempts to catch a priceless vase, or tries to dive through a closing door.

A persona's dexterity also directly affects her armour rating. Armour rating determines how difficult a target is to hit during combat. So a player character with a high dexterity can dodge and deflect attacks better, and consequently has a better armour rating. The exact details of this bonus are described in chapter 29 Armour Rating.

A persona's movement rate is determined by her DEX. *Table 3.2* is used to find how fast a persona can move in h/u (equal to m/s). So a player

character with an 11 DEX could move 4 h/u. This means her figure can be moved 4 spaces (hexes) in one play (unit). For a more detailed account of movement refer to chapter 12, Time & Movement.

The dexterity attribute is rolled on 3d6, and this makes its range from 3 to 18. If a persona's dexterity should happen to fall below 1, she is irrevocably dead due to complete motor-nervous system failure.

Essay: The Reflex

The most important component of DEX is the body's nervous system. The system of nerves, both sensory and muscular, are responsible for the maintenance of reflex actions. Reflex actions are the involuntary muscle contractions which are responsible for such things as protecting us from injury, and maintaining our balance. Even some learned skills, those which are highly practised, can become reflex actions.

The classic example of a reflex action is the knee-tap foot-jerk reaction. The knee itself isn't tapped, but a tendon just below the knee is.

The tap on this tendon (called the patellar tendon) stretches the tendon, and the muscles attached to it (muscles are attached to tendons, and tendons are attached to bones). The tap is very light, and the stretching is actually even lighter. However the sensory nerves in our muscles are very sensitive. The stretch causes them to initiate an involuntary contraction of the quadriceps group (the muscles on the front of the thigh), which causes the lower leg to fling forward. Although often made light of, the knee-jerk reflex is not as silly as it seems.

In a standing position, the sensory nerve (called a muscle spindle) would assume a stretch of the quadriceps (like the stretch caused by the hammer tap) is due to a bending of the knee joint. Since the brain wants to maintain position, the nervous system compensates by straightening out the knee. The knee is straightened by an involuntary contraction of the quadriceps group (sound familiar). In this case it causes the lower leg to fling forward. This is a reflex action that keeps you from dropping to your knees when your trying to stand up.

The involuntary contraction of the quadriceps is just one of many reflex actions which keeps a person upright. Other important reflex balance systems are found in: neck muscles; spine muscles; hips; and ankles. Not all of these reflexes can be stimulated by tapping. However, they are examples of the intimate relation between nerve and muscle which maintains the balance necessary for running, walking, and sitting.

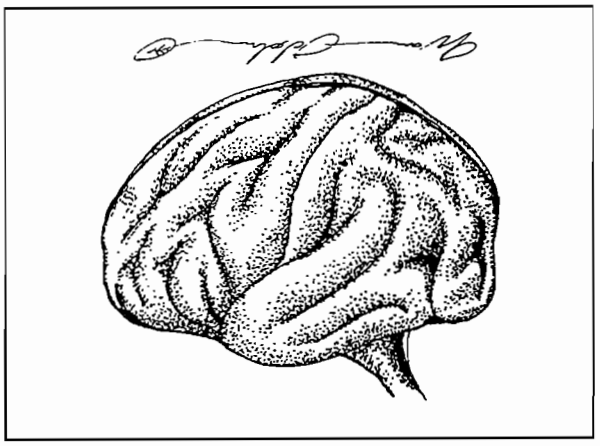
Table 3.2: Dexterity & Movement

DEX	MOVEMENT RATE (h/u)
1-2	1
3-5	2
6-8	3
9-11	4
12-14	5
15-16	6
17	7
18	8
19	9
20	10
21	11
22	12
23	13
24	14
25	15

Intelligence (INT)

The attribute of intelligence includes many aspects of sentient behaviour: creative thought, reasoning, mnemonic resources, and learning capacity. It would be incorrect to assume that a persona has an equal distribution of all these components, but actually some undetermined mixture which results in the standard INT value.

Rolling INT for a persona poses some questions about player/persona interaction. Conclusions made by a player cannot be refuted because her persona has a low INT score. Such inaccuracies will either be creatively disguised by the player, or merely chalked up to the old numinous. The obverse situation, a persona with a high INT attribute run by a dull player, will not allow the player to sit back and have scenarios solve themselves. If the player herself cannot solve a



problem, that's just too bad.

A persona's INT directly affects one of her other attributes. The affected attribute is her **mental strength**. The mental strength is a psychic sort of attribute. It reflects the persona's will power, luck, and control over the unknown components of the mind. Mental strength is an attribute entirely separate from INT, but greatly modified by it. The more intelligent a persona is the more she can manipulate this intangible mental attribute.

Mental Strength (MSTR)

Mental strength represents the persona's will power, luck, and level of control over the mind's unknown abilities. The MSTR attribute is a mystical combination of ability and fantasy. A persona with a high MSTR could endure torture longer than a persona with a low mental strength. Varying abilities to withstand pain are well documented. However, mental strength also reflects a persona's psionic ability, something entirely undocumented to this date.

Mental strength has a direct contribution to the effectiveness of most mental mutations. MSTR can affect the range, intensity, and duration of psionic abilities. The persona's MSTR is the only natural defence the persona has against psionic attacks. See the chapter 16, Special Rolls, for more information.

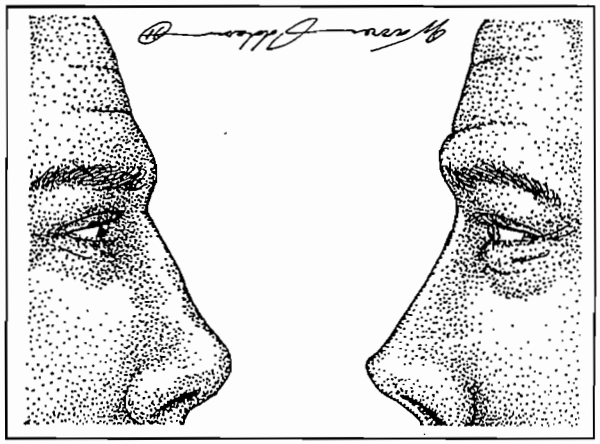
Attribute rolls may challenge MSTR when the persona is being tortured, maintaining a vow of silence, playing dice games, or just plain hoping her luck will change.

Mental strength is generated on 4d4. This produces a range of 4 to 16. It is very important that MSTR retain this range, because a persona's MSTR score is greatly adjusted by her INT—remember that a persona's INT attribute can help focus her MSTR. The effects of INT on MSTR is also discussed under Intelligence in this chapter.

The *Mental Strength* table shows the adjustment made to the persona's mental strength for differing levels of INT. E.g., a persona with a 7 INT would lose 1 point of mental strength whereas a persona with a 16 INT would gain 2 points of mental strength.

If a persona's MSTR should drop below 1 she is irrevocably deceased. This type of death is caused by an evaporation of the life force of the brain. The more observant of the readers may note that there is the potential for a persona to die while being created. If the referee encounters such a low intelligence, low mental strength persona combination and it kills the persona during creation the player should re-roll her persona's attributes, and start again.

There is no set upper limit to the MSTR of a persona, however a referee should start to worry considerably about any MSTR that exceeds 20 points



in value.

Table 3.3: Mental Strength

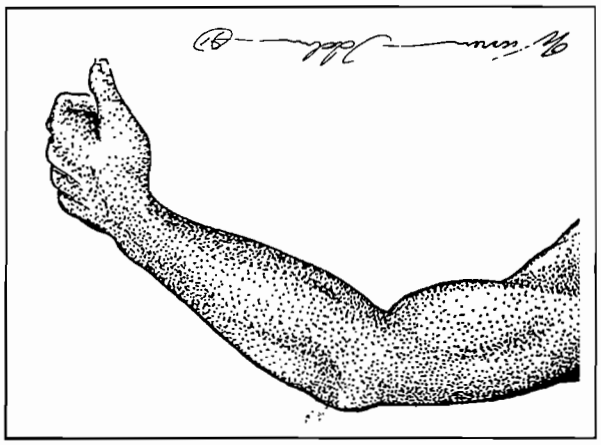
INT	ADJUST MSTR BY
1	-5
2	-4
3-4	-3
5	-2
6-8	-1
9-11	—
12-13	+1
14-15	+1
16	+2
17	+2
18	+3
19-20	+3
21	+4
22	+4
23	+5
24	+5
25	+6

Physical Strength (PSTR)

In short, physical strength represents the muscular brute force of the persona. A more detailed look shows that PSTR is actually a combination of leverage, power, and physique. It is important to note that a persona with a high PSTR isn't necessarily bulky or muscle-bound. Shape is mostly determined by the persona's race. For instance a wiry preying mantis, can be as strong as a polar bear provided that their PSTR values were the same. Muscle-boundedness is a reflection of low dexterity, and is determined by the dexterity attribute, not the PSTR attribute.

A persona with a high PSTR could lift heavier weights, be unaffected by a greater load, and generally have greater strength than a persona with a lower PSTR. Physical strength attribute rolls may be required for kicking open doors, breaking bonds, crushing beer cans, or lifting weights.

The amount of equipment a persona can carry is determined by her PSTR wate allowance, and picky referees may limit the persona's equipment list to the nearest milligram. The player's should know their persona's wate allowances to ensure they don't 'accidentally' end up carting 3 tonnes of equipment across rickety suspension bridges. This happens most often due to purely innocent oversight. The finer details of how equipment mass affects movement is covered in the chapter 18, Encumbrance. To determine wate allowance use the *PSTR Wate Allowance* table.



Hit Points (HPS)

Hit points reflects the persona's ability to withstand physical damage. The important components of HPS are based on body construction: how well is the brain protected; the amount of protective tissue around vital organs; and the connective tissue's ability to resist tearing and shattering. There are other less gruesome components of hit points. These include the innate skill of the body, as a whole, to react to threat, and just plain old luck.

Hit points are a very dynamic attribute. Unlike the persona's other attributes, which are unlikely to ever alter during a persona's life, hit points will constantly have different values, although none of these values should exceed the persona's maximum HPS.

Whenever a player character is injured in some way, or another, she loses HPs. Personas which lose too many hit points will die. Persona's which die from loss of hit points have usually died in some violent death: shooting, stabbing, car accident, fall, explosion, etc. For more information about losing hit points see chapters 26 or 27 in the combat section.

Personas don't just lose hit points until they die (hit points are a dynamic attribute not a declining attribute). Personas can get hit points back through rest. See Chapter 13, Health, for more information about rest. Medical attention can heal back lost hit points. This is covered in detail under the veterinarian class (chapter 8, Classes).

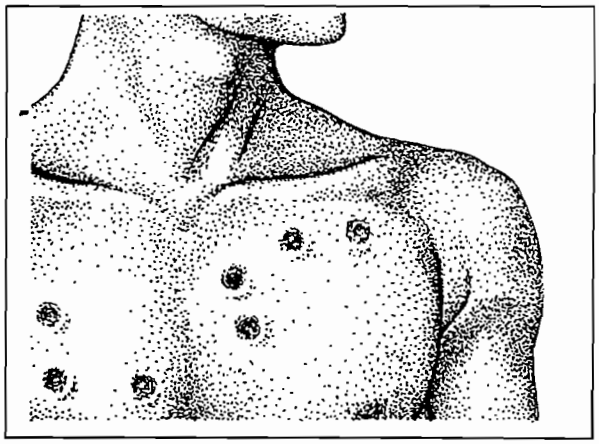


Table 3.4: PSTR Wate Allowance

PSTR	WATE ALLOWANCE (kgs)
1	4.5
2	5.6
3	6.8
4	7
5	8
6	10
7	12
8	13
9	14
10	15
11	16
12	17
13	18
14	19
15	20
16	22
17	25
18	28
19	31
20	34
21	39
22	45
23	52
24	60
25	69
26	79
27	90
28	102
29	115

The hit point doesn't convert to some unit of energy—like an erg. However, the hit point is a constant value. Any person, alien, or robot at 10 HPs can only withstand 10 HPs of damage. What varies is how each race type is affected upon reaching 0 HPs. How aliens and robots respond to very low hit point totals (less than 1) is covered in their respective chapters. How people respond to particular HPs totals is detailed here.

All in all hit points is a general indicator of a being's overall hardiness. The more HPs the creature has the better condition she is in.

Determining Hit Points: A persona's maximum HPs are determined once, while the player is rolling her attributes. The maximum HPs cannot be exceeded by healing of any sort (of course there are always exceptions). No pity should be given to the players while they are rolling their persona's HPs. Hit points should be considered just another attribute which will determine class and race. Once the player has determined a maximum HPs, it should be recorded in ink on her persona record sheet.

The persona's CON attribute plays an important role in determining the persona's maximum HPs. A persona's HPs is determined by rolling d8s. The player may roll 1 d8 for every two

points of Con. The total of these d8s comprises a large component of the Hps. The persona's Hps are then adjusted by her Con attribute. For every 1 point of Con the persona has, 1 hit point is added to the maximum Hps.

For example, a persona with a 10 Con would roll 5d8 (let's say 6, 3, 1, 4, and 2) and then add 10 Hps for a Hpsmax of 26. A persona with a 17 Con would roll 9d8, and add 17 Hps. A persona with a 4 Con would roll 2d8, and add 4 Hps.

Determing Hps maximum

Hps = (1/2 Con x d8) + Con

Dying From Hps Loss: The player must also be aware of several conditions that are tied into damage and Hps. When a persona takes 1 and a 1/2 times her Hps max without any interim healing she is permanently dead. So the persona that rolled 26 Hps max would be dead if her Hps total dropped below -13. A persona with 54 Hps max would be dead if her Hps total were to go below -27 Hps, one with 44 Hps max would be dead if her Hps total were to drop below -22 Hps. This is also called negative one half one's Hps.

Hit points appear to be an attribute that can drop below 1 without killing the persona. This is true, however any persona with a negative hit point total, is in a state of severe trauma—she is dying. When negative (having a negative Hps total), a persona loses one hit point each 5 units (10 seconds) she is left unattended. This rapid decline to death cannot be halted unless medically treated. See chapter 34, Healing for more information.

A persona with negative Hps total is completely unconscious, and can do nothing other than lie about and bleed. Things start to return to normal once the persona is returned to a positive Hps total, something which the body cannot do itself.

Damage System Shock Rolls (DSS): Personas with positive hit point totals still have to be cautious. Whenever a persona loses more than half her present hit point total in one attack she must make a DSS roll, or be knocked unconscious. A damage system shock roll (DSS) is a deci-die roll less than 3 times her current Hps total plus her Con. If the player rolls higher than 3 x Hps + Con on percentile dice the persona has been stunned, or knocked down.

DSS = 3 x (current Hps) + Con

Recovery Rolls (REC): The stunned persona will remain inactive until she makes a successful recovery roll. A recovery roll (REC) is a percentile dice roll less than 5 times her persona's Hps total plus her Con. If the player rolls higher than her 5 x Hps + Con on deci-dice the persona remains stunned or knocked down. The player may only attempt a recovery roll as often as her Con dictates.

REC = 5 x (current Hps) + Con

An example using numbers may help. Two player characters both take equal damage in a car accident, let's say 20 Hps. However, each persona has a different Hps total. Persona Sea has 43 Hps, and a 15 Con, and player Ecks has 34 Hps, and a 11 Con. Persona Sea can unstrap her seat-belt and stagger away, but persona Ecks must make a DSS roll, or be knocked unconscious. This is because persona Ecks took more than half her Hpstotal at once, but persona Sea did not. Ecks has 14 Hps left, and therefore must roll less than 42 on deci-dice, or be knocked unconscious. Since the player running persona Ecks rolled 54 on the percentile dice, her character is stunned for 10 units (duration) until she can attempt a recovery roll. Ten units later (about 20 game seconds) the player must roll less than 90 on the percentile dice. Or remain stunned for another 10 units.

Note that units are a very precise measure of game time that are only relevant during combat. Once combat has ended all stunned personas should immediately recover, and be able to join in on the game.

Chapter 4
Anthropomorphs

Race is probably the most important aspect of persona creation. Assigning a persona's race raises it from an array of attributes to something with definite character. The characteristics of the races allows for a working base for the persona by giving it description and dimensions. Persona race allows the player to evoke tangible images about her persona.

Every persona, from the evillest RPC to the kindest player character has a race. The three types of races found in **EXP** are **anthropomorphs** (humans, canines, felines, etc.), **robots** (janitorial to combat), and **aliens** (flying carnivorous plants to pulsating blobs). Player character personas primarily consist of anthropomorphs. The other race options (robots and aliens) are extraordinary ones which combine both race and class into one description. For more information about bots and aliens refer to their respective chapters.

The races detailed in this chapter are referred to as **anthropomorphs**. They are all upright bipedal and humanoid. Every persona has legs (for locomotion), arms (not used for locomotion), and hands (attached to the ends of the arms) which are used for grasping/manipulating. The head, however, would be a facsimile of whichever race the persona is. The body covering (skin, hide, feathers) will also reflect the base race chosen. The properly proportioned humanoid form would sport whatever tails, snorts, brows, horns, or tufts are found on the base race.

Let's consider a player who is canine. First she shall choose a dog type that suits her fancy. This is done purely for descriptive purposes, and will not alter any of the attributes rolled. The race type chosen may be reflected in the disposition of the persona though.

After much deliberation, the player chooses that her canine persona will have the likeness of a bulldog. The persona's head will have the gnarled features, and folded jowls characteristic of a bulldog. The skin would consist of a coat of short hair, typically found on bulldogs. She would also have stocky upper shoulders, and powerful looking arms (which end in stubby paw-like hands). Her persona would stand upright on two fur covered legs, which are topped off in a stubby tail. Such descriptions would be analogous for other races, like florians—bark for skin, fungus for hair; or insectoids—a buggy eyed fly's head, atop an bipedal exoskeleton.

The descriptions are as far as the similarities go. Insectoid personas cannot lift 1000 times their own wate. Reptiles do not automatically get poisonous bites. Avarians aren't all gifted with flight. The races have no special abilities other than those described in this chapter. However, each racial type does have specific features which add to the character of the persona.

It may seem very provincial, and humanocentric to have all the races bipedal, earthbound, humanoids. Such an attitude can be pseudo-scientifically defended on the grounds that there are definite biological advantages to evolving bipedally. Regardless of how the referee defends this humanoid preference, the form has primarily been chosen for the obvious advantages it yields to role-playing.

Maintaining a standard humanoid form allows for a great variety of races which are all readily suited to **EXP** technology, and rules. This means the game can be easily played with few rule changes for one race to another. This allows the referee to make preparations without having to make exceptions, and special rulings for each race.

The constant humanoid shape of the races can be more easily adapted to by the players. This gives beginners, and experienced players alike, the ability to role-play without having to worry about being a quadruped, having treads instead of legs, or being shaped like an amoeba. The truly alien non-humanoids are covered in chapters 5 and 6, Robots and Aliens.

How the different races arose allows for many

avenues of thought. Each one could have evolved from a lesser species (as humans evolved from apes); they could be peculiarly mutated forms of humans; they could be surviving progeny of long lost cloning experiments; or they could be a unique collection of beings each divinely created by a superior deity (like adam and eve).

Inquisitive players may force a referee to answer more complex questions like: How do all the races appear in the same place? Why are they humanoid? *Do androids dream of electric sheep* (Dick)? The answers to such questions may be included in the initial campaign background, or may even be woven into the goal of the campaign itself.

The players usually have the option of choosing from one of several races. Which races the player can choose from depends on the attributes rolled for the persona.

The player will compare her attributes to each race on *Table 4.1, Racial Attributes.* The player may choose freely from any of those races which her attributes allow. Once a race is chosen, the player must refer to the write-up about that race type. The write-up will yield further information, such as: special abilities; ages; hite; and wate.

Attribute Limits: Choosing a Race

The attribute limits ensure that races at least start the campaign with their attributes resembling their racial stock. The restrictions ensure that hardy races have a high CON, that smart races have a high INT, and that strong races have a high PSTR. It should be re-emphasized that the humanoid races are referred to as 'Anthropomorphs'. Each race tends to have particular fortes and weaknesses, however, such tendencies are not the rule.

The Attribute Limits Table is used by the player to see which of the twelve races she may be. The player compares the attributes she has rolled against the minimum side of the Attribute Limit Table. For example, if she wanted to be an ursidae both her DEX and INT would have to be 4 or better, and her PSTR would have to be 12 or more. The best way to determine one's race is to go down the minimum attributes column, and then choose from the races that the player may be (see example).

The *Racial Attribute* table not only restricts personas from being certain races, but also protects the player while rolling mutations. Many defective mutations can reduce attribute scores, but while creating a persona, such reductions can never force an attribute below a race's attribute minimum.

E.g., if a feline with a 9 CHA (minimum 8 CHA) were to get a Total Carapace (physical mutation #50) her CHA should drop by 4 points. Because a feline's minimum CHA is 8 her CHA would be 8 instead of the expected 5.

Charisma is a special example, because often a player will want her persona's CHA attribute to be as low as possible. If the player desires this, the protective aspect of the racial minimums can be ignored, and her CHA can drop as low as possible. Remember that the persona's attributes must meet all of the racial requirements before any race can be chosen. For more information about charisma see Chapter 3, Attributes.

All these benefits are ignored once the persona has entered into play. The racial minimums do not apply, and the racial maximums are firmly in place. If a player's CHA drops because of burns, or her PSTR drops because of disease, or her INT drops because of brain damage during the campaign the racial minimums will NOT limit an attributes decline. If one, or several, of a persona's attributes drops below the racial minimum during the course of a campaign the persona does NOT have to change races.

Attribute Maximums: Racial maximums do not apply when the player is rolling up her persona. So a canine could have a charisma of 17 even though the racial maximum is 15.

The racial maximums DO apply once the persona is being played in the campaign. For example, an avarian's PSTR cannot exceed 17—regardless of pharmaceuticals imbibed, or mutations acquired—during play. If a player were lucky enough to generate a persona with an attribute greater than a racial maximum (see preceding paragraphs) it is not reduced to the

racial maximum. However, the persona's attribute in question cannot be increased any higher than it already is above the racial maximum. For example, an avarian has a maximum CON of 15. If the player were to have rolled 17 during attribute generation 17 would be this avarian's maximum CON.

Observe the following example, which employs the *Racial Attribute* table. A player has generated a persona with the following attributes: AWE 6, CHA 15, CON 17, DEX 9, INT 14, MSTR 12, PSTR 6, and HPS 42. By comparing her attributes to the values on the minimum side of the *Racial Attribute* table, this player finds she may choose from aquarian, florian, humanoid, insectoid, rodent and PSH (pure strain human).

Race Relations

As with most things in this game, *Racial Agreeability* should not be treated as a platinum rule. Expedition members should not be forced into combat through the interpretation of these tables.

The table is included for RPCs (referee player characters) and player characters (personas) who wish to build some additional character, however

Table 4.1: Racial Attributes

Race	Minimum	Maximum
Aquarian	None	None
Avarian	AWE 12 CON 10 DEX 10	CON 15 PSTR 17
Canine	AWE 4 CHA 3	CHA 15 MSTR 20 PSTR 7
Equine	DEX 8 PSTR 10	MSTR 18
Feline	AWE 8 CHA 8 DEX 13	CON 17 MSTR 21 PSTR 18
Florian	CON 12 INT12	CON 22 INT 25
Humanoid Insectoid PSH	CHA -9 MSTR 12 None	CHA 18 MSTR 25 None
Reptilian	MSTR 13 PSTR 10	AWE 22 CHA 18 PSTR 20
Rodentia	CHA 12	or CHA 6 MSTR 23 PSTR 23
Ursidae	DEX 4 INT 4 PSTR 12	DEX 20 INT 18 MSTR 18

Figure 4.2 Example Attributes Table

Race	Minimum	Maximum
Aquarian	None	None
~~Avarian~~	~~AWE 12~~ CON 10 ~~DEX 10~~	CON 15 PSTR 17
Canine	AWE 4 CHA 3	CHA 15 MSTR 20 PSTR 7
~~Equine~~	DEX 8 ~~PSTR 10~~	MSTR 18
~~Feline~~	~~AWE 8~~ CHA 8 ~~DEX 13~~	CON 17 MSTR 21 PSTR 18
Florian	CON 12 INT12	CON 22 INT 25
Humanoid Insectoid PSH	CHA -9 MSTR 12 None	CHA 18 MSTR 25 None
~~Reptilian~~	~~MSTR 13~~ ~~PSTR 10~~	AWE 22 CHA 18 PSTR 20
Rodentia	CHA 12	or CHA 6 MSTR 23 PSTR 23
~~Ursidae~~	DEX 4 INT 4 ~~PSTR 12~~	DEX 20 INT 18 MSTR 18

undesirable, into their personas. The table more accurately represents how entire races mesh together, rather than solitary personas. However this will not prevent such feelings from occasionally being expressed by individual referee player characters (RPCs).

The *Racial Agreeability* table is not a valid excuse for murdering another player character (is there ever one?), and in turn the table cannot be used to expect compassion, fairness or any other of the higher emotions from RPCs.

Before anyone has the chance to get their equal rights hairs on end, let us emphasize that this table is very tongue in mouth. All human races are classed together as one species, and the other racial relations are arranged by culinary taste. Felines prefer avarians, and rodents, however rodents and avarians hate felines.

When using the *Racial Agreeability* table the leftmost column is the reference race. By moving from the left to the right will indicate what the race in the leftmost column thinks of the races along the top. For example, a feline prefers (P) avarians, however avarians hate (H) felines.

Types of Races

There are twelve different race types that the players may have an opportunity to choose from. Each type is grouped homo-typically (by shape) in such a fashion that will give respectable taxonomists fits. These groupings are arranged by what visually appears most similar. Some examples are: giraffes and cows are both classed as equine; kangaroos and rats are both classed as rodents; sloths and

Table 4.4: Racial Agreeability Subtable

P-Preferred T-Tolerated
N-Neutral A-Antipathy
H-Hated

Table 4.3: Racial Agreeability

	Aquarian	Avarian	Canine	Equine	Feline	Florian	Humanoid	Insectoid	PSH	Reptilian	Rodentia	Ursidae
Aquarian	P	A	N	N	T	P	N	N	H	N	T	H
Avarian	N	P	A	N	H	N	T	N	N	T	T	N
Canine	N	N	P	T	P	N	N	N	A	N	P	A
Equine	N	T	H	P	I	P	T	A	H	A	N	A
Feline	N	P	H	N	P	N	T	N	A	T	P	A
Florian	N	A	N	H	N	P	T	A	N	N	N	N
Humanoid	H	T	N	P	N	A	P	N	N	N	T	N
Insectoid	N	N	P	N	P	N	T	N	A	N	N	N
PSH	A	P	P	P	P	A	N	A	P	N	T	N
Reptilian	T	T	T	T	T	T	T	T	N	P	T	T
Rodentia	N	A	N	N	A	N	T	N	N	N	T	N
Ursidae	P	N	A	N	A	A	N	N	A	A	T	P

polar bears are both grouped as ursidae. There are probably countless biological reasons for not grouping such animal types together; however, morphologically they are similar.

Racial Abilities

Each race is a bipedal upright humanoid. The races only have those special features listed in the discussion for that race. Special abilities found in the animal kingdom, like flying or poison attacks, do not apply. Such special abilities can only occur as random mutations when the persona's mutations are rolled (see chapter 7, Mutations).

Attribute Adjustments

After the race type has been described, and its special abilities explained certain adjustments may be made to the persona's attributes. These changes can only be made after the player has chosen a race for her persona. For example, if a persona qualifies to be an ursidae the following adjustments must be made to her attributes: PSTR +2, CON +1, and INT -2. These adjustments can exceed racial maximums, but cannot go below racial minimums, as previously described.

The attribute adjustments ensure that certain races tend towards certain attribute values. In effect it ensures even more that the strong have high PSTRs, and the dumb have low INTs.

Race Age

All personas must roll a start age after they have selected a race. Each race has a different start age. The start age may place them in one of two age categories ranging from adolescent to adult. In most cases the persona will be an adolescent. While creating a persona none of the attribute adjustments for age, as described in chapter 13 (Health), can be applied. If the persona survives for many campaign years her attributes will feel the effects of aging, until she eventually dies of old age.

Race Dimensions

A persona's physical dimensions will prove very important at least several times during a campaign. Whenever a persona is being carried by the rest of the expedition, her wate must be considered. Whenever she is trying to fit into a space suit her hite must be considered. Calculation of a persona's dimensions appears to be a daunting task, however it is not near as difficult a task as it seems. It is important not to ignore the generation of dimensions while the persona is being created, because the omission will certainly come back to haunt smooth role-playing.

The persona's dimensions vary depending on the sex of the persona. Persona sex has no other effect on attributes, and males are as strong as females. When the dimensions is indicated by FE/MALE this means that male and female personas use the same dimensions in that race.

A persona's HITE is easily calculated by rolling the prescribed dice and carrying out the necessary calculations. E.g., the average HITE of a female equine is 179 cms. This is shown in the first part of the HITE equation.

Hite Equation for an Equine	
179+(2 x d20)-20 cms	71 kg

To avoid a race of clones, the average HITE is adjusted by a dice roll. A player with an equine persona would roll 2d20 (roll 2 twenty-sided dice and add their values), and then subtract 20 from the result. This gives a range of -18 cms to +20 cms below and above the average HITE.

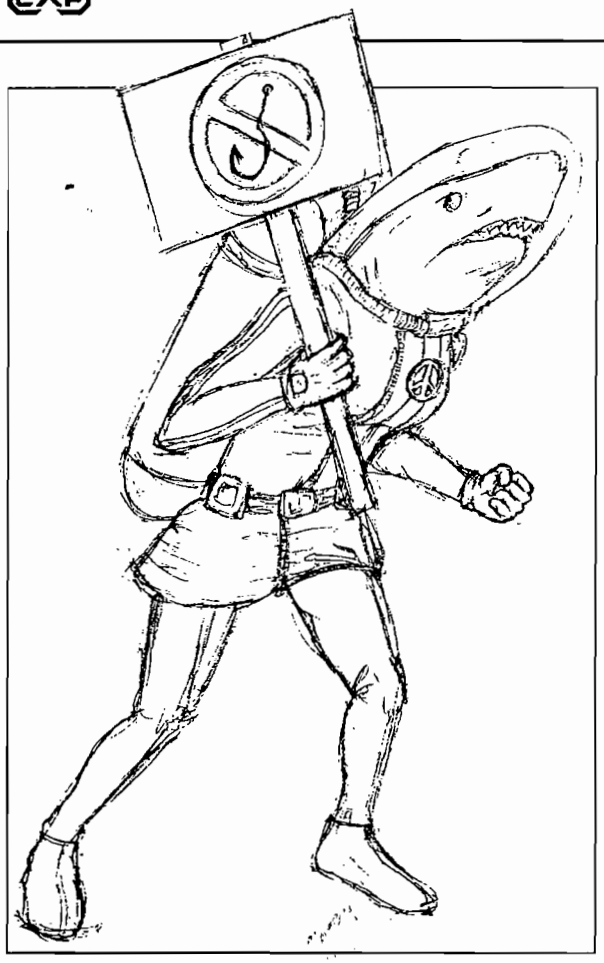
If a player were to roll 3, and 11 on the 2d20 roll, she would end up subtracting 6 cms from the 179 cms average. This would make her equine persona 173 cms tall.

Example Hite for an Equine: 179+(3+11)-20 = 173 cms.

WATE variation is mostly determined by a persona's HITE. The average WATE if a race is listed as a single number after the HITE equation. In the case of the equine race this value is 71 kgs.

If a persona is shorter than average her WATE will be lighter than the average WATE. Those personas taller than average will be heavier. First divide the persona's HITE by the average HITE for the race. Then multiply this quotient by the average WATE. For example, the female equine would divide her calculated HITE (173 cms) by the average HITE for her race (179 cms) 173/179 = 0.97. This value is multiplied by the race's average WATE (71 kg). This equine's WATE would be 69 kgs (0.97x71kgs).

An obvious problem with this method is that all personas of the same HITE, race and sex will have the same WATE. If this causes the referee some consternation then a random factor of d50-25 percent can alter each persona WATE. This is a range of +25% to -24%. So if the same equine persona above were to have a -15% random adjustment her final WATE would be 58.6 kgs. That is 69 kgs x .85 = 58.6 kgs.



Aquarian

Aquarians can also be referred to as *Homo Pisces*. They are basically fish people. It would be expected for an aquarian to have webbed hands, webbed feet, and a scaly covering for skin.

An aquarian persona can choose to appear as one of many aquatic life forms. Some examples are shark, goldfish, octopus, salmon, viper, sea cucumber, anemone or sea star. Remember that regardless of the descriptive aquarian type chosen the persona remains a bipedal humanoid that possesses no special abilities other than rolled mutations. For example, an aquarian fashioned after an electric eel would not have an electric shock.

Some aquarians from popular fiction are mermaids, Aquaman, Flipper, and the Creature From the Black Lagoon.

Aquarians are very limited in that they can only be played easily in the milieu which they were spawned. The aquarians are aquatic life forms, and are not capable of prolonged stays in gaseous environments. Fishoids may temporarily leave their liquid environments after hyper-circulating (a process of super-soaking their gills) for at least 10 minutes. An aquarian can survive in a gaseous atmosphere for 1 minute per point of CON. There are special environment suits that aquarians can obtain to prolong their stay out of water.

Aquarians suffer many out-of-liquid penalties, regardless of what equipment they have. The lack of buoyancy out of water makes gravity effects much more severe for aquarians. This race moves at -25% when on normal gravity land. They also suffer a severe penalty of -2 on all attributes. Players running aquarians should keep two sets of data, one for in the water, and one for on land. The

-2 on all attribute penalty will alter movement rate, combat tables, and mutations. Note that the attribute penalty may keep some aquarians permanently in the water.

Aquarians are quite familiar with low, or zero, gravity environments. In such environments they suffer no attribute penalties, and can move at +30%. For further information on low gravity see chapter 19, Special Terrain.

Table 4.5: Aquarian Data

ATTRIBUTE ADJUSTMENTS +2 on AWE +2 on DEX -2 on all attributes when in a gaseous, gravity environment.		
START AGE 4 + 1-6 (d6) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
fe/male	150+(6 x d20)-50	60

Avarian

Avarians usually have beaks for mouths, feathers for hair, down covered skin, and eyes where our ears would normally be. This race is also known as homo avis.

An avarian can choose to appear as one of many bird types: hawk, parrot, albatross, ostrich, penguin, vulture, swallow, puffin, robin, etc., etc. Remember that regardless of the bird type chosen the persona remains a bipedal humanoid that naturally possesses no abilities other than those listed here. For example, almost all birds can fly, however, almost no avarians can fly.

Some avarians from popular fiction are Tweety Bird (Warner Bros.), Daffy Duck (Warner Bros.), and Hawk (Buck Rogers).

Avarians are generally wingless, however there is a 30% chance of an avarian having decorative wings in addition to down covered arms.



These residual wings will not hamper the persona in any way, however, they are nothing more than decorative. Of those avarians which randomly attain wings 10% of those can fly. Players that insist on having wings for their avarian personas have a 2% chance of being able to fly. These percentage chances are commonly determined by rolling deci-dice, where the lower the roll the more likely they are of occurring.

Flying avarians are able to fly at up to double their regular movement rate. Those avarians which are capable of flight also suffer a -2 h/u movement rate penalty when they are walking on the ground. Those avarians that have the ground movement penalty cannot have a movement rate less than 1 h/u. An avarian with a 16 DEX would move at 6 h/u as determined on the *Movement* table in chapter 3 (Attributes). If this avarian also had

functioning wings she could fly at 12 h/u, and run at 4 h/u. For more information about movement rates see chapter 12, Time & Movement.

Avarians are flighty, nervous, and aware of their surroundings. This is the basis of their ambush detection bonus of being able to use 3 times their AWE to detect ambushes. This is something that players should frequently remind their referee about in order to ensure that the detection ability is always employed. For further information see chapter 34, Ambush.

Table 4.6: Avarian Data

ATTRIBUTE ADJUSTMENTS		
+3 on AWE		
-1 on CON		
+2 on DEX		
-2 on PSTR		
START AGE		
9 + 1-8 (d8) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
male	175+(2 x d20)-40	71
female	175+(3 x d10)-20	65

Canine

The race of canines can be more scientifically referred to as *Homo Canis*. The canines are humanoid dogs that are covered in fur, and sport doggy tails.

A canine persona can select the looks of one of many dog types: poodle, terrier, wolf, jackal, dingo, fox, etc. No matter which of the canine types are chosen, the persona remains a bipedal humanoid that possesses no other natural abilities other than those described here. For example, real



bloodhounds have finely tuned detection senses, but the only searching aid a bloodhound persona would receive would be her AWE.

Some canines from popular fiction are Goofy, Rhalgorn (the Aldair series), most werewolves and Madonna.

Canine Radiation Sense: Although not all canines are bloodhounds they still have a keen sense of smell. This keen aromatic faculty allows the persona to —when actively searching— detect radiation. The canine's radiation detection range is 2 hexes per point of AWE. This is a simple yes/no response as to whether radiation is present or not. The ability to sense radiation yields no more information about the radiation source other than its presence, and general direction.

To determine the radiation type the homo

canis persona must get closer to the source. The effective range for determining radiation type is 1 hex per 2 points of AWE. Once within range a canine has a 5% chance per point of MSTR of properly identifying the radiation type. If properly identified tha canine persona will get some idea of its intensity and general type. Intensity should never be described to the player as numbers. The referee should describe it as dangerous, background, lethal etc. More information about the dangers of radiation poisoning are described in chapter 19, Special Rolls. The type of radiation will rarely be of importance to the expedition, and if it is the referee must be prepared to describe it. Note that the two abilities are separate. If the canine fails to identify the radiation type she is just as likely to be poisoned by it as any other persona.

Table 4.7: Canine Data

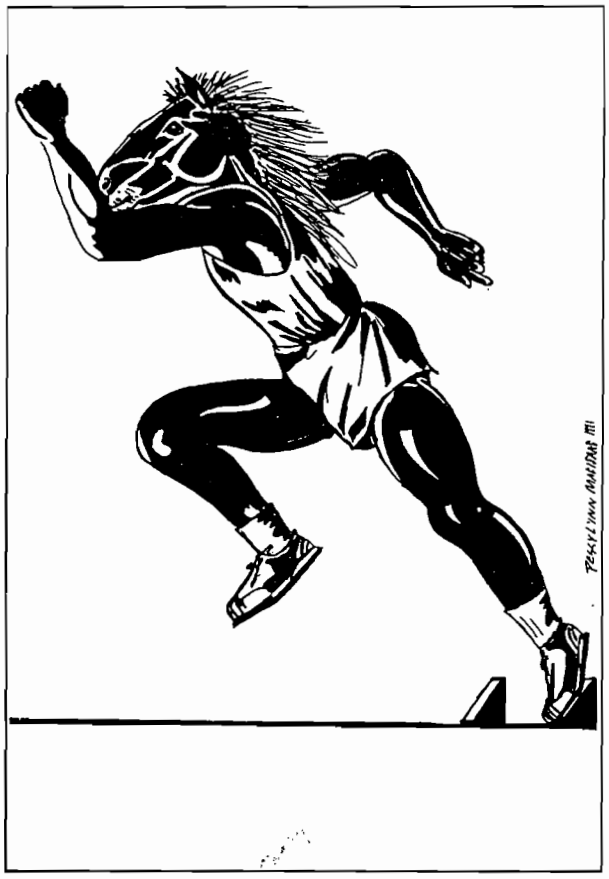
ATTRIBUTE ADJUSTMENTS
+1 on AWE
-2 on CHA
+1 on CON
START AGE
4 + 1-6 (d6) years
DIMENSIONS

	HITE (cms)	WATE (kgs)
fe/male	150+(d12)-8	48

Equine

The race of equines can also be labelled as *Homo Equus*. They have horse like heads, hooves for feet, fly swatting tails, and their cured skins make good leather.

Equines can choose to resemble any of a great variety of hoofed animals: Clydesdale,



gazelle, elephant, cow, goat, unicorn, giraffe, etc., etc. It doesn't matter which of the animal types are chosen, the persona remains a bipedal humanoid that naturally possesses no more abilities than those covered in this section. For example, the mythical unicorn is supposed to be able to teleport from one place to another. A homo equus unicorn could not teleport without rolling a teleport mutation.

Some equines from popular fiction are minotaurs, and satyrs.

The equines are fast. They get a bonus of +3 h/u on their movement rate, and when running at a full sprint (gallop) they can move at 2 and 1/2 times their normal speed. Equines are also fantastic horizontal jumpers, and can leap 2 hexes per 8 points of PSTR. When jumping this race does not

need to make an attribute check to avoid tumbling, and can proceed unhindered. Lastly, the homo equus can jump twice as high as all other persona races.

Table 4.8: Equine Data

ATTRIBUTE ADJUSTMENTS
+1 on DEX
-1 on INT
-2 on MSTR
+2 on PSTR
START AGE
9 + 1-20 (d20) years
DIMENSIONS

	HITE (cms)	WATE (kgs)
male	186+(2 x d20)-20	81
female	179+(2 x d20)-20	71

Feline

Meow. For those readers who haven't already guessed, felines can also be referred to as *Homo Felis*. Felines are cat people. They have furry bodies, long slender tails and mouths full of sharp little teeth.

Some of the animal types that felines may resemble are listed here: Siamese, Manx, lion, tiger, puma, jaguar, leopard, ocelot, etc., etc. It must be stated again that the feline type chosen is purely descriptive, and has no abilities other than those described here. For example, a leopard fashioned feline persona could not accelerate up to 100 kmh to catch prey (or more likely a bus). A feline's base movement rate is determined by her DEX, like any other persona.

Some felines from popular media are Fritz theCat (Bakshi), Sylvester (Warner Bros.), Furtig (from The Breed To Come), the lion-man (from The Wizard of Oz).



Felines have a keen sense of balance and agility. Because of this they are granted a +30% movement bonus. Therefore a feline with a 5 h/u movement rate (determined by the DEX Table) would move at 6.5 h/u (1.3 x 5 h/u) which is rounded up to 7 h/u.

Such speed and agility was once needed by felines in order to catch prey, but this was before they could buy it at the supermarket. The ability to ambush prey is an asset too, and felines get a bonus when trying to ambush a target. This bonus only applies when the feline is acting alone, or the entire ambushing expedition is feline. An ambushing feline can subtract her DEX from the targets AWE. So if a feline with a 14 DEX is trying to ambush a target that has a 16 AWE the target's effective AWE is reduced to 2. This is very

devastating to the target. See chapter 34, Ambush for more information.

Homo felis also has equal nite/day vision. This allows them to operate in darkness without any penalty.

Table 4.9: Feline Data

ATTRIBUTE ADJUSTMENTS
-2 on CON
+2 on DEX
-1 on PSTR
START AGE
4 + 1-6 (d6) years

DIMENSIONS

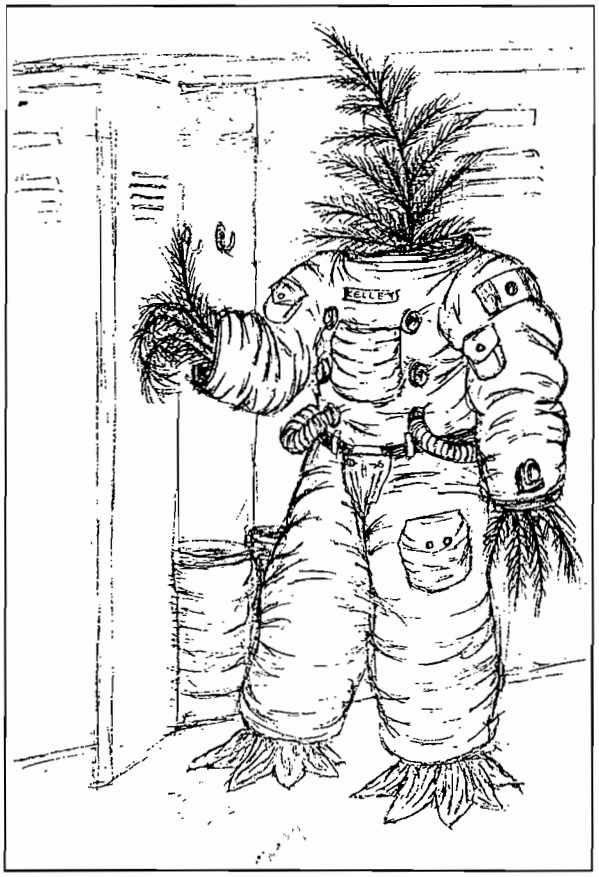
	HITE (cms)	WATE (kgs)
male	150+(d20)-9	45
female	150+(d20)-6	48

Florian

Florians are also known as Homo Planta. The florians are walking plants which will usually have bark for skin, and fungus, or leaves, for hair. All florians have a humanoid shape with many types of decorations to choose from: petunia, rose, seaweed, pine cones, etc. Remember that these various florian types are merely decorations for upright humanoids, and they have no abilities other than those listed here. For example, a florian persona modelled after poison ivy would not be untouchable. However, a florian's charisma could be so low that she is treated like poison ivy. Florians do not have any special prowess at hiding amongst the flora either.

Some florians from popular fiction can be found in the story The Artificial Kid (Sterling).

Florian Photosynthesis: Florians are photosynthetic. Even florians modelled after fungi are photosynthetic. This means that florians need nourishing sunlight, and plenty of water to keep



from starving. The florians do not have blood coursing through their arteries (stroma), but they do have flowing liquids that, if lost will cause death. A wounded florian will essentially bleed to death, but at a much slower rate than other races. A florian will lose 1 hit point per 10 units, whereas all other races lose 1 hit point per 5 units.

Florians not only bleed slower, but they heal faster. When resting in sunlight all day, drinking lots of water, and sleeping all night (i.e., not out pollinating), a florian will heal twice as fast as other races. A sunbathing florian will initially heal at 2 HPS per day, and after one week heal at 4 HPS per day. For more information about healing, see the chapter on natural healing.

Florians do have lungs, but they operate at a much reduced rate, and effectively carry out an

opposite process to mammalian lungs. Florian lungs draw carbon dioxide from the air for photosynthesis, and blow off waste oxygen. The lungs are redundant, and florians can "hold" their breath indefinitely. This allows florians to be unaffected by inhaled gases. Because the skin of the florian is such a doubly important organ, fire, heat, cold and corrosive attacks do double damage.

Table 4.10: Florian Data

ATTRIBUTE ADJUSTMENTS		
+1 on INT		
START AGE		
55+ 1-20 (d20) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
fe/male	165+(3 x d20)-30	50



Humanoid

Humanoids are also labelled *Homo Mutabilis*. The humanoids are typically human shaped, but they are untypically susceptible to mutations. Players with humanoid personas may choose to have any skin colour they desire.

The humanoid race is a highly mutated version of PSH (pure strain human). Humanoids include all human races (Asian, Black, Caucasian) plus some related geni: simians (monkeys, apes), suidae (pigs, boars), elves, dwarves, orcs, punk rockers, etc. None of these descriptive types have any of their purported natural abilities. For example, elves and leprechauns are supposed to have many mythical abilities. However a humanoid persona would only resemble such a humanoid, and the only special abilities they have would be the ones generated as mutations.

Humanoids from popular fiction are Bilbo Baggins, Gollum, Jawas (Star Wars), Aldair (Aldair In Albion), the piggies from Animal Farm, etc., etc., etc.

Homo mutabilis has no remarkable abilities other than their extreme susceptibility to mutation.

Table 4.11: Humanoid Data

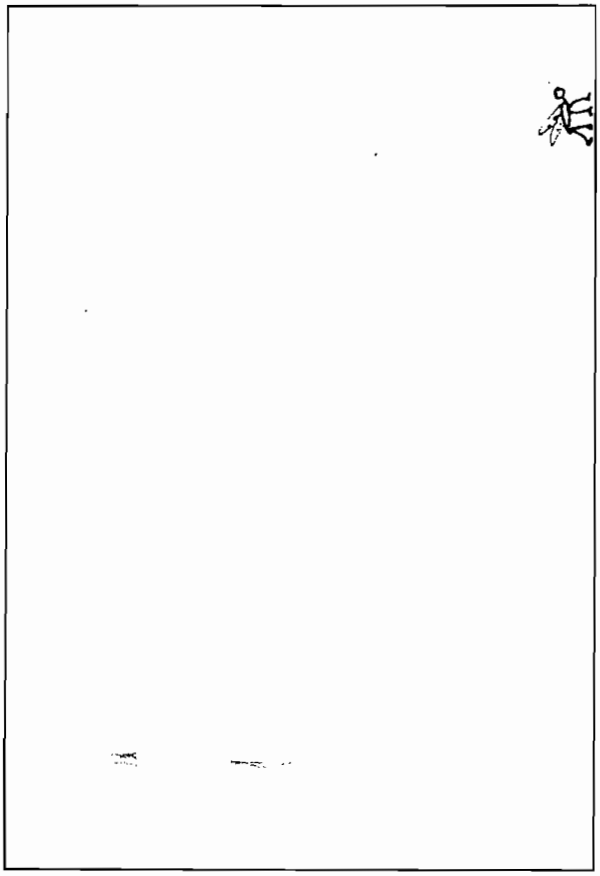
ATTRIBUTE ADJUSTMENTS		
-2 on CHA		
START AGE		
16 + 1-8 (d8) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
male	176+(2 x d20)-20	71
female	169+(2 x d20)-20	62

Insectoid

Homo insectum is the pseudo-scientific term for the race of insectoid. An insectoid will sport the head shape of whatever insect type is chosen. Insectoids also have an exoskeleton-like skin covering, and decorative limbs and/or wings.

An insectoid persona could resemble a bee, wasp, worm, slug, flea, mosquito, beetle, tick, louse, moth, grasshopper, dragon fly, etc., etc.

Since their is such variety in the insect world, it must be re-emphasized here that the descriptive character of the persona is nothing more than that. The insectoid is a bipedal upright humanoid that possesses no abilities other than those described here, and whatever additional mutations are rolled. For example, a persona modelled after a wolf spider could not make a web nor could a bee-like homo insectum sting; however, special mutations may yield such abilities.



Some insectoids from popular fiction are: Jiminy Cricket, and Atom ant.

Because of an indescribably peculiar brain pattern insectoids are naturally resistant to psionic attack. They receive a bonus of +1 for every 5 points of MSTR on saves versus psionic attack.

Table 4.12: Insectoid Data

ATTRIBUTE ADJUSTMENTS None		
START AGE 25 + 1-20 (d20) years		
DIMENSIONS	HITE (cms)	WATE (kgs)
male	150+(6 x d20)-50	55
female	125+(8 x d20)-40	60

Pure Strain Human (PSH)

Pure strain humans are often referred to as *Homo Sapiens*. The exhausting title of pure strain human is abbreviated to PSH. PSH are the collection of upright bipedal humanoids which inhabit our planet earth.

The qualifier "Pure strain" implies nothing to support bigoted aspirations, and PSHs can choose from any human ethnicity: African, Asian, Indian, Hispanic, Caucasian, etc., etc. Pure strain humans are simply upright bipedal humanoids who possess no purported mythical abilities other than those described here. None of the varieties of the human animal are in any way more proficient at any one task than another. Physical abilities are described by class, rolled attributes, mutations, and nothing else.

Almost every shred of literature devised involves the actions of at least some PSH. A few of the most famous PSH are listed here: Luke Skywalker (Star Wars), Jim and Angelina DiGriz (Stainless Steel Rat), Indiana Jones (Raiders of the



Lost Ark).

The "pure" in pure-strain-human cannot be taken too literally. PSH have the benefit of starting the campaign with no physical mutations, or diseases, of any sort. However they are susceptible to both once involved in the campaign. In fact, PSH have a very slim chance of starting a campaign with one mental mutation. This mutation CANNOT be a defect. See chapter 7, Mutations.

Table 4.13: PSH Data

ATTRIBUTE ADJUSTMENTS		
+3 on CHA		
START AGE		
16 + 1-8 (d8) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
male	176+(2 x d20)-20	71
female	169+(2 x d20)-20	62

Reptilian

Reptilians have the taxonomic label of *Homo Serpens.* All reptilians are covered in the expected leathery hide, and have lizard-like heads.

Reptilians have a good variety of descriptions to choose from: salamanders, snakes, iguanas, alligators, turtles, frogs, T-rexes, brontosaurs, etc., etc., etc. Note that the type of reptile chosen is done so for descriptive purposes; they are upright bipedal humanoids which naturally possess no abilities other than those listed here. For example, a frog-like reptilian wouldn't be amphibious unless she rolled a mutation like Non-breathing (Physical mutation #30).

Famous reptilians from popular fiction are: Yoda (Empire Strikes Back), Thareesh (Aldair series), Jerry (Enemy Mine).

Chameleon Ability: A reptilian has an 8% chance of having chameleon like powers which enable the reptilian to blend into the background. This skin colour alteration will work 90% of the time. Chameleon power is a defensive hiding ability which allows the reptilian to become virtually invisible provided that she doesn't move while being watched. The skill will not work if she attempts to employ it while under direct gaze. Chameleon power will also succumb to sonar, or



any other special vision. The persona must be completely naked in order to employ this ability. For more information see chapter 59, Physical Mutations (mutation #6 Chameleon Power).

Reptilian Torpor: All reptilians can voluntarily revert into a trance like state similar to an ursidae's hibernation. Once the reptilian is in this torpor she cannot be awakened for 2-12 days. The number of days unconscious is rolled by the referee, and is kept secret from the players. While in this state of lower metabolism the persona will heal at a constant 3 hit points each day.

A reptilian can go into torpor by her own decision, or automatically (as when failing a damage system shock roll). In either case the reptilian will heal at a rate of three hit points per day, and remain unconscious for 2 to 12 days. Reptilians will remain in their torpor for 2 to 12 days regardless of whether they are completely healed or not. Reptilians cannot go into torpor if they have less than 0 hit points. When this occurs, reptilians are dying like all other races.

The torpor condition lowers the reptilian's metabolism, and can be used to reduce the effects of poisonous atmospheres. When in the torpor state, ingested and inhaled poisons have 1/2 intensity and effect. However the reptilian will still be unconscious for the full 2 to 12 days. Corrosive, heat, and flame attacks are unaffected by the torpor.

Table 4.14: Reptilian Data

ATTRIBUTE ADJUSTMENTS		
-2 on CHA		
+1 on Con		
+3 on Mstr		
START AGE		
75 + 1-20 (d20) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
fe/male	165+(3 x d20)-30	50

Rodentia

Rodentia are fur covered humanoids with paws, rodent heads, and tails (whenever applicable). Rodentia can also be referred to as rodents, or homo rodens. Some rodent types that a player can choose from are listed here: beaver (Canadian eh!), kangaroo, rat, mouse, mole, vole, porcupine, hedgehog, gopher, platypus, hamster, gerbil, squirrel, etc., etc.

No matter which rodent type is chosen the persona remains a bipedal humanoid who possesses no natural abilities other than those detailed here.



For example a beaver can chew down timber, and construct dams better than a civil engineer can chew down trees and construct dams. However the only dam building experience a beaver persona could have would be through civil engineering (the mechanic class).

Some rodents from from popular fiction are: Rattons (Breed to Come), and Bugs Bunny (Warner Bros.).

Rodentia earn a 20% bonus on their movement rate. So a rodent that moves 5 h/u, as determined on the Movement Table, would actually move at 6 h/u. Rodents are unaffected when scuttling through the underbrush or similar floral terrain coverings.

Rodentia also enjoy 12 hex night/day vision, which is disrupted by alternative light sources, such as torches and searchlights. Thus the night/day vision can only operate in the absence of significant light.

Figure 4.15: Rodentia Data Table

ATTRIBUTE ADJUSTMENTS
+2 on AWE
+1 on DEX
-1 on PSTR

START AGE
4 + 1-10 (d10) years

DIMENSIONS		
	HITE (cms)	WATE (kgs)
male	175+(2 x d20)-15	71
female	175+(2 x d20)-20	71

Ursidae

Ursidae have the scientific nomenclature of *Homo Ursus*. Ursidae are big furry bearoids. They have rotund bodies, bear-like heads, and claw tipped stubby hands. Some ursidae descriptive types are: grizzly bear, sloth, wookie (Star Wars), polar bear, yeti, brown bear, sasquatch, etc. Remember that regardless of the bear type chosen the persona remains a bipedal humanoid that naturally possesses no more abilities than those described here.

Some ursidae from popular fiction are Chewbacca (Star Wars), Smokey the Bear, and Signar Haldring (Aldair series).

Ursidae Hibernation: Ursidae can revert to a hibernation-like stupor in which their metabolism is so slowed that they appear dead. Only a well trained veterinarian can determine whether a hibernating ursidae is dead, or just resting. Ursidae will only hibernate when they voluntarily decide to do so. They will not automatically hibernate if they are knocked unconscious (failing a DSS roll). The persona must be conscious, and voluntarily curl up



in order to hibernate. Ursidae cannot hibernate when their HPS totals are negative, and they are dying like all other personas.

Once bedded down to hibernation the ursidae will sleep for 1-6 days. This is determined by the referee with a d6 roll, and the result is kept secret from the players. While hibernating the ursidae will heal one hit point each day for every two points of CON. So an ursidae with a 14 CON, hibernating for 4 days would heal a total of 28 HPS.

Metabolic poisons have no effect on an ursidae while she's in hibernation.

During the time of rest their is a 1/2% chance that the persona will actually slip into a state of permanent sleep, otherwise referred to as death. At the end of hibernation the ref makes a kilo-die roll, if this is less than 005 the ursidae has died due to a severely decreased metabolism. Remember that only the trained eye can distinguish hibernation from death, so uneducated players won't know an ursidae has kicked the bucket until she starts to smell.

Any attempt to wake an ursidae will have a 7% chance of success regardless of what the attempt is. For instance whispering softly into her ear will be as effective as inducing electric shocks. Only one such attempt can be made each day of hibernation.

Ursidae Frenzy: In complete juxtaposition to the ursidae hibernation ability is their frenzied attack. The persona can revert to this mauling frenzy by choice, or when confronted with a situation she cannot readily find a solution for. When intellectually stumped, as ursidae will frequently find themselves, there is a 5% chance that they she will involuntarily go frenzied. If an ursidae is awakened from her hibernation there is a 40% chance she will automatically go into her insane violence act.

Once frenzied the persona has reverted to a claw driven, non-powered fighting machine. The persona will drop all weapons of any sort, and proceed to rend and tear at the major cause of the dilemma with her bare claws. When attacking in this frenzied passion the ursidae will receive 1 and 1/2 attacks per experience level per unit. No ursidae can have more than 6 attacks per unit while in a frenzy. Each attack strikes as a type A weapon, and does 1-6 points of damage per hit. The ursidae can also add 1/2 her PSTR bonus to each hit, turning her into a lethal killing machine (the same as 1/2 her type A damage adjustment). Thus a 6th level ursidae with an 18 PSTR would get 6 attacks, each capable of inflicting 10 to 15 points of damage. Other non-cerebral, physical actions such as force rolls, are twice as likely to succeed while frenzied. Frenzied ursidae do not have to make damage system shock rolls, and will continue fighting until they are at a negative HPS total.

The homo ursus frenzy is not the panacea of hand to hand combat that it appears. The fit will last for 2 to 16 units. The duration of the attack is rolled by the referee, and kept secret from the players. If an ursidae's opponents have been

eliminated her frenzy will continue until the duration is up. This means that she will attack the nearest organic creature for the remainder of the frenzy—be it RPC, player, or alien. So even an ursidae's best comrades flee until she has calmed down. Once the frenzy ends, there is a 10% chance that it will continue for another 1-8 units.

Ursidae are particularly hardy, and when saving against cold based attacks ursidae get +2 on their saving throw. All cold based attacks do 25% less damage to an ursidae.

Table 4.16: Ursidae Data

ATTRIBUTE ADJUSTMENTS		
+1 on CON		
-2 on INT		
+2 on PSTR		
START AGE		
11 + 1-6 (d6) years		
DIMENSIONS		
	HITE (cms)	WATE (kgs)
Male	208+(2 x d20)-20	139
Female	176+(2 x d20)-20	78

References

The following materials might give the reader some examples of the variety of anthropomrphs found in science-fiction. Of course what matters is how the players and referee picture these exotic species in their own minds. The EXP definition of any of these creatures is meant only as a guide for inspiring the sick and twisted imagination of the reader.

Aquarian: 'Mon Calamari' from *Return of The Jedi,* Lawrence Kasdan and George Lucas (producers), 1983, [film] 20th Century Fox.

Avarian: 'Big Bird' from Sesame Street, [TV] Children's Television Workshop.

Canine: The 'Lo Teks' from William Gibson's *Johnny Mnemonic*, 1981, Omni Publication International Ltd.

Feline: C.J. Cherryh, Cuckoo's Egg, 1985, DAW.

Florian: 'Alec Holland' from Alan Moore, *Swamp Thing,* 1982, DC Comics Inc.

Humanoid: 'Vulcans, Klingons and Romulans' from Star Trek (1966-1969) [TV], Paramount Productions.

Insectoid: John Brunner, The Crucible of Time, 1984, Arrow.

PSH: David Brin, Earth, 1990,

Reptillian: 'Jerry' from Barry Longyear, "Enemy Mine" in Manifest Destiny, 1980, Berkley.

Ursidae: 'Chewbacca, the Wookie' from George Lucas' Star Wars Trilogy, 1977, 1980, 1983, [film] 20th Century Fox.

Chapter 5
Robots

For players who want to try something different, and more challenging, the Robot section will fit the bill nicely. Robots are an unusual category of persona for many reasons, the least of which is the fact that they are not biological entities. This alone makes them more alien than aliens. Robots are ideal for players who have always felt some affinity for things mechanical. Although robots will not suit everyone, some players will immediately find a home for their psyche inside one of these alloy-cans. Have you ever found yourself establishing immediate rapport with your home computer, toaster or electric drill? If so, you may find yourself at home in this chapter.

Do not enter the robotic realm without consideration. Though it may seem appealing, there are many things to consider. First of all, the robots are not a basic humanoid form. Few players can relate to being shaped like a cube, and floating around on antigrav. There are many advantages and disadvantages to being a robot—all of which take a lot of getting used to. The robotic class can be riotous fun for those players who can relate to the completely different physical and mental construction—and can result in severe problems for those who cannot adapt.

Those players who have chosen robot personas have their work cut out for them. The robots are completely unlike either humanoids or aliens. The system for designing robots is also unique and involves the use of a great many tables. The process is actually quite straightforward and can be executed via the following check list:

Table 5.1: Robot Design Checklist

(1) Determine bot type
(2) Translate attributes
(3) Base race
(4) Armour Rating
(5) Movement rate
(6) Wate allowance
(7) Power source
(8) Sensors
(9) Locomotion type
(10) Offensive systems (attacks)
(11) Defensive systems (defenses)
(12) Peripheral systems (random)
(13) Description
(14) Wate
(15) Size
(16) Control factor
(17) Hit points
(18) Tech level
(19) Adaptability

(1)Determine Robot Type

Although attributes for robots are comprised of the usual seven (AWE, CHA, CON, DEX, INT, MSTR, PSTR), their generation differs somewhat. There are four prime requisites: CON, DEX, INT and PSTR. Each of these is determined initially on a four-sided die, and is referred to as the level of the attribute. A player that rolls a three for PSTR, thus has a PSTR level of III. The level of the attribute is quite distinct from the true value of the attribute. The levels are used to determine what robotic type the player will have, and must be converted to regular attribute values for play. Although a robot's attributes may change in the course of a campaign, its attribute level cannot.

When the attribute levels have been determined, refer to the *Robot Determination* Table

Table 5.2: Robot Determination

ROBOT TYPE/NAME	CON 1	2	3	4	DEX 1	2	3	4	INT 1	2	3	4	PSTR 1	2	3	4
A Analog	A	A			A	A						A	A	A		
B Hobbot	B				B						B	B	B			
C Industrial	C	C	C	C		C	C		C	C						C
D Relations	D	D			D	D					D	D	D			
E Janitorial	E				E	E			E	E			E	E		
F Explorations				F		F			F			F			F	
G Combat		G		G				G	G		G					G
H Police			H					H			H				H	
I Medical	I	I						I			I	I	I			
J Emergency				J		J		J		J	J		J		J	
K Maintenance	K	K				K	K			K	K	K	K			
L Transport	L				L			L	L			L	L			
M Android				M				M				M				M

to see what possibilities are available to the player. For example, a bot with a PSTR level III would look down the column for PSTR III, and find that three robot types (F,H, & J) are allowed. This is repeated for each of the four attributes. The robot type that appears most frequently becomes the persona's robot type. In the case of a tie, the player is free to choose.

Let's consider a bot named Sal. Her attribute levels are: CON II, DEX II, INT III, and PSTRIV. The player would go down the columns of the Robot Determination Table to see which robot types apply. For instance her CON of II would is indicative of robot types A, C, D, G, I, and K. This corresponds with analog, industrial, relations, combat, medical, and maintenance robots. This does not immediately determine which robot type Sal can be.

The player must go down the columns of each of her attribute levels, and record which types are indicated by each one. The robot type that presents the most is Sal's robot type. The table below indicates which robot types are indicated by each attribute. Sal is lucky, she has four equally recorded types. The choices for robotic type are C, D, G, and K. These bot types are: industrial, relations, combat and maintenance. Sal would now look at these four possibilities more closely.

Sal's Options:

CON	II	A		C	D			G		I		K	
DEX	II	A		C	D	E	F				J	K	
INT	III		B		D			G	H	I	J	K	
PSTR	IV			C				G					M

(2) Translate Attributes

Once the attribute levels have been used to determine the robot type, they need to be converted to standard attributes. The conversion equations for CON, DEX, INT and PSTR are given on the Robotic Attribute Conversion Table. The remaining attributes (AWE, CHA) are rolled as usual—on 3 six sides. Incidentally, MSTR for bots is always 0, which in fact may create ground for fascinating philosophical arguments, best not pursued herein.

Table 5.3: Robotic Attribute Conversion

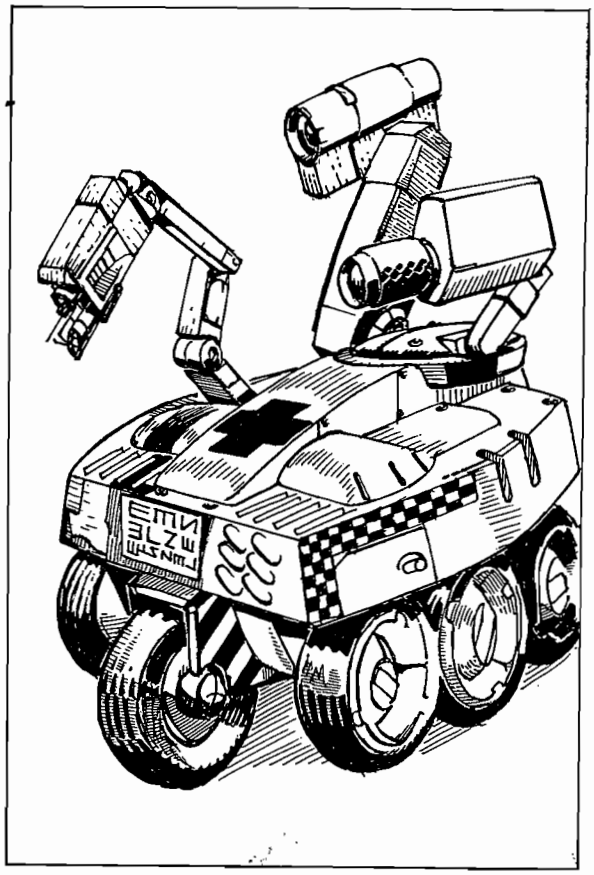
LEVEL	CON	DEX	INT	PSTR
IV	d6+19	d6+19	d6+19	d10+19
RANGE	20-25	20-25	20-25	20-29
III	d6+13	d6+13	d6+13	d4+15
RANGE	14-19	14-19	14-19	16-19
II	d6+7	d6+7	d6+7	d6+9
RANGE	8-13	8-13	8-13	10-15
I	d8	d8	d8	d10
RANGE	1-8	1-8	1-8	0-9

Robot Types

The robot types are listed in the following pages. Each type is described, and its particular parameters are listed. There are seven points that the player must record about her bot persona. These are: ATTACKS, DEFENCES, RANDOM (random peripherals), ADAPTABILITY, VALUE, SIZE, and ATTRIBUTES (attribute requirements).

ATTACKS: determines the attacks that the robot can have. Remember that these robots are completely insane, and an offensive weapon does not necessarily mean a gun or a bomb, but it could indicate a defective piece of equipment that the malfunctioning robot is using as a weapon. Attacks are more completely described in step 10, offensive systems, in this chapter. A percentage value indicates the percent chance that a robot will have an offensive weapon. The number of rolls is the number surrounded in brackets. An analog robot would receive a 5% chance at one attack. If there is only a number listed beside ATTacks then that is the number of attacks.

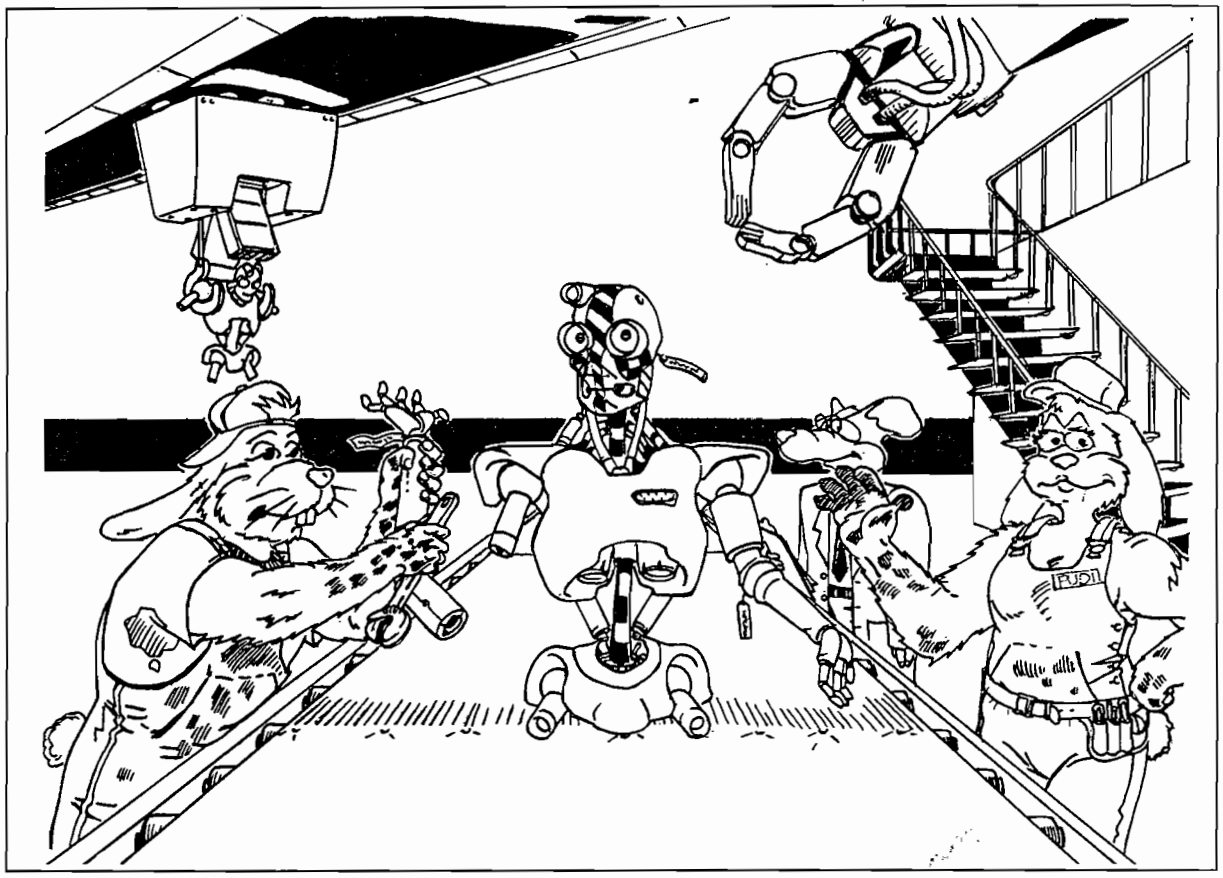
DEFENCES: determines the combat defences that the robot can have. Remember that these robots are completely insane, and a defensive weapon does not necessarily mean a force field or special armour, but it could indicate a defective piece of equipment that the malfunctioning robot is using as a defence. Defences are more completely described in step 11, defensive systems, in this



chapter. A percentage value indicates the percent chance that a robot will have an defensive weapon. The number of rolls is the number surrounded in brackets. An analog robot would receive a 24% chance at two defences. If there is only a number listed beside DEFences: then that is the number of defences. The type of defence is determined in the Defensive systems part of this chapter.

RANDOM: determines how many random peripherals are attached to the robot. The peripherals are gadgets that allow the robot to be more useful and flexible. Normally a robot will get just one roll in the peripheral systems (step 12) of this chapter. Such robots are listed as 'normal', other robots have a percentage chance of having extra rolls on the peripheral table.

ADAPTABILITY: represents the adaptability



of the robot. If it is very easily attached to new robotic peripherals then its adaptability will be high. The percentage chance equals the likelihood that an object can be interfaced with the robot. This same value is added to the mechanic's PT roll.

VALUE: is the standard currency value of the most basic version of the robot type. The more peripherals attached to the bot, the more valuable it becomes. This represents the simple base value.

SIZE: indicates whether a robot is designed for outdoor use, or indoor use. Robots designed to withstand the elements, and function outside of buildings are larger than those that are produced for indoor use. The size classifications are **indoor** (smaller), and **outdoor** (larger). If the persona wants to be a small outside robot she may use the **indoor** size voluntarily, however robots cannot be made larger by choice.

ATTRIBUTES: help define further divisions of the robotic types. The robot type is analogous to the persona class. The type determines what strengths the robot has, and what special abilities it has. There are some classifications within the robot types themselves. For instance there is more than one type of combat robot, or industrial bot, and which sub-type of robot the persona can be is depends on the the converted attributes. All policing robots have an INT level of III, but a special operations policing (a detective) robot's INT must be at least 15.

A. Analog Monitors

Analog monitors are tin-can thinkers that tend to be the most insane type of robot—for, as we all know, intelligence breeds insanity. They are so stuffed with artificial intelligence that it is not uncommon for them to be moody—dwelling, as they tend to do, too much on their and the world's ills. Most analog monitors have a semi-organic form of central computing unit that is so complex it can have a mental mutation. The chance for an analog monitor to mutate mentally is equal to four times the robot's base race's chance for a mental mutation. This is determined in chapter 58, Mental mutations. So, a Type A robot of a canine base race would have a 40% chance for a mental mutation. The base race of a robot is determined in this chapter under (3) Base race.

ATTACKS: 5% for 1
DEFENCES: 24% for 2
RANDOM: Normal plus 35% for 1 extra
ADAPTIBILITY: 15%
VALUE: 10000-60000
SIZE: Indoor
ATTRIBUTES: -

B. Hobbots

Hobby robots put together at home by the enthused robotics hobbyist. Hobbots were made for companionship, mechanical fun, or even possibly for some actual purpose. The hobbots come with many peripherals rolled off the Random Peripheral Tables. Hobbots are the most easily modified of all the robots. **There is a +2 DD bonus for Mechanics when trying to work on a hobbot.** Hobbots are also characterized by an unusual degree of uniqueness—it is almost impossible to have two identical hobbots. Often they are jerry-built super-mechano sets with bits and bytes attached here and there. They should not be underestimated because of their humble origins—they may cunningly conceal a host of nifty tricks and treats.

ATTACKS: 10% for 1
DEFENCES: 10% for 1
RANDOM: Auto 2-8 (2d4)
ADAPTIBILITY: 75%
VALUE: 2500+8000 per peripheral
SIZE: Indoor
ATTRIBUTES: —

C. Industrial

The basic class of industrial robots break down into three separate types: construction, lifting and moving. If the persona's highest attribute is INT, she will be a construction bot. A lifting bot must have PSTR as the highest attribute. If DEX is the highest, the persona will be a moving bot. If there is a tie among the three attributes, the player is free to choose.

I

Construction bots: Are mobile assembly units that generally cannot design anything. Once programmed to produce certain items, they set right to it, acquiring their own supplies and machining the items non-stop until supplies run out. The cycle then starts over: acquisition of raw materials, etc. Bots with INT ratings greater than 22 can design their own simple objects (cups, ball, combs, toys). **Properly programing a construction bot is a Mechanic maneuver of d8 DD**. The more valuable the item the more difficult the DD. This skill does not include production of fancy high-tech weaponry and other such goodies. Usually a construction bot will stop functioning when it runs out of raw materials.

Lifting bots: These are unemployed cargo hoists that somehow have lost their jobs in warehouses or department stores. Lifting bots are capable of supporting one object per three points of DEX. So a lifting bot with a 12 DEX would have 4 articulations for lifting. The objects lifted by one arm cannot exceed 3 times the bot's PSTR weight allowance. If the robot has multiple lifting articulations, a DEX attribute roll must be made if the arms are to work in unison, i.e., to lift a single object. Any object which may be lifted can be raised to a height five times the bot's size (height).

Normally, for obvious reasons, lifting bots were not made to drop things to the ground. However if an insane bot were to drop things too often that might be why she is unemployed. If the player wishes to have her lifting bot drop something, a **Control Factor** (CF) roll must be made. If the player fails the roll (rolls under CF) the object or creature will be placed safely on the ground. After this CF failure, the robot will have to rest for a length of time equal to a Control Factor fit.

Moving bots: These robots should not be mistaken for intelligent trucks—in action they more resemble sentient mail carriers. Like most mail carriers, these bots have gone on strike. Unlike most mail carriers, they can carry 3 times their robotic wate allowance, and they are very fast. Moving robots get a bonus of 50% on their movement rate. They can remember 5 locations per point of INT, all within a range of 100 kilometers per point of AWE. The moving bot can also decipher maps and find points on maps with an efficiency of four times the bot's INT.

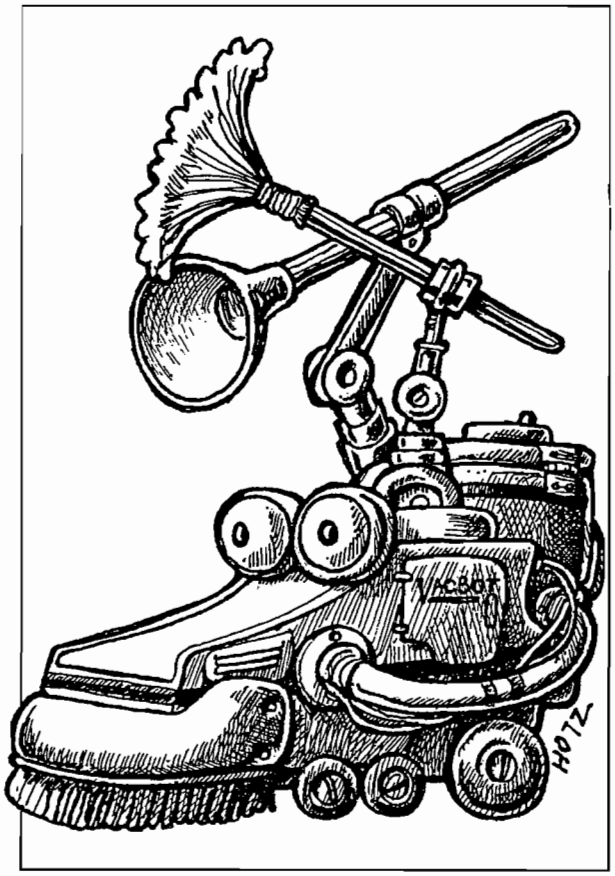
Some of the Moving bots are capable of loading themselves (the chance is three times (INT+DEX). Those that are self-loading can lift items up to twice their wate allowance, and can load them at a rate of about one object per unit.

	CONSTRUCTION	LIFTING	MOVING
ATTACKS:	Auto for 2	35% for 2	35% for 1
DEFENCES:	15% for 1	15% for 2	15% for 1
RANDOM:	Normal, 10% for +1	Normal	Normal
ADAPTIBILITY:	5%	5%	5%
VALUE:	50000	30000	20000
SIZE:	Indoor	Outdoor	Outdoor
ATTRIBUTES:	INT highest	PSTR highest	DEX highest

D. Relations

Relations bots are borgs that roughly resemble the base race that built them. This resemblance is purely for aesthetics and cannot be mistaken for the real race. The size and weight of the robot will be rolled on the tables for the base race, with the weight being increased by 25%. This robot type will have articulated legs 90% of the time; this will supercede any other form of locomotion. Relations bots speak the language of their base race and possibly many others. The maximum number of languages that a relations bot can understand and employ is 10 times her INT. Each new language encountered can be immediately understood with a deci-die roll less than her INT. If a language is not immediately understood, then a relations bot will come to understand it with 1 to 4 days of exposure. Relations bots are also known as robotic butlers, and they can observe the customs and etiquette (often pedantically) of 1 culture per point of INT. Robutlers can also tend to the needs of 2 guests per point of INT.

ATTACKS: 10% for 1
DEFENCES: 85% for 1, non-lethal
RANDOM: Normal
ADAPTIBILITY: 5%
VALUE: 100000
SIZE: Special
ATTRIBUTES: —



E. Janitorial

Janitorial bots, very simply, clean up. If the bot's INT is 12 or greater, they will be of the domestic variety. The domestic bot is designed to clean up constantly changing domestic landscapes, where anything can randomly occur. The industrial type, on the other hand, is intended to work in a pre-programmed factory which is highly regulated and supposedly self-sufficient. Industrial bots roll their size on the outdoor table, while the domestics use the indoor table.

Both types of janitorial bot are equipped with vacuums, sweepers, detergents, toilet plungers and other such paraphernalia necessary for decreasing the entropy of the universe. These bots can also act as part-time sentries, or can be ordered to go get specific tools or types of food.

	DOMESTIC	INDUSTRIAL
ATTACKS:	10% for 1	25% for 2
DEFENCES:	15% for 2	45% for 2
RANDOM:	40% for +2	Normal
ADAPTIBILITY:	10%	30%
VALUE:	35000	20000
SIZE:	Indoor	Outdoor
ATTRIBUTES:	INT 12	

F. Explorations

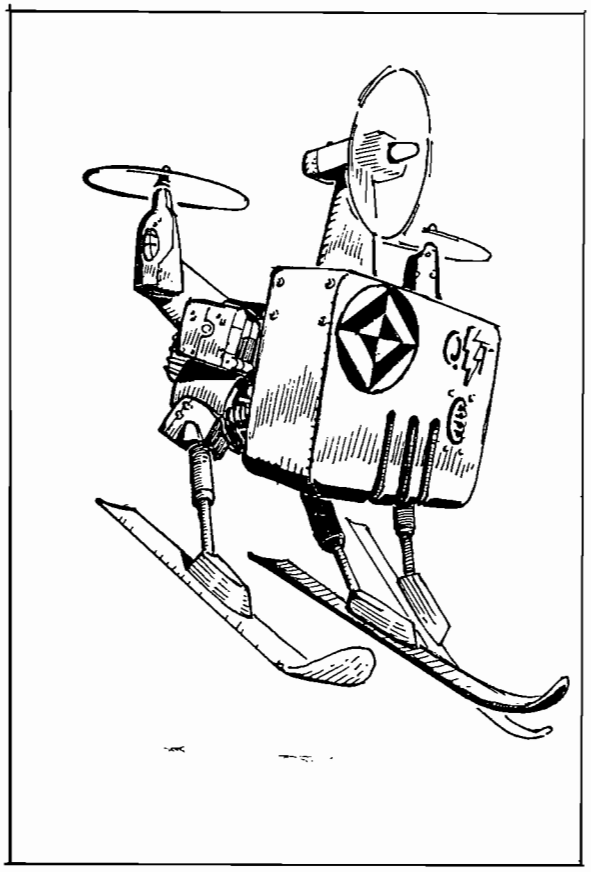
	Planetary	ExtraPlanetary
ATTACKS:	25% for 1	Auto 1
DEFENCES:	Auto 1	Auto 3
RANDOM:	Normal	Normal
ADAPTIBILITY:	None	None
VALUE:	250000	1900000
SIZE:	Outdoor	Outdoor
ATTRIBUTES:		INT 24

Explorations bots come in two quite distinct but complementary types: planetary and extra-planetary. In order to qualify for extra-planetary status, a minimum 24 INT is required, making extra-planetary bots the rarer of the two exbots.

Planetary: The planetary type is the more mindless version commonly deposited on planets as an expendable drone to do preliminary reconnaissance. Their job is to survey a section of the planet on which they have been let loose; they are mostly used to determine mineral contents, atmosphere composition, surface mapping and take photo-graphs. They are capable of speech, but are not advanced enough to undertake communication with newly encountered creatures on the planet. A planetary explorations bot will actively avoid the natives. Some standard functions planetary bots perform are:

Atmospheric Analysis
Long Range Communication
Mineral Identification
Photography (includes infra-red, x-ray etc)
Poison / Radiation Detection
Sample Collection

Data for more complex tasks such as map-making and surveying is relayed to another location and interpreted there. These communications may be processed anywhere from an orbiting spaceship to a roving extra-planetary bot.



Extraplanetary: Extraplanetary bots can do everything their less qualified counterparts can do, plus more. The exbo can process the information which the planetary bot can only collect. They can also:

Comprehend languages
Identify intelligence
Map terrain

Extraplanetary bots are far more intelligent than their planetary friends and so are able to think more independently, get around more, accomplish more and defend themselves far better. They come with an AR of 800, and can function in a greater variety of substances: liquid, vacuum etc.

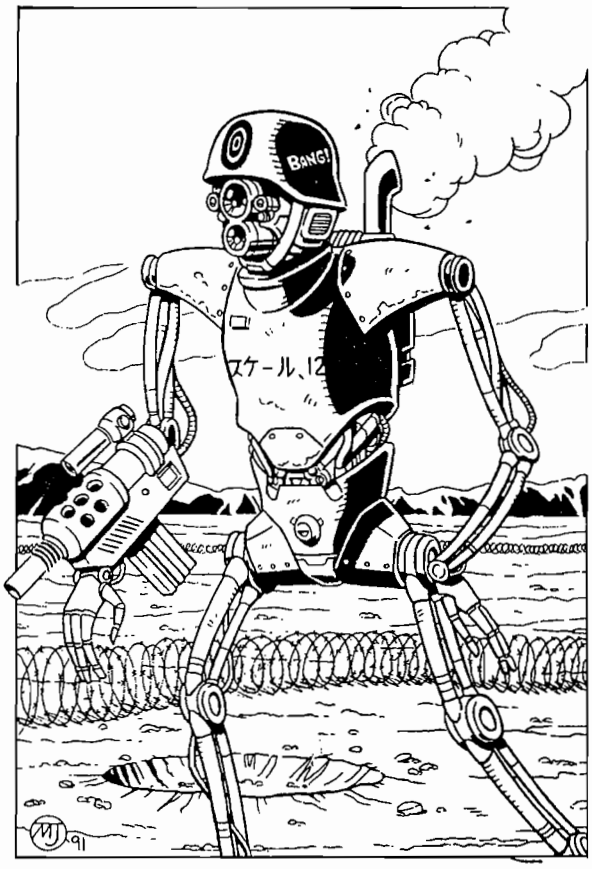
G. Combat

Each category of combat bot, is covered individually below. These bots are supposed to be only small, deadly combat drones, not superpowered tanks that an entire campaign or game system could be based on. All of these robots have somehow strayed from their commanders, and most of them are being actively hunted by someone, or something. Their pursuers are usually a vengeful enemy, embarrassed opposition, or corporate personnel trying to contain the out of control robot. Often there will be some other combat bot, perhaps holding some grudge, that has decided to make pursuit of this combot its personal mission.

It must be stated that these combots are nothing more than wayward drones. They are the dog-meat of mechanized massacre. The combots are merely the tools of larger military machines or governments. The combots covered here are all expected to have seen battle and be a little worse for wear—though still substantially lethal.

Combots are exempt from the restriction that keeps a robot from allowing its base race to come to harm. Any level of civility, or responsibility on the battle field could jeopardize a combat robot, so this feature is not included in their programming.

Expendable: These bots are ex-reconnaissance, ex-officer's aids, defunct spies, or just very intelligent bombs. Whatever they used to be, they are not that now and are wandering about on their own, free-lance. Expendable combat robots can also drive military vehicles in combat situations other robots cannot. This bot type has the advantage over all the others of being able to remember combat situations, and other sensitive issues.



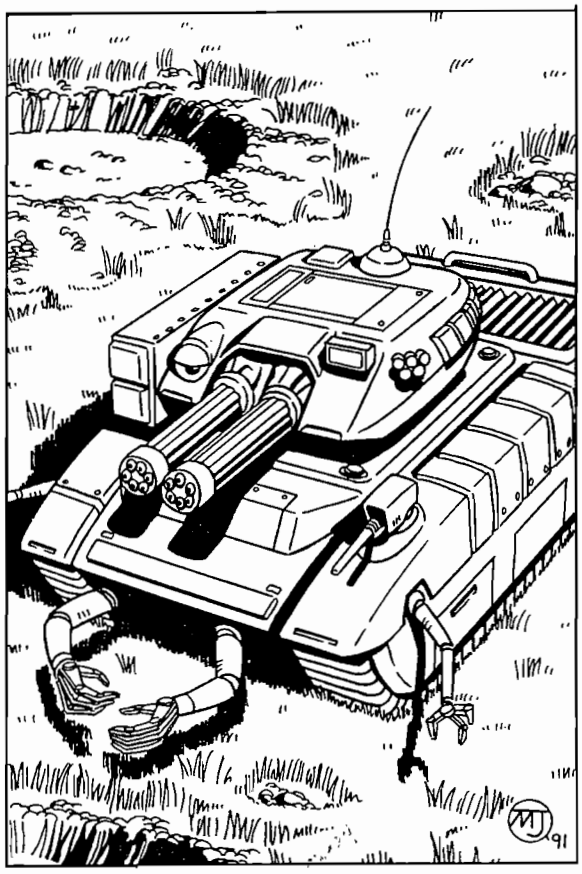
	EXPENDABLE	DEFENSIVE	OFFENSIVE LIGHT	OFFENSIVE HEAVY
ATTACKS:	Auto 1	Auto 1	Auto 3 (tables 2,2,3)	Auto 3 (tables 2,3,4)
DEFENCES:	Auto 1	Auto CON/3	Auto 2	Auto 3
RANDOM:	Normal	Normal	80% for 1	50% for 1
ADAPTIBILITY	40%	None	None	None
VALUE:	500000	4500000	20000000	42000000
SIZE:	Outdoor	Outdoor	Indoor	Outdoor
ATTRIBUTES:		CON 20	CON 19 DEX 15	CON 23 PSTR 27

Defensive: To be a defensive bot, the persona must have a CON better than 20. As the name indicates, these combots defend positions from enemy attack. They get two specialized abilities granted only to defensive bots: The first is the ability to ceaselessly utter vile comments and insults about the enemy base race. Second is the ability to analyze attacking enemy formations for offensive weaknesses. The chance of effectively identifying such a weakness is equal to 4 times the defensive bot's INT. Defensive bots can also detect intruders up to a range of 10 hexes per point of AWE.

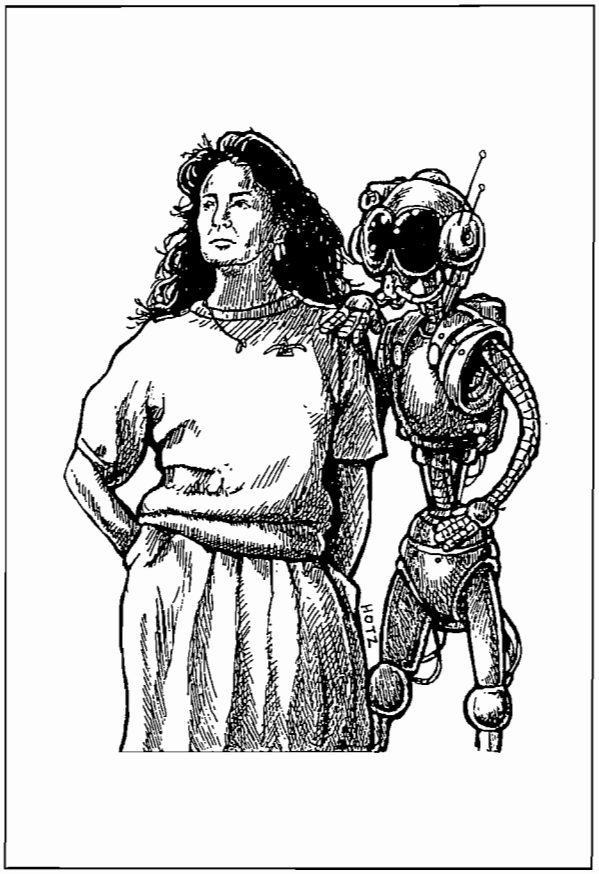
Another ability included within the given range is the bot's Anti-anti-detection system. The Anti-anti-detection system will automatically pick up technological aids that are concealing or scrambling the presence of intruders. The combot has a chance equal to twice its (AWE + INT) when trying to detect mechanical anti-surveillance systems.

The bot also has a weapons identification skill which can only be used on a weapon which has inflicted damage on the bot. This skill can be successfully employed if the player rolls under 2 times the bot's INT on percentile dice.

Offensive, light: This type of combot requires the player to have a CON better than 19, and a DEX better than 15. These light offensive combots are small attack drones used mostly for combat in cities and similar short range environments. Their job is singular—to attack and destroy the enemy, and the enemy's defenses. That is their sole purpose and they therefore tend to have a single-minded violent outlook on existence.



Offensive, heavy: This is the major league version of the light combot. Here too, there are some attribute requirements: PSTR greater than 27 and CON better than 23. These restrictions are tough, but so is the heavy combot. They have a good chance of being armed with bombs or missiles: a percentage chance equal to their CON for each type of device. The number of bombs and/or missiles is determined by the referee (a limit of two of either sort is recommended). The base AR for a heavy combot is 775.



H. Policing

Policing bots are used by crime fighting forces in extremely rough areas, or in places where there are severe police staff shortages. The three types of policing bots are: riot (CON minimum 15), civilian, or special operations (INT minimum 15). All policing bots respect the lives and livelihoods (if legal) of their base race, though it is expected that insane policing bots may be renegade and not the great protectors of law and order that they were initially designed to be.

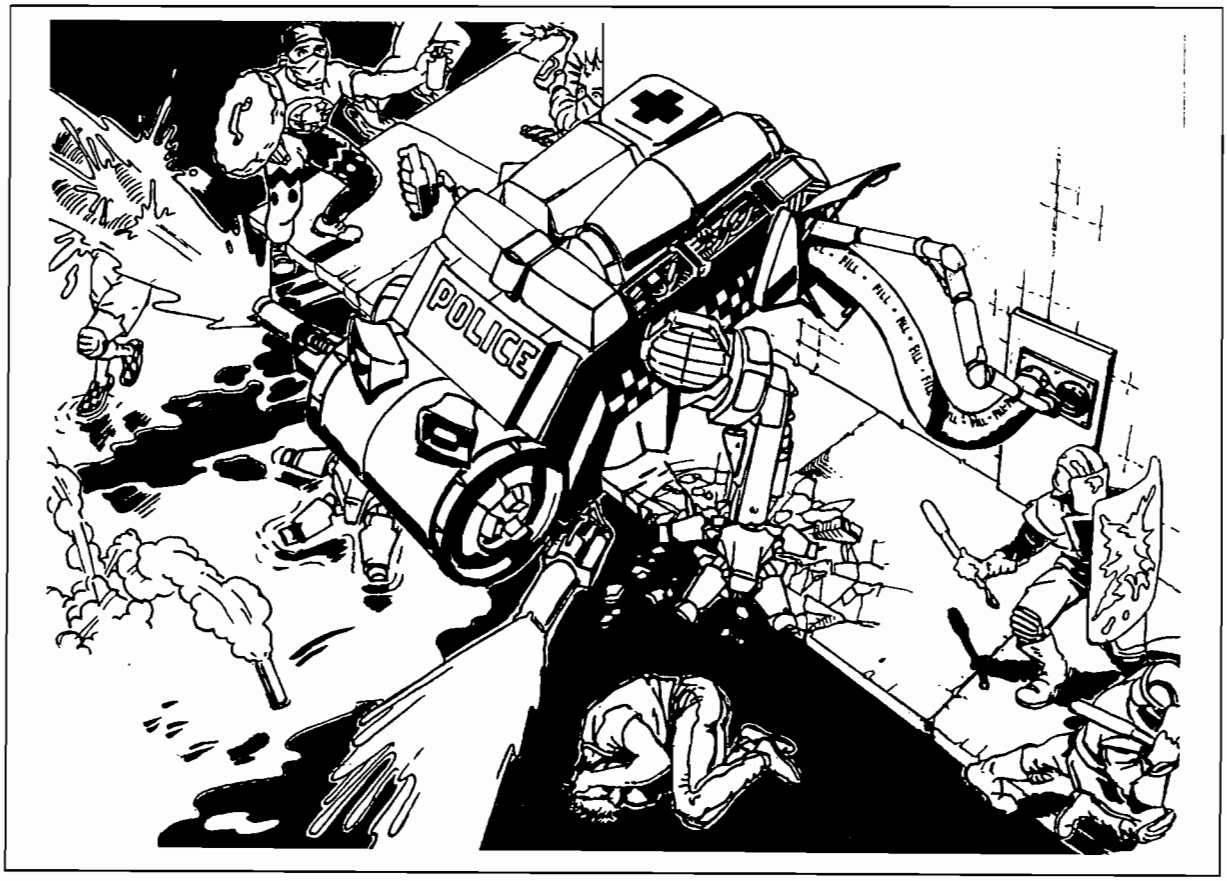
Riot: Riot bots are large crowd control devices and often turn up at labour disputes, surprise sales, food line-ups, rock concerts, etc. Each riobot has one roll on the Riot Policing Bot Peripheral Table for every three points of INT. It is possible to have multiple copies of the same device. Note that all rioters get saves against those crowd control devices to which saves are applicable. The type of save applicable is listed in brackets. Those crowd control devices that do not have saves must score to hit to have an affect.

Civils: Civilian policing bots are sent out to apprehend known criminals, guard banks, give out traffic tickets, lecture kids on road safety, etc. This bot type can speak very fluently, and can double its CHA to make commanding comments like "FREEZE!," or "HOLD IT!" The civil bots get three chances to roll a single non-damaging weapons from the robot attack tables 2 or 3. If the bot is unsuccessful on all three attempts to acquire a stunning or similarly non-damaging weapon, the bot will be without any form of attack.

	RIOT	CIVIL	SPECIAL OPERATIONS
ATTACKS:	None	Auto 1	Auto 1
DEFENCES:	Auto 1	Auto 1	Auto 1
RANDOM:	Normal	Normal	Normal
ADAPTIBILITY:	10%	10%	10%
VALUE:	300000	600000	900000
SIZE:	Outdoor	Outdoor	Indoor
ATTRIBUTES:	CON 15		INT 15

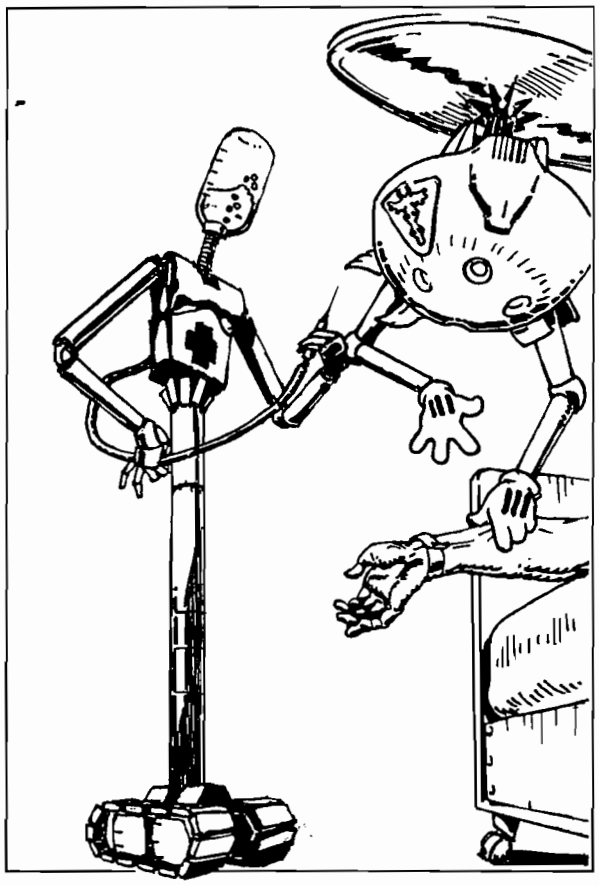
Table 5.4: Riot Policing Bot Peripherals

DIE ROLL	CROWD CONTROL PERIPH.	PERIPHERAL SPECIFICATION
01-20	Water cannon	Range: 5 + PSTR hexes; knockdown, or 3d4 hit points damage
21-40	Tear gas	Range: 5 + CON hexes; poison intensity equals CON blinds for 3d6 units
41-50	Stun ray	Range: 20 hexes; poison intensity equals CON stun for d6 minutes
51-60	Gravity disrupter	Range: 8 hexes; increases gravity by 2 to 4 times knock down
61-70	Force beam	Range: 5 + PSTR hexes; knockdown, or 3d4 hit points damage
71-80	Weapon malfunction.	Range: 15 hexes; increase malfunction 25 times, chance of severe jam
81-90	Battery drain	Range: 15 hexes; drains all batteries
91-99	Sleep beam	Range: 10 hexes; psionic intensity equal to INT sleep 5d10 minutes
00	Other	



Those civil policing bots without weapons can still grapple a target. Successfully scoring a hit will completely immobilize a humanoid target, rendering them unable to do anything physical. To break away requires a bizarre PSTR roll. During this time the civil bot will usually remove any weapons or offending items from the immobilized persona. Civil policing bots will usually carry their collars (captured criminals) in this unglamorous fashion to the police station.

Special operations: Special operations bots are the bots which dispatch riot bots and civils to perform their sundry duties. This intelligent robot is a criminologist in a drum (to put it less than gracefully) that is used to track down intergalactic murderers, confidence women and other unsavory rogues. If a player's persona qualifies to become a special operations bot, her highest attribute can be transferred to her INT. It is possible that when this robotic type fails its CF roll it will go off hunting criminals. This may include other personas, or even the entire expedition, which due to the nature of the game, stand a good chance of being criminals themselves.



I. Medical

Medibots are veterinarians in a drum. They are capable of carrying out any vet skill provided that it falls under the description of the vedibot's subtype. All three medibots are capable of minor repair work and standard first aid procedures; however, a diagnostic bot could not carry out surgical procedures, a surgical bot could not perform facial reconstructions, and a cosmetic bot could not stop an internal hemorrhage.

All medibots will be diagnostic unless they qualify as either of the others. Regardless of how insane a medibot becomes it will always have a very high regard for life. In fact this is how the medibot's insanity will usually present itself, with an extraordinarily high regard for life. This may include bacteria, insects, and mindless animals on the same level of sentient life.

Diagnostic: The forte of the diagnostic robot is diagnosis. It has the memory capacity, and the intuitive abilities to very accurately diagnose all but the most peculiar conditions. The diagnostic bot can occasionally fail to assess even the most trivial conditions. A diagnostic bot has enough articulations and peripherals attached to attempt virtually any vet maneuver. The diagnostic bot cannot apply general anaesthetics, or perform classic surgical procedures. For instance, a diagnostic bot may identify a brain tumor, but would be helpless to remove it.

The chance for success of these maneuvers is determined on the *Veterinarian Performance* Table. The diagnostic bot can subtract its INT level from the DD of the maneuver, and add twice its INT to the die roll. So a diagnostic bot with an INT level of 3, and an INT of 15 would subtract 3 DD from each maneuver, and add 30 to the PT roll. The diagnostic

Medical Bots

	DIAGNOSTIC	COSMETIC	SURGICAL
ATTACKS:	Nil	Nil	Nil
DEFENCES:	10% for 1	10% for 1	10% for 1
RANDOM:	Normal	Normal	Normal
ADAPTIBILITY:	10%	10%	10%
VALUE:	2250000	1500000	2750000 (5000000)
SIZE:	Indoor	Indoor	Indoor
ATTRIBUTES:		DEX 23 INT 21 max.	DEX 23 INT 21

bot is also capable of identifying any medical appliance or pharmaceutical with a proficiency 5 times the persona's INT.

Cosmetic: These bots are capable of fleshy reconstructions that will affect only the player's CHA and external appearance. Cosmetic medibots can reconstruct teeth, change hair, eye, skin colour, facial appearance (nose jobs, etc) and other purely external changes. Regardless of the extent of repairs and changes, a persona's CHA can only be increased by a maximum of 3 points. Cosmetics bots make few (if any) errors: the chance for success is five times the bot's INT. Once the work is finished, the patient's CON must be capable of overcoming any complications or side effects—this is checked with a CON attribute roll.

Whether the bot screws up or the persona succumbs to infection, the result is the same—a drop in CHA by one to four points. Lost CHA can be built back up to no more than three higher than the persona's original CHA. The cosmetic bots are only able to anesthetize local parts of the body with their sonic anesthetic. Spies can add 10 times the INT of the cosmetic bot to their PT roll when using one to create a disguise. Cosmetic bots can function as a veterinarian, when using the PT table cosmetic bots can add their INT.

Surgical: These medibots are capable of performing all surgical functions. They can replace eyes, add bionic parts, add real parts, remove real parts, remove gallstones, glue eyelids shut plus a host of other related wonders. All surgical bots have local and general anesthetic and any patient can be kept under for as long as necessary or desired. The surgical bot must be within 1 hex per 2 points of PSTR to use its anaesthetics.

Before proceeding, the surgical robot must be given a description of what needs to be done. This description can be given by a diagnostic bot or a veterinarian. If a surgical bot is left to do its own diagnosis, then it will function as veterinarian that can add its INT to the performance table rolls. The percentage chance of successful surgery is 4 times the bot's INT. Recovery is also dependant on the CON of the patient, and she must make a DSS roll and a CON attribute roll before recovering. Failure to recover may mean delayed recovery, or death, depending on the procedure.

J. Emergency

There are two types of emergency bots: rescue (used for removing people from inhospitable and unhealthy situations) and spillage (used for containing contaminants). To qualify as a rescue emergency bot, the persona's DEX must be 22, or higher.

Rescue: Rescue bots are used to remove people or bodies from such dangerous situations as fires, landslides, radioactive areas, outer-space etc. They are capable of performing their duties underwater, in zero-gravity or in a vacuum. These bots can also save people against their will, stashing them into a nice cool stasis chamber—for their own good, of course. The robot will have one stasis chamber for every two points of PSTR. People stored in the chambers cannot be killed or in any way come to harm unless the bot is destroyed. All rescue bots roll their size on the Outdoor table. Rescue bots also have loudspeakers and sirens for warning signals, and 150 hexes of glowing retractable fencing for cordoning off danger areas.

Spillage: Spillage bots are not sloppy drink servers—they are bots designed to control the spillage of deadly chemicals, or to contain fires. Spillage bots can sense deadly chemicals at a range of ten hexes per point of AWE, but only if there is a lethal amount of the poison present. Once the bot detects a nasty substance, it can be safely stored away inside the bot by an array of shovels, rakes and scoops. The chance of doing this successfully is equal to five times the persona's DEX.

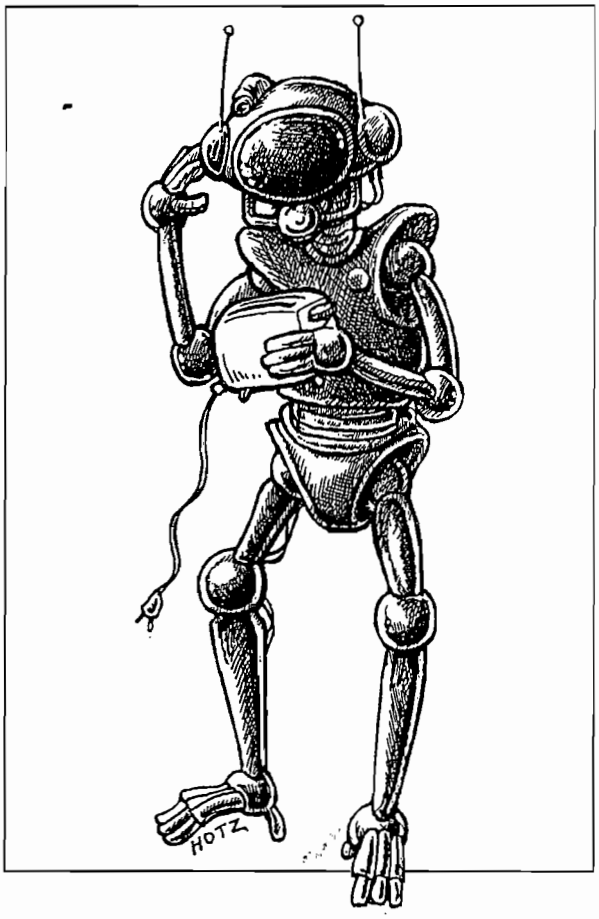
Once collected, the garbage will be stored in a cargo hold with a capacity of 20 times the persona's WA. The spillage bot is capable of sifting through debris, and storing only the toxic materials. Eventually the spillage bot will run out of storage space.

At this point a spillage bot can cover the toxic area with a sealing plastic. The bot will normally have enough spray on plastic to cover 100 hexes. This spray on plastic can also function as a web gun (see chapter 46, Guns). Poisonous junk cannot be completely forgotten once stashed away, a full spillage bot may begin to glow, radiate, or attract strange animals.

	RESCUE	SPILLAGE
ATTACKS:	Auto 1, 25% +1	25% for 1
DEFENCES:	Auto 3	Auto 3
RANDOM:	Normal	Normal
ADAPTIBILITY:	10%	10%
VALUE:	950000	750000
SIZE:	Outdoor	Outdoor
ATTRIBUTES:	DEX 22	

The spillage bot also has flame retardant which will extinguish all normal fires. The bot can extinguish 5 hexes of fire for every point of CHA. For example, a bot with CON 22 could put out 110 flaming hexes. The player can regulate how much retardant is used each time and need not expend the whole lot at one go. Spillage bots can fence off 250 hexes of danger zone with their glowing retractable fencing. They have a base AR of 875 and roll their size on the outdoor table.

K. Maintenance



Maintenance bots should not be confused with janitorial bots (see Type E) although they sound similar. The crucial difference is that maintenance bots, in addition to cleaning, are adept at repairing artifacts. A maintenance bot is best likened to a mechanic in a drum.

The robot functions the same as a mechanic except for some tremendous bonuses. The player can add the repair droid's INT to performance table rolls, just like a normal mech; however ,a maintenance bot gets one skill per point of intelligence, plus 5 per experience level. So a maint bot with a 13 INT would get 18 skills at first level plus 5 new skills per experience level. For referee persona robots most of these skills will be rolled on the *Mechanic Skills* table in chapter 8, Classes.

Players can choose where they want the expertise of their persona to lie. Thus a robot could have skill level 15 in repairing bicycles, and skill level 2 in guns. Thus this robot would be able to subtract 15 DDs when repairing or working with bicycles. This is an ominous bonus indeed. It is recommended that one take a variety of skills, making their persona more flexible. For further reading about performance tables consult chapter 27, Performance Tables.

ATTACKS:	40% for 1
DEFENCES:	40% for 1
RANDOM:	Normal
ADAPTIBILITY:	37%
VALUE:	1050000
SIZE:	Indoor
ATTRIBUTES:	—

L. Transportation

	Planetary	ExtraPlanetary
ATTACKS:	50% for 1	Auto 1
DEFENCES:	40% for 1	Auto 1
RANDOM:	Normal	Normal
ADAPTIBILITY:	22%	22%
VALUE:	450000	900000
SIZE:	Indoor	Indoor
ATTRIBUTES:		DEX 22
		INT 22

In order to be an extra-planetary transportation bot, DEX and INT must both be greater than 22. All skills function the same for both types, except that bots which qualify as extra-planetary transbots can pilot space-vehicles, and can function in a vacuum.

Transportation bots get driving skills equal to their INT plus five skills per experience level. Thus a first level transport bot with an INT of 23 would have 28 skills to divide amongst cosen vehicles. Any bot that can use a vehicle that carries more than 15 passengers automatically gets a serving skill. These bots can only maneuver and navigate their vehicles—they cannot engage in vehicle combat. Only expendable combots can use vehicles for offensive combat tactics. There is nothing keeping a particularly insane transbot from attempting such maneuvers though.

The transport bot uses the *Driving Performance Table* (see chapter 17, Driving) as any other persona would, however she can use her skill level to reduce the DD of the maneuver. For instance, a transport bot with aircar skill level 10 would subtract 10 DDs from any maneuver she was attempting. The chance that a transport robot will be able to pilot a vehicle is equal to 4 times its INT, regardless of skill level. Remember that only an extra-planetary transport bot can pilot a space vehicle, and one can be used to replace the pilot.

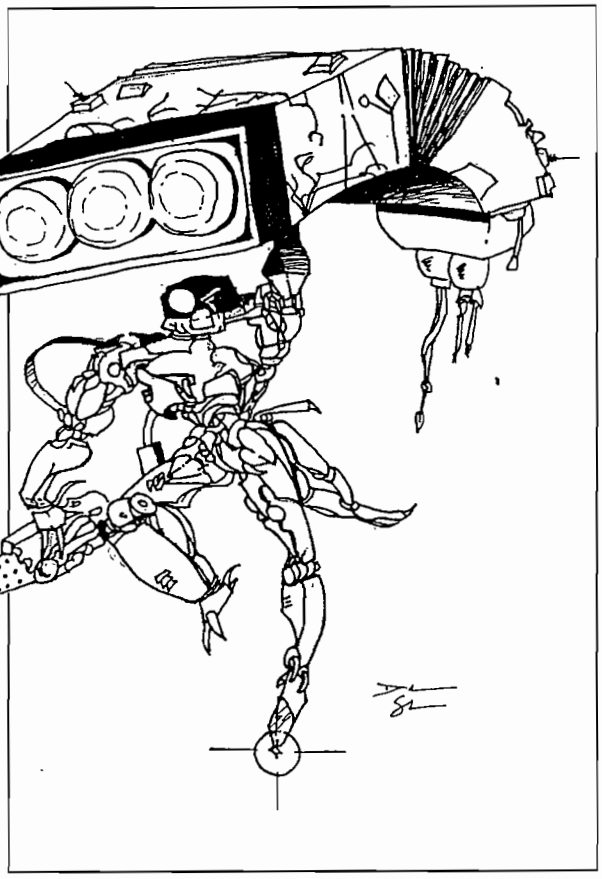
M. Android

ATTACKS:	—
DEFENCES:	—
RANDOM:	Special
ADAPTIBILITY:	3%
VALUE:	100000000
SIZE:	Special
ATTRIBUTES:	—

Androids are the elite of the robotic world; they are in a class all their own. An android is a robotic likeness of the base race that designed the bot. Except for the intense scrutiny of a veterinarian most androids are indistinguishable from the base race. Androids are very independent robots, and are manufactured with a very high level of self-determined free will. From a robotics stand point this makes them very dangerous.

Androids are generated like regular personas; the major difference is that they cannot choose their race, nor their class. The android's race is determined by a roll on the *Robotic Base Race* table. The android will appear to have the the age, sex, hite and wate of the race rolled on that table. To get all the pertinent information the player may have to refer to chapter 4, Anthropomorphs. The class of the persona can be chosen by the player, but if the referee wishes she may force the player to roll the android's class on the *Referee Persona Class* table in chapter 8. HPS for androids are determined the same as other humanoid personas. An android is a formidable opponent, and having an android spie, or mercenary, may seriously jeopardize the balance of a campaign.

Andys get a percentage chance equal to their INT to have a hidden random peripheral. Even though innocently pursuing regular classes and lives, the unique origins of androids should never be forgotten.



(3) Base Race

This is the race that the robot was designed and manufactured for. Unless otherwise specified, a bot will not harm or allow to come to harm any member of its base race. So if a robot were to have an equine base race then the persona would not be allowed to damage any equine that she met. Nor would the robot allow the base race to accidentally come to harm. Every robot type, except for androids and combat robots, must obey this tenet.

Non-lethal attacks that inflict small amounts of damage can be employed against a robot's base race. A robot will protect a member of its base race from other expedition members also. This is a major inconvenience that the player must get around when running a robot.

The more insane a robot is the more flexible the application of this core programmed law. The law itself is not corrupted, but its application becomes contorted. Whenever the player wants to challenge the protection of her base race she must make a control factor roll for her robot. More information about control factor is found later in this chapter. The referee may ignore this restriction for any referee robot that she wishes to.

Table 5.5: Base Race Table

DIE ROLL	BASE RACE
01-60	human
61-70	equine
71-73	ursidae
74-76	canine
77-87	avarian
88-90	rodentia
91-99	florian
00	Other (aquarian, alien)

(4) Armour Rating

All bots have a base AR of 700. It is important to note that armour rating values are the same for robots and all other personas. A robot has no immunity from punches, slashes and bangs just because they are composed of special alloys. A successful to hit roll will do damage to a robot as it would to any other target. So a to hit roll of 700, or higher, would damage a bot with an AR 700 just as it would damage any other persona with an AR of 700. Robots are different from biological creatures, and damage differently. This aspect of damage is covered in this chapter under robotic damage.

(5) Movement Rate

Robotic movement rates are determined by the robot's DEX value. Table 5.6, *Robotic Movement*, is used to determine the maximum movement rate of the robot in hexes per unit. Robots are twice as fast as those persona's with the same DEX. Those bots which move faster than 8 h/u, must accelerate the same as vehicles. Robotic acceleration is one hex per unit per PSTR level (I-IV).

A robot that has a 17 DEX, and PSTR level of 3 would move 8 h/u at first, 11 h/u the next unit and then reach maximum speed of 14 h/u in the next unit. These cumbersome acceleration rules should only be applied in rare instances when the players have decided that picayune detail is of upmost importance. Depending on the locomotion type, bots are affected by terrain just as regular personas are. More information about robotic movement is covered under locomotion in this chapter.

Table 5.6: Robotic Movement

DEX	MOVEMENT (h/u)
1-2	2
3-5	4
6-8	6
9-11	8
12-14	10
15-16	12
17	14
18	16
19	18
20	20
21	22
22	24
23	26
24	28
25	30

(6) Wate Allowance

Bots, too, are affected by encumbrance, though not as much as other personas. As expected, weight allowance is determined by the PSTR, and the PSTR level of the bot. The wate allowance of the robot, measured in kilograms, is determined on the *Robotic Wate Allowance* table. A robot with a PSTR level of 3, and a 17 PSTR would have a wate allowance of 75 kgs. This means that the robot can carry 75 kgs before any movement penalties are incurred. All penalties of encumbrance apply to robots as they would apply to other personas. These affects are detailed in chapter 18, Encumbrance.

Table 5.7: Robotic Wate Allowance

BOT PSTR	PSTR LEVEL OF BOT I	II	III	IV
1	4.5	9.0	13.5	18
2	5.6	11.2	16.8	22.4
3	6.8	13.6	20.4	27.2
4	7	14	21	28
5	8	16	24	32
6	10	20	30	40
7	12	24	36	48
8	13	26	39	52
9	14	28	42	56
10	15	30	45	60
11	16	32	48	64
12	17	34	51	68
13	18	36	54	72
14	19	38	57	76
15	20	40	60	80
16	22	44	66	88
17	25	50	75	100
18	28	56	84	112
19	31	62	93	124
20	34	68	102	136
21	39	78	117	156
22	45	90	135	180
23	52	104	156	208
24	60	120	180	240
25	69	138	207	276
26	79	158	237	316
27	90	180	270	360
28	102	204	306	408
29	115	230	345	460

(7) Power Source

All bots operate on electrical power, but the cell (or supercell) that converts the source into electrical power will vary. For gaming simplicity, all cells work due to ingenious technological advances that require little or no explanation. All robotic power cells are rechargeable, and may even be better described as extremely efficient motors. Each battery type functions equally well, but the conditions under which they function varies, and this is the most important factor of determining the battery type.

The bot's cell storage capacity depends on its CON attribute. A robot can function for one month per point of CON per fully charged battery set. If the bot's CON drops during play, then its fuel capacity decreases proportionately. When a bot runs out of power, the machine will completely shut down until refuelled. Unless the robot has built-in charge indicators, fuel depletion will not be apparent until the final month. Use of peripherals does not drain the robot any more than usual; their batteries will last the predetermined length of time regardless of the activities engaged in.

It should always be made possible for a robot to recharge its power source. A campaign could become boring if all robot personas did was was spend their time searching for fuel. The requirements of recharging robotic power cells is different for each cell type; however, the duration of refuelling is generally the same. One hour must be spent refueling for each month of charge stored. Refuelling might mean being plugged into a wall, filtering water from a well, or being manually packed with fissionable material.

1) Basic cells: These cells contain chemicals in the specified states which are transformed miraculously and efficiently into electrical energy. The nature of the chemicals required is optional. The referee may elect to specify some particular required substance (e.g., natural gas, manure-for agricultural bots, hair-for barber shop bots, etc.), or she may generously allow the bot to use any material of a compatible form. It is usually best (and more fun) if the ref specifies some substance or range of substances limited enough to require a modicum of effort but not so difficult to locate that it slows down the game.

Table 5.8: Power Cell

DIE ROLL	CELL TYPE
01-09	1. Basic, gaseous
10-18	1. Basic, liquid
19-27	1. Basic, solid
28-38	2. Broadcast
39-49	3. Dynamo
50-61	4. Gravitational
62-72	5. Magnetic
73-88	6. Nuclear
89-91	7. Plasmoid
92	8. Psionic
93-97	9. Solar
98-00	Other

Normally, gas and liquid cells will cease operation if exposed to a vacuum. They will return to normal once atmosphere is returned. How a bot fuel cell operates in a vacuum is highly dependent on the type of robot involved. If a robot type is specifically designed to operate in a vacuum, then it is given that its power plant is protected too. For example, an extra-planetary explorations bot could function exatmo regardless of its cell type.

Solid cells function fine in vacuums, but do not function at high temperatures. Prolonged exposure to temperatures that may not damage the robot may damage its power cell. Things such as fusion attacks, napalm blasts, and burning buildings are good examples of situations that will shut off the robot's power plant. Solid cells will return to normal once they are cooled down. Extreme heat could destroy a bot's solid cell.

2) Broadcast: Broadcast cells are actually power receivers that convert transmissions from a source into energy. The receivers will cease to function if they are electronically jammed, or taken out of broadcast range. Robots using broadcast

power cannot store any energy, and if they are cut off from their power source, or it is destroyed, they will cease to function. Otherwise there is no limit to the length of time that a broadcast receiver cell can power its robot. If the referee wishes she may enforce regular maintenance of the receiver cells.

3) Dynamo: Internal gyros manufacture the useable energy for this cell. The dynamo cell is very close to being a perpetual motion machine. In this instance 'close to perpetual' means the normal duration for a robotic battery. Dynamo cells can be recharged by plugging into the nearest electrical outlet. Dynamos will not function when exposed to more than 2 gravities.

4) Gravitational: This power cell converts gravitational force into electrical energy. An explanation of this phenomenon will not even be attempted, it will have to suffice that this is a black box device that is only discussed in its operational parameters. The gravitational cell will work continuously if there is gravitational force acting on it. The gravitational force cannot exceed 3g, or be less than one half g. The gravitational cell will store energy for those instances where the gravity is not conducive to the cell's function. During such times the robot can function for 1 hour per point of CON. So a bot with a 16 CON, and a gravitational cell, could function indefinitely in gravity and up to 16 hours in its absence.

5) Magnetic: The magnetic forces generated by the cell's molecules are amplified, and directed to produce electrical power for the robot. Depletion indicates a disruption of the material's magnetic qualities. Regeneration of this cell requires electrical recharge that re-magnetizes the power cell's functional material. Magnetic cells will be be disrupted by any magnetic based attacks or disruptions. Severe disruptions may cause the cell to be demagnetized, and require recharging. This is left to the discretion of the referee.

6) Nuclear: This type of robot battery could utilize any of the standard nuclear power sources: fusion, fission, etc. Robots with nuclear power cells cannot voluntarily explode like an atomic or nuclear weapon. In fact it is virtually impossible. The nuclear cell is so efficient that there is hardly enough material to present a radiation hazard. The cell has the limited life span of a robot battery, but it is unaffected by changes in gravity, or atmosphere. Fissionable materials are required for the replenishment of nuclear batteries.

7) Plasmoids: Superheated gases are contained in 'magnetic' bottles. If the seal is broken on these bottles then the reaction stops, or is re-calibrated for smaller uncompromised bottles. This should make it virtually impossible for Mechanics to use the plasmoid cell maliciously. Plasmoid cells are rechargeable, like any other cells. If the atmospheric gravity should exceed 4g, then the plasmoid reaction will stop until a manageable gravity is returned. Such high gravities can occur during high accelerations. Reactivating depleted plasmoid batteries requires the re-introduction of inactive plasmoidal materials.

8) Psionic: Psionic cells convert the surrounding psychic energy into electrical forces that allow the robot to function. Provided there are sentient beings with MSTR around the robot it will be continuously charged. Whenever this robot depletes its power cell it will randomly attack any creature that has MSTR in the area. The process is carried out by the cell itself, and the robot cannot choose the target. The robot may even be unaware of how its batteries function.

Once a target is chosen it will get a save versus psionic attack. The batteries will have a random MSTR of d6. The MSTR of the batteries will be re-rolled each depletion. If the target saves, another is randomly chosen until the battery is successful. One full battery recharge will drain 1 point of MSTR . This could eventually kill a repeat target. To be susceptible the target must be within close range.

9) Solar: Any light source that is capable of surrounding the robot is sufficient for it to function at full capacity. So in order to be able to function this robot must be immersed in any light source. An overhead bulb would be as efficient as an orbiting sun. As long as this robot is operating in light its solar cell will always be fully charged. The robot's solar cell not only converts light into energy, but it can also store light for operation in complete

darkness. A solar cell that has been exposed to light for a day can store 1 hour's energy per point of the robot's CON. So a bot with a 16 CON, and a solar cell, could function indefinitely in light and up to 16 hours in complete darkness.

(8) Sensors

All robots will have built-in audio, and video sensors which will allow the robot to 'hear', and 'see'. Robots do not have regular sensations for touch, and no capacity for smell. The basic sensory system works with full colour, directional vision, and with all around acoustic hearing. This makes the robotic senses identical to how any other persona would see and hear. The built in sensors are defined by the bot's AWE attribute, and are not damaged unless that attribute is. Robots will receive one additional sensor for every 4 points of AWE. The new sensor type is rolled on the *Robotic Sensor* table.

Table 5.8: Robotic Sensors

DIE ROLL	SENSOR TYPE
01-70	1. Video
71-76	2. Alternate optical (laser, uv, ir)
77-83	3. Vibrations (molecular)
84-90	4. Sonar
91-96	5. Radar
97-00	Other (organic eyes, feelers, olfactory)

One roll per 4 points AWE

1) Video: This robot has an extra set of video sensors. These essentially act as an extra set of eyes for the robot. These can be built into the robot's hull, or conveniently attached to the end of an articulation.

2) Alternate optical: Alternate forms of optical vision include laser sights, or ultraviolet/ infrared detectors. These types of vision can be included in the robot's regular vision or considered an extra component. The primary function of the alternate optical sensor is that it allows the robot to easily see in darkness.

3) Vibrations: Vibration sensors are very specialized detectors that easily convert molecular vibrations into comprehensible robotic vision. This sensory feature will cut through any obscuring clouds of gas or particulate debris. The maximum range of a vibration sensor is 5 hexes per point of AWE. Vibration sensors are directional, and the robot must look towards whatever she wants to observe.

3) Sonar: Sonar will allow the bot to perceive a spherical image in any medium in which it immerses its sonar. The sonar sensor's range is 10 hexes per point of AWE. Sonar will function through any continuous substance, but will be obscured by changes in density of the carrier medium. For instance, sonar will work equally well through air, water or smoke, but it will not function across the boundaries of these. Sonar cannot function in a vacuum.

4) Radar: Radar sensors offer 360° vision around the robot. This is a 360° disk, and not a spherical area of detection. This allows the robot to detect objects and determine their wate within 10 hexes per point of AWE. The radar will see through any medium that is not solid.

(9) Locomotion

The means of locomotion, in addition to being an important necessity, will add a great deal of personality and individuality to the bot. The locomotion type is the first indication of the appearance of the robot, and it will greatly affect the development of the persona. To determine the robot's locomotion type roll once on Table 5.9, *Robotic Locomotion*..

The locomotion type occasionally needs to be supplemented by a roll on the *Robotic Locomotion Subtable*. When a locomotion type requires such a

roll, it indicates that the basic form of locomotion requires some assistance in working. For example, if the locomotion type is sails, another role is made on the subtable to determine what the bot will sail along on (wheels, skis, chemical slide or antigrav). Regardless of the locomotion type rolled all will function essentially equally.

A robot that bounces on 3 pods will function as well as one with 9 pods, which will function as well as one that has wheels. The main difference between the locomotion types is that some will allow the robot to fly, while others will keep it bound to the ground. Regardless of the apparent nature of any of these modes of locomotion, bots will always travel at their predetermined movement rate.

Table 5.9: Robotic Locomotion

DIE ROLL	LOCOMOTION TYPE
01-11	1. Anti-gravity
12-17	2. Chemical slide; plus subtable
18-25	3. Electromagnetic legs
26-31	4. Jets, plus subtable
32-39	5. Magnetic
40-45	6. Pistons; 4-16 (4d4)
46-55	7. Pods; 1-10
56-62	8. Propellers, plus subtable
63-66	9. Sails plus subtable
67-72	10. Skis; 3-6 (d4 + 2)
73-74	11. Slog bag
75-81	12. Tracks
82-98	13. Wheels; 1-12
99-00	Other, choose

Table 5.10: Robotic Locomotion Subtable

DIE ROLL	SUPPORT TYPE
01-40	Wheels
41-50	Skis
51-60	Chemical slide
61-99	Anti-grav
00	Other

1) Antigrav: This enviable transportation mode allows the bot to fly and flit about with the greatest of ease, to an undetermined maximum height. Antigrav is a classic science fiction term for anti-gravity. This robot can travel about as though gravity has no effect upon it. The robot has no obvious external mechanisms that assist its buoyancy in the sky. As ideal as antigrav is, it will only function within a gravity well. If antigrav has appeared on the *Robot Locomotion Subtable* then the bot is considered to be buoyant, but some other form of locomotion gives the robot direction.

2) Chemical slide: All the bot does is angle its base, ooze some slippery goo beneath itself, and along it slides. This process leaves a quickly evaporating trail behind it similar to a slug's. This comparison does not necessarily imply the bot will also be slow, and a chemical slide will operate just as well up a slope as down a slope. Sand, stairs and other difficult terrain may prove to be a challenge for a robot with this locomotive type. How difficult such travel is depends entirely on the referee. When a chemical slide is not the primary mode of locomotion it is offering a frictionless surface on which the primary locomotive type (sails, propellers, or jets) is producing the locomotion and direction.

3) Electromagnetic legs: Electromagnetic legs are visible beams of force which support the robot at a constant height above the ground. There are 1 to 4 electromagnetic legs. Electromagnetic legs adjust for terrain by altering their height, and generated force. This form of locomotion keeps the robot level for all but the most unstable terrain.

Electromagnetic legs will not allow the robot to walk on water, nor will they allow the robot to cross deep chasms. The legs generate force on the surface which supports the robot and cannot extend the robot more than 1 meter (half a hex) off of the ground.

4) Jets: Robotic jets are intake-less and do not eject dangerous super heated propellants. There are 2 to 5 jets (d4 plus 1). The jets offer substantial thrust to push the robot around, and offer direction. Jets work whether the robot is inatmo or exatmo. Jets are often attached to robots that have wheels, skis or chemical slides. Regardless of what the robot slides along on all jets will function equivalently. Combining jets with antigrav will allow the robot to maneuver in the air.

5) Magnetics: A magnetic locomotion unit allows the robot to hover above the ground, and effortlessly float along. The height of the robot is fixed at no higher than 1 hex. This locomotion type resembles antigrav in most regards except that magnetics will only work above a solid surface. Robots on magnetic locomotion will often float around long after their locomotion has been destroyed.

6) Pistons: High-speed pistons alternately poking up and down keep the bot aloft. There are 1 to 10 pistons. A single piston will cause the robot to appear to be riding a single pogo stick. The timing of the pistons is so immaculately integrated that a robot that moves along on bouncing pistons will remain as steady as a robot on any other locomotive type.

7) Pods: Pods are the mechanical legs that are expected to be found on robots. There are 4 to 16 pods. Bots that have these articulated poles will either hop, scuttle, or patter from one place to another.

8) Propellers: Robotic propellers are quiet, high-powered, safely encased air screws that can direct the robot and give it acceleration in its chosen direction. There are 1 to 6 propellers. Depending on the *Locomotion Subtable* roll the propellers may push the robot about on a set of wheels, along a chemical slide, or through the air on antigrav.

9) Sails: Sails are very sturdy, molecular chain planes. The robot alters the sails electromagnetically to allow only those air molecules which are travelling parallel to the desired direction to strike the sail. There are 1 to 3 sails. Between this very selective filtering , and computerized tacking procedures the robot can achieve speeds that are equivalent to any other locomotive type. The sails may be used to drive the robot along on its wheels, or through the air on its antigrav, depending on the *Locomotion Subtable* roll. The durability of the sails makes them almost impossible to tear, and they can only be damaged in combat if the robot's locomotion is damaged.

10) Skis: The robot's skis are attached to articulated pods that can drive them over almost any type of terrain. There are 3 to 6 (d4 plus 2) skis. The skis operate like cross-country skis, because they can travel up a slope as easily as down a slope. There is no difference in speed whether the robot is trotting uphill, or sliding down slopes.

When skis are employed as a secondary part of locomotion they are attached to articulated pods, but not powered legs. The skis would be the surface contact, but jets, sails or propellers would drive them.

11) Slog bag: A slog bag appears as a flexible, fluid filled sack that is attached to the undercarriage of the robot. The robot maintains an even balance while the slog bag undulates and contorts itself along the surface it is travelling. The slog bag moves like a sack of mercury might, although there is no reason that it has to contain a liquid. The slog bag cannot be punctured during regular combat unless the robot's locomotion is damaged.

12) Tracks: Robotic tracks are nothing more than rubber-coated tank tracks. There are 1 to 6 tracks. This form of locomotion is rugged, although not especially graceful. A single tracked robot can change direction by altering the tension on one side of the track, versus the tension on the other side.

13) Wheels: Robotic wheels are singularly powered, axle-less and have solid tires. A robot could have any number of wheels, and it could even be a unicycle. There are 1 to 12 wheels. Robots can also have non-powered wheels that are used to direct the forces generated by sails, jets or propellers.

(10) Offensive Systems (Attacks)

Robotic attacks are rarely built in devices designed for inflicting damage on targets in combat. The robots in **EXP** have a particularly high level of free will and hence are considered quite insane. The majority of weapons that robots will use are mismanaged devices that are intended for some other purpose. An industrial robot may have two attacks, but neither of them would be a gun or a grenade launcher, although the attacking device may function exactly like one. The construction robot may fire nails from its nail gun, and that may function just like a low-powered pistol, or it may have a malfunctioning welder that is acting just like a flame thrower. Only robots such as combat robots would actually have a military gun as a peripheral, but this doesn't mean that malfunctioning robotic peripherals are any less dangerous.

All Robots Can Ram: A robot's most basic attack is ramming. Any robot can self destructively fling itself into a target hoping to inflict damage on it. To inflict damage while ramming the robot must make a successful to hit roll. The amount of damage inflicted on the target is dependant on the wate, and speed, of the robot. The wate of the target is also considered.

Many robots will have no attacks at all, and this indicates that they can only ram targets, and that is only done with difficulty. Robots that have not rolled ramming as an attack must make a successful control factor roll before they will be able to ram into the target. Those robots that have ramming as an attack can ram anything that they wish.

Chapter 31, Robotic Combat, discusses this topic in greater detail. In this chapter the player is determining what attacks her persona has, and not the exact mechanisms of how they are played.

Detemining Attacks: The number of attacks that a robot persona can have depends on the attack listing (ATTACKS) under the robotic type. Those robotic types that are listed with 'nil', get nothing other than intermittent ramming. Other robot types have a percentage chance of having a roll on one of the attack tables. If the percentage roll is successful then the player will get the number of rolls listed on *Attack Table One*. Sometimes a paticular attack table is indicated as with combat robots.

The attack tables increase in number as the deadliness of the attacks increase. Higher attack tables can give the robot multiple attacks from lower attack tables, and lower attack tables can sneak onto higher ones. A robot with multiple attacks can use each attack every unit of combat. Explanations of the varous attack types are discussed in paragraphs following the attack tables.

Table 5.11: Attack Table One

DIE ROLL	ROBOTIC ATTACK
01-10	Deadly random ability
11-25	Type A weapon
26-75	Ramming abilities
76-00	Refer to Table Two

Table 5.12: Attack Table Two

DIE ROLL	ROBOT ATTACK
01-20	two rolls on Table One
21-40	Type B weapon
41-45	Poison, nausea (intensity 3-12)
46-50	Poison, paralyzing (intensity 3-12)
51-60	Weapon, vibro (refer to Table A)
61-70	Weapon, stun (refer to Table A)
71-80	Weapon, inertia (refer to Table A)
81-90	Weapon, energy (refer to Table A)
91-00	Refer to Table Three

Table 5.13: Attack Table Three

DIE ROLL	ROBOT ATTACK
01-15	Three rolls on Table One
16-30	Two rolls on Table Two
31-40	Poison, nausea (intensity 5-20)
41-50	Poison, paralysis (intensity 5-20)
51-60	Weapon, vibro (refer to Table B)
61-65	Weapon, stun (refer to Table B)
66-70	Weapon, inertia (refer to Table B)
71-75	Weapon, energy (refer to Table B)
76-80	Heat/cold blast (d6 per point PSTR)
81-85	Acid/base mist (d8 per point PSTR)
86-90	Gun (medium or low powered)
91-95	Aerosol
96-00	Refer to Table Four

Table 5.14: Attack Table Four

DIE ROLL	ROBOT ATTACK
01-15	Four rolls on Table Two
16-30	Three rolls on Table Three
31-40	Poison, killing (intensity 4-16)
41-50	Gun (any)
51-60	Grenade/aerosol
61-70	Bomb/missile
71-80	Acidic/alkaline jet
81-90	Physical/mental attack mutation
91-99	Disregard life of base race
00	Referee's imagination

Deadly random ability: This is the most difficult attack type for the referee to run. She and the player must decide what peripheral the robot can use as an attack. If time is of the essence, or if the player is being particularly difficult in the arbitration, then the referee can ignore this roll and have the player roll again.

This attack type is difficult, because there are no guidelines for damage, range, area of effect, or range of the attack. All of these parameters must be decided before the random ability is allowed to be used as a weapon. Some examples of deadly peripherals are given as follows. An air conditioning unit that can attack like a cryofrag grenade, but can also be used to maintain a comfortable atmosphere. A photocopier that can be used to copy leaflets, or flash at targets and blind them (saving throw granted).

Type A and Type B weapons: These are malfunctioning peripherals that can be used as weapons by the robot. The weapon type indicates what the malfunctioning attacks like, but not what it is. Arrows, daggers, and bolts could be nail guns, or staplers. Shurikens could be tin can lids. A staff could be a rolling pin. A flag pole could attack as a lance. A rake could attack as a pike. A nail hammer could be used as a head hammer.

The weapon types are explained in the Tactical Combat chapter (27). The main difference in that type A weapons are thrusting and striking weapons, adding the PSTR as a damage adjustment, and that type B weapons are ranged attacks that only add one half PSTR as a damage adjustment. The weapon types cannot be criss crossed. A type A spear could only be used as a type A spear, and not as a type B throwing spear also. For convenience the weapon damages are included on the *Robotic Weapon Type* table. How these weapons work, ranges etc., are covered in section II, Combat Rules.

Type B weapons are ranged weapons, and that indicates something that usually is ejected from the robot, or something that is thrown by the robot. Each robot will start with 1 to 1000 charges of things such as bolts, arrows, or bullets. Those type B weapons that are marked by an asterisk (*) are limited to 1-8 of that retrievable weapon. For example; a robot with 4 axes could throw 4 of them, and then would have to go retrieve them before it could throw any more.

Table 5.15: Type A Weapon Type

DIE ROLL	WEAPON TYPE	WEAPON DAMAGE
01-07	Axe, battle	d10 + 2
08-14	Flail	d8
15-21	Halberd	2d6
22-28	Fork	2d4
29-35	Hammer	2d6 + 2
36-42	Lance	4d6
43-49	Mace	d6
50-56	Morning star	d6 + d4
57-63	Pick	d10 + 2
64-70	Pike	2d6
71-77	Scimitar	d8
78-84	Spear	d12 + 1
85-91	Staff	d6
92-99	Sword	d12
00	Other	

Table 5.16: Type B Weapon 'Type

DIE ROLL	WEAPON TYPE	WEAPON DAMAGE
01-10	Arrow	d6
11-20	Axe, throwing*	d8
21-29	Bolt	d12
30-38	Boomerang/bolos	d6 + 1
39-47	Bullet (sling)	d8
48-56	Dagger (point)	d3
57-65	Dart	d4
66-74	Javelin*	d8
75-83	Spear*	d8
84-92	Shuriken	d4
93-99	Whip (one only)	d6
00	Other	

*indicates limited number from 1 to 8

Ramming: Not all bots are able to nonchalantly crash into objects. Before any robot can willingly risk damaging itself, and its target it must make a control factor roll. Robots that have ramming as an attack do not have to make a control factor roll before they ram.

A robot will only be able to ram opponents with a pre-determined section of its chassis. This part will be considered the least vital, and most able to withstand the repeated punishment. The ramming part of the robot's chassis is determined by rolling on the Table 5.17, *Robotic Ramming*. Players must keep Newton's law in mind, and remember that bots do not just dole out damage when they ram, but they can be damaged themselves, depending on the wate of the target.

Table 5.17: Robotic Ramming

DIE ROLL	SURFACE DESCRIPTION	AMOUNT OF DAMAGE
01-45	Blunt flat	d4 + d4 per 3 h/u
46-75	Blunt protuberance	d6 + d6 per 3 h/u
76-90	Edge	d8 + d8 per 3 h/u
91-99	Sharp protuberance	d10 + d10 per 3 h/u
00	Other	

Poisons: Poisons are toxic substances that can have an immediate effect on organic creatures that are exposed to them. The robot may spray lubricants from a fractured joint, or squirt super cell by-products onto targets. Some of the poisons may actually just be conductors that allow the robot to transmit radiations, or electricity. Poisons are sprayed onto targets, and the range the attack is 1 hex per 2 points of PSTR . The target persona gets a saving throw versus poison, and the poison toxicity (intensity) is randomly generated each time. If the target saves the poison has no effect. If the persona fails her saving throw she will be incapacitated by the poison in 0 to 3 units (d4-1).

Weapons: There are 4 different kinds of weapons that rolls in this category can generate: energy, inertia, stun, and vibro. These are artifacts

found in chapter 49, Miscellaneous Weapons. Refer to that chapter to get the details of these weapon types. The weapon type that the miscellaneous weapon models its damage after is rolled on the *Robotic Weapon Type* table.

Artifact weapons: Artifact weapons are modeled after those weapon types that we ordinarily consider to be weapons. These include: aerosols, guns, grenades, bombs, etc. The attributes of these weapons are determined from the respective chapters in Technology Part of this book. Again the artifact weapons are rarely the actual weapons, but they are standard equipment being used as a weapon. Robots with artifact weapons have no problem with ammunition, and are very dangerous indeed.

What's left: There are still some obscure items that appear on the Attack Tables that fall between the definitions already included. These are attacks like acidic/alkaline jets, mutations, and base race disregards.

The corrosive jets have a range of 1 hex per point of PSTR, and inflict a d8 per 2 points of CON. A to hit roll must be successful before there is any effect.

The percentage chance of the physical/mental attack mutation being a physical mutation is equal to the robot's CON. If it is not a physical mutation then the mutation will be a mental one. The mutation must have an offensive nature. The final mutation will be a mechanical mimic of the biological anomaly, and is only similar in the effect that it has.

Disregarding base race is the ultimate robotic defect. This allows the robot to harm, and allow to come to harm members of the race that the bot was manufactured for. A robot with this attack mentality can damage its own base race with impunity.

(11) Defensive Systems (Defenses)

Each defence that the robot has is equivalent to one roll on the Table 5.18, *Robotic Defences*. The types of defences listed there are either malfunctioning standard peripherals that the robot is using as defences, or they are protections that the robot has had installed to prevent it from being damaged. Robots are most likely to be damaged in combat, but these defences were not necessarily designed to be used in combat.

A robot will get a roll on the table if it is indicated in the DEF: listing of the robot type. A robot that has a % listed will have a percentage chance of one roll on the *Robotic Defences* table. A robot type that has a single number listed will get that many rolls on the *Robotic Defences* table.

Table 5.18: Robotic Defence

DIE ROLL	DEFENCE TYPE
01-06	Anti-missile
07-12	Anti-personnel
13-29	Armour rating increase
30-35	Artifact armour type
36-41	Camouflage
42-47	Detect ambush
48-53	Diffuse bombs
54-59	Evasive action
60-76	Force field
77-82	Increase HPS; 10% to 60%
83-88	Mental mutation
89-99	Override interrupt
00	Other

Anti-missile: This robot has an anti-missile system that is built into its hull. This protective device will avoid direct hits from missiles by increasing its armour rating against powered missile attacks by 50 to 300 (d6 times 50). Any missile that still scores a direct hit will be destroyed by some mechanism on the robot such that it

cannot do damage. This defence will only work against powered missiles like rockets and guided bombs. The system's main fault is in attacks that are designed to strike near the robot, but not on it directly, could still damage the bot.

Anti-personnel: The anti-personnel device is designed to remove clamoring parasites or other organic creatures trying to grapple with the robot. The type of anti-personnel device desired by the robot is chosen by the player (electric shock, sonics, flame, acid mist). Regardless of what is chosen the defence will inflict 3d6 HPS damage to all creatures in the adjacent hex to the robot. The anti-personnel device is designed to inflict pain, and anyone trying to obstruct the robot must make a save versus mental attack to continue obstructing the robot. The intensity of the attack is equal to the amount of damage inflicted.

Armour rating increase: This indicates an increase in the base armour rating of the robot by 50 to 300 (d6 times 50). The base AR of all robots is 700. If one were to roll an AR increase of 250 then the base AR for this robot would be 950. Repeat rolls on this defence will increase the robot's AR each time.

Artifact armour type: The robot's regular body is replaced by a special armour type generated in chapter 42, Armour. The base armour rating of the robot cannot fall below 700, and the special properties of the armour will be included in the bot's defence. So the robot could be covered in relfec, ballistic, or a force field. Things like helmets and shields should be re-rolled.

Camouflage: Often the best defence is being able to hide. The exterior coat of this robot can blend in with the surrounding making it very hard to detect with the naked eye. Any type of sensor that the robot has will allow it to camouflage against it. So a robot with radar, and video sensors could camouflage against radar, and video. This would make it essentially invisible to those type of vision. Detecting this bot can only be done while actively searching, and even then the searcher must make an AWE roll on a d100.

Detect ambush: Ambush detection allows the robot to quadruple its AWE when attempting to search out mines and other types of non-sentient ambushes. A robot with a 12 AWE would have a 48 AWE searching for mines, trip wires or pressure pads.

Diffuse bombs: This robot is a demolitions demolishing expert. It can disassemble bombs and grenades as a 5th level mechanic, and the bot can add twice its INT to the roll. This defence can in no way assist the robot in planting bombs or making bombs.

Evasive action: Allows the robot to avoid combat situations entirely, providing it is not engaging combat itself. This is essentially a computerized tactical withdrawal mode. It allows the robot to move at normal through mine fields, tank traps, phalanx of soldiers and other such detriments to escape. Each time the robot encounters an escape obstacle it can avoid it with a d20 DEX roll. No robot can attack while employing this defence (unless it is a combat robot).

Force field: A robot's force field will absorb any HPS in damage that should be taken by the robot. Once the field has absorbed its maximum damage it will remain inactive for 1 minute per HPS absorbed. A force field will be able to absorb 25 to 100 HPS in damage (d4 times 25). Multiple force fields are added together, and function as a single device.

Increase HPS: Increasing a robot's HPS increases the HPS total that it starts the campaign with. A robot's HPS are increased by 10% to 60% (d6 times 10%). A robot with 100 HPS and a HPS increase of 30% would have 130 HPS.

Mental mutation: This robot has a peripheral that has the same effect as a mental mutation. The type of mental mutation is rolled in chapter 58, Mental mutations, and it must be a defensive mutation. If the mutation is a defect, offensive, or useless to the robot, then re-roll.

Override interrupt: The bot cannot be subject a robotic override. This means that any device designed to control robots, or make them subservient will not function on this robot.

(12) Peripheral Systems (Random)

Peripherals are attachments that give the robot some additional flexibility in performing its tasks. These peripherals are non-combative, and are used by the robot to survive day to day campaign trials.

The RANDOM listing under the robot type determines how many rolls the robot gets on the Table 5.19, *Robotic Peripherals*. A listing of 'Normal' indicates that the player can make one roll on the *Primary* table. If there is a single number listed under the RANDOM listing then the player will make that many rolls on the *Primary* table. If there is a percentage value listed, that is the chance that there is an additional roll. If the robot type has nothing listed under RANDOM then it has no random peripherals to start with.

The *Primary* table is a list of harmless peripherals that can be attached to a robot. These peripherals cannot be used in combat, and will not harm or damage anything in any way. The robotic peripherals listed on the *Primary Peripheral* table are ones which have a very limited effect on their environment. Aroma producing could be used to make a garage smell nice, but it could not be used to make a nausea attack. An articulation could not strangle an opponent, but it could open a door, or lift a wate. There are no explanations of the particulars of the robotic peripherals other than the guidelines above. The onus is placed on the player and the referee that the self explanatory peripherals will not be abused.

Table 5.20 is quite different. These are peripherals and abilities that might not be explainable by standard programming or hardware. These robotic abilities are often the result of the synergistic effect of several damaged systems. If a robot has some ability listed on the *Secondary* table this is no indication that the particular robot type has that peripheral. A relations bot may be amphibious, but it does not mean that all relations bots are amphibious. The robotic peripherals found on the *Secondary* table are very briefly explained in single line sentences listed with each peripheral. For the most part these abilities are self explanatory.

Table 5.19: Primary Peripherals

Die Roll	Robotic Peripheral
01-16	Articulation
17-18	Air conditioning
19-20	Alarm system
21-22	Amphibious
23-24	Aroma producing
25-26	Cammo
27-28	Chairs
29-30	Communications
31-32	Copier
33-34	Copy-editing
35-36	Damage analysis; self
37-38	Detect radiation
39-40	Fire extinguisher
41-42	Food production
43-44	Hairdressing
45-46	Horticulture
47-48	Hygiene
49-50	Language
51-52	Lash
53-54	Leash
55-56	Laundry
57-58	Lights
59-60	Magnet
61-62	Multiple power plants; roll extra
63-64	Music
65-66	Paint
67-68	Periscope
69-70	Plastics
71-72	Power plug
73-74	Recording; visual and audio
75-76	Saw
77-78	Sewing
79-80	Storage compartments
81-82	Superstability; instant acceleration
83-84	Tactics: very minor
85-86	Timekeeping
87-88	Vacuum
89-90	Video screen
91-92	Written material; hardcopy
93-94	Choose one
95-96	Roll extra
97-00	Secondary Peripherals Table
Normal is one roll on this table	

Table 5.20: Secondary Peripherals

DIE ROLL	ROBOTIC PERIPHERAL
01-03	Class computer from chapter 48
04-05	Cybernetic part from chapter 59
06	Class, can pursue a character class
07-09	Damage analysis, external and self
10-12	Detect ammunition, 1 km per AWE
13-15	Detect mutations, 1 hex per AWE
16-18	Detect pharmaceuticals, 1 km per AWE
19-21	Detector from, chapter 48
22-24	Exatmo hardened
25-27	Heightened control factor, doubled
28-30	Identify alien, 2 times INT % chance
31-33	Identify drugs, 2 times INT % chance
34-36	Identify value, 2 times INT % chance
37-39	Identify wate, 2 times INT % chance
40-42	Identify weapons, 2 times INT % chance
43-45	Increase speed, d4+1 times
46-48	Increase wate allowance, d4+1 times
49-53	Languages
54-56	Medical equipment, chapter 47
57-59	Mental mutation, chapter 58
60-72	Miscellaneous Equipment, chapter 48
73-75	Multi-robot, combine with another robot
76-78	Navigation
79-81	Pharmaceutical, chapter 50
82-84	Physical mutation, chapter 59
85-87	Robotic over-ride
88	Robotic drone, control another robot
89-93	Spontaneous acceleration
94-97	Roll extra
98-99	Choose one
00	Other
Only use when indicated by Primary Peripheral Table	

(13) Description

The shape of a robot is randomly determined unless the referee has some pre-determined description of the robot desired. The robotic shape has no bearing on any other robotic abilities be they attacks, peripherals or defences. Rolling other should allow the player to choose her robot's shape; the referee may prefer this anyway, and her robot persona could be shaped like anything she wants: fire hydrant, filing cabinet, kitchen appliance, etc. The robot's shape can be deformed by a subsequent roll on the *Shape Adjustment* table.

Table 5.21: Robotic Shape

DIE ROLL	ROBOT'S BASIC SHAPE
01-05	Cone
06-09	Decahedron
10-15	Descriptive
16-60	Square; cube
61-69	Disc
70-77	Octahedron
78-85	Pyramid
86-92	Sphere
93-00	Other

Table 5.22: Shape Adjustment

DIE ROLL	SHAPE ADJUSTMENT
01-20	Elongated
21-40	Flattened
41-49	Inverted
50-99	Normal
00	Other

(14) Wate

A robot's wate will be determined by one of two equations, outdoor and indoor. For robots that are designed to carry out hard work, such as heavy lifting or construction there is the outdoor wate equation. Other robots that are not designed for such load bearing tasks use the indoor wate equation. Regardless of the wate equation used robots can function equally well both indoors and outdoors and only their wates will vary.

Further variation in robot wate can be attained from rolling the robot's tech level. Tech level can be determined for any artifact in chapter 56 Tech Level. If the wate of a persona is ruining a perfectly good persona then the value can be altered. A robot can become lighter, but NEVER heavier. If a player wants her persona to look heavier that is fine, but the wate cannot be increased.

Table 5.23: Robotic Wate

General Use	Wate
Outdoor	30kg + (PSTR + CON- DEX) + 3d100
Indoor	8kg + (PSTR + CON - DEX) + 4d20

(15) Size

Size gives a rough estimation of the volume occupied by the robot. The size roll will be used to determine what the bot can reach, fit into, or be covered by. Regardless of the shape rolled on the *Shape Description* table, the bot must fit into the volume rolled here. For example, a sphere with the parameters 1meter by 15 cm by 15 cm would become a cigar. Extrapolations for other shapes are usually just as simple. If the dimensions rolled are very close, they may be rounded off to make perfect shapes.

Each player rolls dimensions three times: once for each of hite, width and length. These can be arranged in whatever order works best for the persona. If this table is ruining a finely formed persona then ignore it, but record at least some indication of the size of the robot.

Table 5.24: Robotic Size

ROBOT WATE (kgs)	ROUGH DIMENSIONS (cms)	
01-10	31-40	(30 + d10)
11-30	41-50	(40.+.d10)
31-50	50-69	(49 + d20)
51-70	67-100	(64 + 3d12)
71-90	84-120	(80 + 4d10)
91-130	94-130	(90 + 4d10)
131-170	105-150	(100 + 5d10)
171-230	125-220	(120 + 5d20)
231-300	142-250	(130 + 12d10)
301 and up	174-250	(170 + 4d20)

(16) Control Factor

Robots were originally developed to do slave labour for the base race that they were designed for. The robot personas controlled by the players are insane robots who don't care much for being slaves. The more insane the bot is, the more it is like a normal player (generally not a very rational lot). This insanity is relative. These free willed robots are considered insane because they will look after their own self interest before they'll do their robotic duties. An insane robot does not mean that the player must run her robot persona like a lunatic, but that she can control her persona however she wishes.

The insanity level of the bot, or the amount of free will it has, is measured by its Control Factor. The robot's Control Factor (CF) is the resistance it has to reverting to a normal functioning robot. Whenever the robot is functioning as a normal bot, the persona has lost control of her persona. When a janitorial bot starts cleaning up a room it is functioning according to its internal programming, and not the player's initiative.

CF is essentially a measure of the persona's free will—the higher the Control Factor, the more control the player has over her robotic persona. If the CF is quite high, the bot's personality is greatly affected. The higher the bot's INT, the higher the CF, and the higher the CF, the better—at least for the player.

Control Factor Checks: Control factor checks can be made whenever the robot performs a task for which it was originally designed. For example, if a janitorial bot were to clean up a room, or a combat bot to kill something, a CF check may be in order. If the CF check is failed, the bot will temporarily revert to being the automaton intended. Players running robots shouldn't be always rolling the dice to see if they lose control of their character or not. The referee should only make her roll a CF check once in a while, perhaps when it is particularly crucial for the player to be in control of her persona.

CONTROL FACTOR EQUATION
Control Factor (CF) = INT + level

Control factor checks are very similar to an adjusted attribute roll (see chapter 16, Special Rolls). The robot's CF is determined by the Control factor equation given below. For instance a 3rd level robot with a 14 INT would have a control factor of 17. If the robot's INT drops due to damage its CF will increase the amount of INT lost. The more damaged, the more insane, the more free willed.

The player must roll under her control factor to maintain control of her robot persona. Most control factor checks are made on a d20, and that is the smallest die that can be used. More difficult CF checks may be made on d30s, d50s, or deci-dice.

If the robot with the CF of 17 were to voluntarily clean up a messy room (assuming it were a janitorial bot) the referee may require a d20 CF check. If the robot were ordered to clean up a room by a charismatic member of its base race, and if the orderer were a Mechanic with robotics skill the robot may have to make a d50 CF check.

Loss of Control: A failed CF check will indicate that the player has temporarily lost control of her persona. This loss of control could be critical to the robot's survival, and CF checks can often be life, or death, rolls.

The duration of the CF failure depends on the type of CF failure that occurred. If the failure occurs during combat then it will last a random number of units determined by the die that tested the robot's CF. So a robot failing a d50 CF check would become a referee run robot for d50 units. If the CF check occurs during non-combat then the persona will revert to being a robot for a random number of minutes determined by the die that tested the robot's CF. So a robot failing a d50 CF check would become a referee run robot for d50 minutes

(17) Hit Points (HPS)

Hit points for robots work pretty much the way they do for other personas. The major difference is that bots do not go unconscious when they reach zero hit points, nor do they die, nor can they be knocked unconscious, nor can they heal their damage. A HIT POINT is a HIT POINT regardless of whether it is a robot's, an alien's, or a anthropomorph's. The difference lies in how losing HPS affects the bot. Old robots never die—they just wear out. This topic is covered under Robotic Damage in this chapter.

Each bot gets one HPS factor per point of CON. An explorations bot (F) with a 20 CON would have 300 HPS, and an analog bot (A) with a 4 CON could have between 12 and 16 HPS.

(18) Tech Level

The player should roll a Tech Level, chapter 56, for her robot persona. This roll can adjust the wate and value of robot. A strange tech level could possibly make it more difficult to adapt, a robot. The tech level roll can make a robot lighter, but it cannot make it any heavier. If no tech level is rolled the robot is assumed to have a tech level of 10.

Table 5.25: Robotic Hit Points

ROBOT TYPE	HIT POINT FACTOR/point of CON
A-Analog	2 + d2 HPS
B-Hobbot	2d4 HPS
C-Industrial	10 HPS
D-Relations	3 HPS
E-Janitorial	d4 HPS (domestic) d6 HPS (industrial)
F-Explorations	15 HPS
G-Combat	5 HPS (expendable) 20 HPS (defensive) 15 + d10 HPS (offensive)
H-Police	12 HPS (riot) 3d4 HPS (civil) 3 HPS (special ops)
I-Medical	2 HPS (all)
J-Emergency	5 + 2d10 HPS (all)
K-Maintenance	d4 HPS
L-Transport	10 HPS (planetary) 13 HPS (extraplanetary)
M-Android	Special

(19) Adaptibility

Only Mechanics can fit peripheral devices onto bots, and this is done using the *Mechanics' Performance Tables*. The ADAPTABILITY is the percentage added to the mechanic's PT roll, thus increasing the mech's chance for success. The Degree of Difficulty of the particular procedure is determined by the ref. Those bots with no adaptability percentage are designed to not be tampered with, and instead of a PT roll bonus the Mechanic suffers a 3 DD penalty.

Robot Value

The value of the bot is its base worth relative to all the robot types described. The values indicated are for the basic unit that rolls off the assembly line. The strange peripherals that may have just happened, or are added to the basic robot type increase the robot's value. Primary peripherals are worth about 10000 to 60000 each, and secondary peripherals about 100000 to 600000 each. The adjustment of the robot's base value is really up to the referee. Any artifacts that are attached to the robot are tripled in value, and added to the robot's value. Robots that are worth incredible sums of money, or have particularly valuable peripherals will often find themselves being greedily pursued by former owners or prospective "buyers".

Robot Experience

As a bot gains more experience, it begins to solidify and reinforce its individuality and personality. The robot becomes more insane as it gathers data moderated by its own free will. The more individualistic and independent it becomes, the more insane it is. Remember that insanity in a robot does not mean lunacy, just robotic free will. Robots will gain experience by engaging in combat, taking damage, and taking more damage.

5% of combat EXPS can be converted into data that will re-enforce the robot's independent thought. Nothing will increase the robot's free will more than damage. Robots will earn 20 EXPS per HPS of damage they take. Increasing a robot's level will increase its control factor, and hence its free will.

Bots cannot acquire experience points for performing functions for which they were designed. A domestic bot will not get experience for cleaning a room, but will be rewarded if lucky enough to expose a fresco in the process of doing so. A bot with painting skill would not be rewarded for painting a house, but would gain experience points for using that same ability to spray paint into the eyes of the opponent. So, novel use of a built-in skill will be rewarded with experience points.

Table 5.26: Robotic Experience Table

EXPERIENCE	LEVEL
0-2000	1
2001-4000	2
4001-8000	3
8001-18000	4
18001-35000	5
35001-70000	6
70001-125000	7
125001-250000	8
250001-500000	9
500001-800000	10

310000 EXPS needed per level above 10th.

Robot Damage

Many of the robot types seem to have enormous HPS totals. This is because they need them. Many attacks, such as electrical, and disintegrations do double damage, and robots cannot repair HPS like other personas. When a robot is hit, any damage it takes is subtracted from its HPS total. Damage to a robot is the same as damage to any other persona. A punch does no less damage to a robot than it does to any other biological life form. The HPS still represents a universal value. This means that a robot will quickly lose HPS, and will be unable to heal itself.

The major difference between other personas and robot personas is that robots do not expire upon reaching zero HPS. When a robot's hit point total drops below zero HPS, it is damaged, and not dead. Some random part of the bot has been eroded by some degree. This erosion is represented by a drop in the persona's attributes, including the HPS total.

Regardless of the fashion in which the robot was damaged the injured sub-system will be randomly determined. This could roughly be considered the same as a hit location. An attacker could damage a bot's sensors or power plant without even aiming for that specific part. Each time the robot is reduced to zero HPS another part is damaged. Robotic death, the fatal malfunction, occurs *whenever any of a robot's attributes is reduced to zero, or its HPS max is reduced to zero.*

Losing Hit Points: When a robot's HPS total does drop below zero the robot has malfunctioned. Damaging a robot reduces its HPS max by ten percent, and randomly reduces another attribute. The bot is then returned to full HPS max, less the ten percent. For example, a bot with a total 110 HPS drops below zero. The bot returns to the new HPS maximum—which is less 10% of the previous one—in this case, 99 hit points. This new hit point total is now the bot's HPS maximum. If this robot were to accumulate more than 99 HPS in damage, it would be damaged again, and its new HPS max would be 89. This process of diminishing returns is undergone each time the bot reaches zero HPS total. So the robot's HPS max would continue to decline 80, 72, 57 etc. until it reaches zero HPS max, at which point it is destroyed.

The easiest way to calculate this is to multiply the robot's present HPS max by 0.90 and round the result DOWN. Always round the result down.

Losing Attributes: Robots may now seem indestructible. They are tough, compared to organic personas, but they are far from indestructible. Usually, long before the robot's HPS max reaches 0, the bot will suffer a fatal malfunction.

It is important to note that bots cannot heal any damage that they take, and they slowly, or quickly, fall apart and break down, until their sentience is no longer supported by their machinery. In addition to losing 10% of their HPS max, the bot also has some specific system malfunction. Depending on which system malfunctions some of the robot's attributes will be reduced. When ever any of these attributes is reduced to zero the robot is irrevocably destroyed.

The robot part damaged is determined randomly on the *Robotic System Malfunction* table, and the extent of damage is determined on the *Robotic Malfunction Severity* table. The *Robotic Malfunction Severity* is rolled for each attribute that is damaged when the robot's HPS drop below zero.

A bot has been rendered inoperative when its maximum Hps are less than one, or when any attribute is less than one.

Table 5.27: Robotic System Malfunction

DIE ROLL	DAMAGED SYSTEM	ATTRIBUTE(S) REDUCED
01-15	Articulations	Dex, Awe
16-25	Brain	Int, add d2 to CF
26-40	Control unit	All attributes; d2 - 1 to CF
41-55	Locomotion	Dex, Pstr
56-69	Peripheral	Lose an attack, defence, ability or sensor
46-75	Power plant	Pstr, Con, lose 1 month storage
76-99	Sensors	Awe, Int
00	Other/choose	

Table 5.28: Robotic Malfunction Severity

DIE ROLL(d6)	DAMAGE SEVERITY	ATTRIBUTE REDUCTION
1-5	Severe	1 point
6	Critical	2 points

Robot Decay Tables

The first question that any self respecting referee will ask is how in the hell does one destroy a robot without drastically reducing playability. If the players and referee gain particular enjoyment out of destroying robots then then tables may not present any problem, but when speed is preferred, a *Robotic Decay Table* is recommended.

The *Robot Decay Table* is prepared by the referee before the robot enters combat, and preferably before the run even begings. The table lists what happens to the robot as it accumulates damage. The referee's tally of how much damage the robot has taken is listed as TTL (total damage), and the corresponding attribute effects are on the same line.

In the given example, if the bot has taken 45 Hps of damage, it would have reduced its Awe, Dex, Int, Pstr and Hps max. These attribute reductions were done by damaging the robot's locomotion system, and brain. If the robot's total damage exceeds 99, then it is destroyed by a fatal malfunction of its Awe. Using a robot decay table allows the referee to have things like drops in wate allowance, and reductions in movement rate prepared for combat. It is generally not necessary for the referee to alter a robot's combat table as it decays, but ideally that could be done too.

Table 5.29: Decay Table for a Diagnostic Medical Bot (I)

AWE	CHA	CON (i)	DEX (iv)	INT (iii)	MSTR	PSTR (ii)	HPS		TTL
9	11	8	21	18	0	12	16		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
9	11	8	21	18	0	12	16	——	16
9	11	8	19	18	0	11	14	Locomotion	30
9	11	8	19	17	0	11	12	Brain	42
7	11	8	19	16	0	11	10	Sensors	52
6	10	7	18	15	0	9	9	Control unit	61
6	10	7	17	15	0	8	7	Locomotion	69
5	10	7	15	15	0	8	7	Articulation	76
4	10	7	15	13	0	8	6	Sensors	82
3	10	7	15	12	0	8	5	Sensors	87
3	10	7	14	12	0	7	4	Locomotion	92
1	10	7	14	11	0	7	3	Sensors	96
1	10	7	14	11	0	7	2	Peripheral	98

References

Here again, the reader may find it useful to consider the following examples of various robots from popular fiction to make sense of the categories defined in this chapter.

Analog Monitor: 'The Brain' from "Escape", in I, Robot, Isaac Asimov, 1945, Fawcett Crest Books.

Relations Bots: 'C3PO' from George Lucas' *Star Wars Trilogy*, 1977-1983, [film] 20th Century Fox.

Planetary Exploration Bots: The Viking Lander, which took soil samples and performed rudimentary experiments in the Martian environment after landing in 1976.

Extraplanetary Exploration Bots: 'Imperial Probot' from *Empire Strikes Back*, Lawrence Kasdan & George Lucas (producer), 1980, [film], 20th Century Fox

Combat Bots: 'ED-209' from *Robocop*, Arne Schmidt (producer) & Paul Verhooven (director), 1987, [film] Orion Pictures.

Policing Bots: from *THX-1138*, Francis Ford Coppolla (producer) & George Lucas (director), 1974, [film] Lucasfilm.

Maintenance Bots: 'Huey, Dewey and Louie' from *Silent Running*, 1973, [film]

Androids: Do Androids Dream of Electric Sheep?, Philip K. Dick, 1968, Doubleday



ROBOT
RECORD
SHEET

Chapter 6
Aliens

Like all other generation systems in **EXP**, the alien persona generation system can create very individual (i.e., bizarre) creatures of varying intelligences, strengths, and descriptions. Persona aliens are created completely randomly, and their niches in the campaign story can vary greatly. The personas could be introduced as natives of an unexplored world, as members of a conquering alien horde, as the offspring of biological experimentation, or any combination of these.

It is usually considered that the player is generating the attributes for an entire race, in which case her persona becomes an individual belonging to this alien race. For convenience, the alien persona is considered an exactly average free-willed representative of this species, and the referee is expected to splice this new race into the existing campaign. The player's business involves the running of her particular alien, and the referee is responsible for the alien race. Usually alien personas will never encounter members of their own race. The referee should remember that she can alter the nature of an alien to suit her campaign as she sees fit.

Role-Playing Aliens

Role-playing an alien is trickier than role-playing a anthropomorph, and these players have more problems than usual in adjusting to their personas. The aliens are generated randomly, and their shape, size, and powers vary greatly. For instance, the player may have to relate to a persona that is bright pink, waving multiple appendages, wagging a tail, sporting antlers, or having no limbs at all.

As with robot personas, alien personas will have to learn to restrain the urge to personify their aliens. If the alien lacks a head, arms, legs, or some other fundamental feature, the player will have to adjust accordingly.

Players running aliens will have to use the most refined imaginative role-playing skills. They will have to imagine grasping items with tentacles; realize that humanoid seats were not necessarily designed for them (if "sitting" is even possible); get accustomed to their massive (or diminutive) size; accept alien priorities (e.g., eating vs remuneration); and adapt to a host of other special circumstances. If your persona were a flying anemone, you may have difficulties with such mundane tasks as turning door handles, or firing humanoid weapons.

There is no reason to assume that the alien's psychology will be even remotely similar to the player's, or to any other humanoid. Alien goals may be as primal as food procurement, or as sophisticated as galactic domination. The player may even find her persona restricted to one particular biome, unable to roam freely like other personas. Thus the player has to deal not only with the physiological aspects of her alien persona, but also with an alien psychology. The problem is not that aliens have no personality, but that it most certainly will be far from human-like. This problem of alien physiological and psychological personification is going to be the greatest challenge the player will face during actual role-play, and hopefully the most fun!

Limits of the Alien Generator

There are limits to what the alien generation system can produce. Aliens that are blobs of gas, crystalline rock formations, or distinctly humanoid, cannot be randomly created with this system. This system cannot be expected to produce a perfect, ready to use alien. It is meant to be used to generate all the biological particulars—attributes, size, movement, damage etc—of an alien persona, as well as a haphazard physical description. If the referee wants a particular type of persona with particular looks, size and attributes is is recommended that she refer to the Referee Persona chapter (11) where referee aliens are discussed.

Chapter 11 discusses all types of referee personas, including how to generate aliens that suit the scenario or campaign.

Generating Aliens

The values generated in this chapter are considered to be the mean values for an adult of the species. Any alterations due to age, sex, climate etc. are left to the ref to accommodate. Personal idiosyncrasies of the alien are left to the player. To properly generate an alien persona the player must follow the Alien Generation Checklist.

Figure 6.1: Alien Generation Checklist

1) Attributes
2) Size
3) Hit Points (HPS)
4) Damage
5) Number of Attacks
6) Combat Table
7) Armour Rating
8) Description
9) Movement
10) Mutations
11) Age
12) Biology
13) Society (class, equipment)
14) Alien Name
15) Experience levels

(1) Attributes

Alien attributes are generated in a different manner than those of other personas. The attributes being generated are considered to be the mean attributes (average) for an entire alien race. This presents no problem for the player because her persona is considered to be a model example of an adult alien. All her attributes are exactly average, and they require no adjustments upwards nor downwards. However if the ref decides to have attribute differences due to sex, or age, it is up to her to determine these deviations. The player rolls her personas attributes on the Mean Attributes Table.

Alien attribute scores are the same as any other personas, whether that persona be a robot or a humanoid. An alien PSTR of 12 is no stronger than a humanoid PSTR of 12 which is no stronger than a robotic PSTR of 12. There is a subtle difference in that aliens can begin a campaign with a zero attribute. If a zero is rolled for any of the alien's attributes, some special conditions will have to apply.

Generating Attributes

Like other personas the alien attributes are generated once for each attribute. Aliens use the Mean Attribute Table to determine their attributes. For example, CON, DEX, INT and MSTR are supposed to be generated on 5d6 - 5. This means that five six sided dice are rolled, and 5 is subtracted from their total. It is essential that these attributes be rolled on the number of dice given. This assures a good statistical curve of attributes for all aliens generated.

Figure 6.2: Mean Attributes Table

Alien Atribute	Dice Rolled	Attrib. Range
AWE, CHA	3d6	3-18
CON, DEX, INT, MSTR	5d6 - 5	0-25
PSTR	6d6 - 6	0-30

Zero Attributes

Certain of the alien's attributes can have a nominal value of zero; however, this number has somewhat different implications than it would for a anthropomorphic persona. For instance, if the DEX roll were 0, the creature would be *sessile* (immobile). The DEX should be re-rolled to determine limb co-ordination, and aiming ability. If CON were 0, this would mean that the creature has no hit points. Such a situation could be interpreted to mean that they lack a life-force, and

do not *appear* to be alive as usually defined. However their CON would be re-rolled to determine how much damage they can take before disintegrating. The re-rolled attributes are the same as any other persona's attribute, and if any of these are reduced to zero the alien is irrevocably dead. Such explanations could be invented for DEX, INT, MSTR and PSTR.

(2) Size

The size of an alien may seem like an irrelevant die roll, but aside from determining size and wate, it helps decide the alien's hit dice and damage. Like the alien attributes, size indicates the mean racial wate, and this will perhaps vary for individual aliens. Size is determined on the *Alien Size* table, which gives both a general adjective and a wate range. The size of an alien does not determine its shape, which is created under Alien Description in this chapter.

The size die roll is adjusted by the persona's DEX and PSTR. The player adds her persona's PSTR to the die roll, and subtracts her alien's DEX from the die roll. This should reflect the basic biological principle that stronger creatures are usually larger, and more dextrous creatures are usually smaller. This principle is not entirely correct, but the *Alien Size* table roll should be adjusted by those attributes. If the adjustment is forgotten and the persona is completed there is no re-rolling of alien size. This gives an added randomness to the creation of aliens.

A player whose alien has a 12 DEX, and a 22 PSTR would add 10 to her deci-dice roll, and a die roll of 67 would be adjusted to 77, and the alien would be large sized. She rolls 39, 41, 11, 89, and 67 for her 5 d100 rolls. Her alien's wate is 347 kgs. Her alien has no description, no name and no abilities to speak of but its wate is 347 kgs. Often the size of an alien will be noted by the first letter of the size adjective—e.g., **L** for **Large**.

Table 6.3: Alien Size

DIE ROLL	ALIEN SIZE	ALIEN WATE (kgs)
01-05	Tiny	0-9 (d10-1)
06-25	Small	01-50 (d100/2)
26-75	Medium	51-100 (d100/2+50)
76-96	Large	105-600 (5d100+100)
97-00	Gigantic	606-6600 (6d1000+600)

Add PSTR and subtract DEX from roll

(3) Alien Hit Points

Alien HPS depend on their size and their CON. The alien's size determines the type of die that is used to generate the alien's HPS, and the alien's CON determines how many times the die is rolled. The die type is determined on the *Alien Hit Point* table, and it is rolled once per point of CON that the alien has.

According to the table, a player running a large alien with a 9 CON would roll 9d10 to determine her alien's HPS. The numbers generated on each die are cumulated as the persona's HPS. If the player had rolled 4, 5, 2, 6, 8, 3, 5, 6, and 7 her alien would have 46 HPS. The HPS max, and the dice rolled should be recorded on the persona record sheet of the alien.

Figure 6.4: Alien Hit Points (HPS) Table

ALIEN SIZE	HIT DIE	DICE ROLLED	HPS RANGE
Tiny	d4	(CON)d4	0-100
Small	d6	(CON)d6	0-150
Medium	d8	(CON)d8	0-200
Large	d10	(CON)d10	0-250
Gigantic	d20	(CON)d20	0-500

Alien Death

One final, very important point that players with alien personas must remember, especially those expecting to be involved in combat, is that aliens, unlike other characters, are DEAD at zero hit points. Aliens are not required to make Damage System Shock rolls regardless of how much damage they have taken, however when they reach 0 HPS the persona is irrevocably dead.

(4) Number of Attacks

The number of attacks a denizen is entitled to is usually its most important offensive combat parameter. The number of attacks that an alien gets is determined by a deci-dice roll (d100) on the *Number of Attacks* table. Players add 1/3 their alien's DEX to the d100 roll. Thus a persona with a 15 DEX would have 5 added to her die roll.

The number of attacks indicates how often the creature may roll to hit each unit. The attack refers to the alien's natural attack. The damage of an alien's natural attack is listed under damage in this chapter. The number of attacks does not refer to any sort of technological weapon, or mutation-like attack that has a preset attack frequency. The number of attacks refers only to the creature's natural offences—tentacle to tentacle combat so to speak.

Table 6.5: Number of Attacks

DIE ROLL	NUMBER OF ATTACKS
01-10	1 per 2 units
11-80	1 per unit
81-90	2 per unit
91-96	3 per unit
97-99	4 per unit
00	Other

Add 1/3 DEX to roll.

One attack every second unit may seem very slow, until one fabricates some possible reasons for this. Perhaps the race is inherently non-combative, and too many of the alien's blows are being easily blocked. The alien may have a high DEX, but in combat it is just plain slow. Conversely, high attack frequencies can turn an alien with an average damage per attack into a killing machine, and may require justification by the referee.

(5) Damage Per Attack

Alien damage per natural attack is determined from the Alien Damage Table. Yet there are subtle complexities about the damage itself that must be considered. The player must decide how the alien attacks—whether it punches, kicks, gores, or whether it fires lazers, spits acid, or electrocutes. This is determined on the *Attack Type* table.

Multiple attacks also pose a slight problem. If an alien has three attacks, it is unlikely that it claws, bites, or kicks three times in one unit (unless, for example, it has three mouths). If the ref feels it is necessary, or if the description dictates, multiple attacks can be given different damages. Where the different damages represent different types of attack. Normally there is only one attack, and that is repeated several times.

Damage Per Hit: Consider a Gigantic alien with a 13 PSTR and three attacks. According to the *Alien Damage* table the alien would inflict 3d12 (3-36) HPS damage each time it scores a hit. A deci-dice roll on the *Alien Attack Type table* is 57. This alien would inflict its damage by a type A attack, contact. The type of physical attack that is employed, whether it is biting, slashing, or clawing, is determined by the player. Aliens do not get a damage adjustment like other personas. The amount of damage an alien inflicts already includes its PSTR.

Table 6.6: Alien Damage

Alien PSTR	Alien Size T	S	M	L	G
00-05	d4	d6	d10	d12	d20
06-10	d6	d8	d12	d20	3d10
11-15	d8	d10	d20	3d10	3d12
16-20	d10	d12	3d10	3d12	4d10
21-25	d12	d20	3d12	4d10	4d12
26-30	d20	3d10	4d10	4d12	5d10

Alien Attack Type: The alien attack type categorizes the alien's damage into one of the 3 basic weapons types discussed in chapter 28, Weapons. Type A attacks are thrusting and striking attacks, and some examples of some alien thrusting and striking attacks are given. Type B attacks are ranged attacks that are powered by the alien herself. These could be quills or spittles that can be hurled up to a length equal to the persona's PSTR. Aliens that have attack type C have a naturally evolved attack that resembles a weapon rolled from chapter 46, Guns. The attack will be modelled after the weapon rolled in chapter46, having the same damage, range and rate of fire. For example, an alien could spit seeds like a fully automatic rifle.

Table 6.7: Alien Attack Type

DIE ROLL	ATTACK TYPE
01-75	Type A, Contact (Bite, punch, claw, beak, gore, lick, rake, slice, gouge, tear)
76-97	Type B, Ranged (Spit, breath, blast, arc, spray)
98-99	Type C, Weapon (natural powered attack)
00	Other

(6) Combat Table

The alien combat table is much simpler than the one for humanoid personas. Aliens which have classes should use the regular combat table that is described in chapter 27, *Tactical Combat*. The combat table here is for the alien's natural attack type. If the alien only has a type A, type B, or type C natural attack then the combat table need only include those attack types. Tool using aliens should use the combat table detailed in chapter ‰.

The combat table for alien natural attacks is very brief. There is no bonus non-proficient (BNP) column, because an alien can't be unskilled with its own attack. There is also no damage adjustment (DA) because the damage inflicted by natural attacks is moderated by PSTR. For example, an alien should not get a PSTR bonus on a Type A natural attack. This only applies to natural attacks.

Type A: Thrusting and striking weapons for aliens include their naturally endowed thrusting and striking attacks (bite, punch, claw, beak, gore, stab, rake, slice, gouge, tear, trample). Aliens using Type A weapons are intelligent enough to warrant using the regular combat table for those weapons.

Type B: This attack type is designated for those aliens that fling objects, shoot quills, or spit in an attempt to inflict their natural damage (spit, breath, blast, arc, spray). Any alien using a Type B weapon should use the regular combat table for that weapon.

Type C: Again this is directed at those creatures with natural, powered attacks (lazers, sonics, electric arcs, radiation doses). Aliens with natural powered attacks are very rare, and extremely dangerous. They have specially evolved organs that allow them to attack naturally, but as a gun from chapter 46. Any creature using powered weapons should use a regular combat table for those weapons.

Table 6.8: Alien Combat

WEAPON TYPE	BONUS PROFICIENT	MAXIMUM ROLL
A (contact)	10 x PSTR	700 + BP
B (ranged)	10 x INT	750 + BP
C (weapons)	10 x DEX	800 + BP

For example, a gigantic alien with a 22 PSTR, a 15 DEX, a 3 INT and a type B attack (spitting sharp blobs of resin) that attacks 3 times each unit would have the following combat table.

	BP	BNP	MR	DA
A	----	------	----	----
B	50	50	800	n/a 4d12
C	----	------	----	----

(7) Armour Rating

Only the AR in terms of aliens is described here. Armour rating is covered more thoroughly in chapter 29, Armour Rating. Alien AR includes its dexterity, agility, hide structure, body structure, and any other natural devices that have evolved to avoid getting damaged or captured.

What fraction of a creature's AR depends on dexterity is subjectively determined by the DEX roll. If the alien has a high DEX , its natural AR most likely consists of dodges and deaks. An alien with a low DEX is more likely to have a thick hide, or a defensive body structure (internal or external).

Regardless of the alien's DEX , or description, the AR is determined completely randomly. The alien's AR can range from 503 to 800. This is the average natural armour rating for completely nude, and un-armoured, members of this alien race. any armour that is worn by an alien will increase its AR from this value. So in essence this is the alien's base AR. Getting specialized alien armour is not discussed here, but will make the alien even harder to hit.

If a player were to roll 15, 89, and 64 her alien persona would have an AR of 668, and any to hit roll would have to higher than that value.

ALIEN ARMOUR RATING
AR = 500 + 3d100

(8) Description

The description system for aliens is, at best, wild and unpredictable. The description is achieved by choosing body parts from an enormous list of past and present earth dwelling denizens. Each creature listed on the *Alien Body Part* table should be familiar to anyone reading it. However, the random combination of these parts creates a strange description indeed. To create a plausible description the players must remember that the alien parts merely resemble those of the familiar creature, and are proportional to each other in size.

Alien Proportions: It is essential that the proportions of the body parts be kept in mind. If the alien has the body of a bear, and head of a mite, it is not a big ball of fur with a microscopic head; the creature is better described as a medium (rolled on size chart) sized creature with an insect-like head atop a bulky, furry body. The mite's head would be a size proportional to the bear torso. When adjusting the alien description to fit relative body sizes, do not disregard the size of the alien, rolled earlier. If an alien is a tiny creature with the body of a sperm whale and the head of a giraffe, remember that it is still tiny, and has a tiny giraffe's head, and a tiny sperm whale's body. Also, if an alien has the legs of an ant, but is gigantic, then the alien has six gigantic ant legs.

External Appearance: Another problem people have when using this system is that they apply their scientific knowledge, and not their imagination, to the generated descriptions.

Comments such as the following abound: "...an amoeba of that size couldn't possibly support its own weight in...". The alien is not a 542 kg pink amoeba; it is something that has a wate of 542 kg, is pink, and bears a striking resemblance to an amoeba.

The rolls merely indicate that the alien's shape strongly resembles the particular earth creature part. The familiarity is totally visual, and there is no reason to assume any internal similarities what so ever. For example, an alien may look like it has the head of a wasp, the torso of a porcupine and the flippers of a walrus. However, its internal composition will consist of highly alien biological workings that can only be guessed wildly at.

The 'black box' physiology of the alien is very convenient; it allows the ref to create imaginative "biologically" based explanations for any of the alien's peculiar attributes, abilities or limitations.

Generating the Description: The size of the alien has already been determined. The alien's shape is now determined with four separate rolls on the *Alien Body Part* table. Each alien rolls for a head, torso, arms, and legs. The four divisions are given to divide up the four most basic structures that any life form would be expected to have. Such classic divisions should not be interpreted to mean that all aliens have such standard structures.

1) Head: The alien's head type is the one that stores the alien's brain, its primary sensors, and is usually located on the front of the alien. Once the head type has been determined, the the player can make some decisions about the alien's appearance. Should she use the neck attached to the head, or wait for the torso? Does the description of the head indicate a possible attack mode for the creature? Should she roll for a special adornment (from the *Head Adornment* table)? Such decisions are purely cosmetic, and should not profoundly affect the alien.

2) Torso: It is expected that the torso would be the most likely place for the alien to store its vital organs. Who knows what these vital organs might be or what they might process, but they are more likely than not to be stored in the torso. Descriptively the torso is probably the most general category of all the body part rolls, and it can easily be melted into the limbs and head of the alien. Some considerations are: Whether, or not, to use the neck attached to the torso? Does a tail suit this alien? Should we add a special adornment from the *Torso Adornment* table?

3) Arms: Arms are the articulations of the alien. Because an alien has limbs that are designated for grasping it does not immediately imply that the alien is a tool user. The alien might use the specialized limbs to pick berries, or peel the flesh off of prey. Whether or not the alien is a tool user, or civilized, is determined under alien society in this chapter.

Even if it is decided that the alien should have arms with manipulative hands the *Alien Body Part* table may still generate a body part that resembles a creature with either no arms (snake, paramecium), or a creature that has no digits (horse, shark). If the alien is supposed to be a civilized tool user, but the animal type rolled has no arms, but has flippers, hooves, fins or legs, then a specially evolved grasping attachment can be rolled on the *Arm Adornment* table. The *Arm Adornment* table should only be used as a last resort (read cop-out). Intelligent races that have hooves, or flippers, will most likely have designed their technology to accommodate such digits.

4) Legs: This alien part indicates the main form of locomotion that gets the alien around. Often an alien's legs will not be legs at all, but flukes, flippers, bulbs, and blobs. If the alien has snake's legs, it slithers about; if it has fish legs, it may wiggle, or fin, itself about; if it has parrot legs, it may have clawed bird-like legs, wings to fly with, or both.

Whole picture: Once the basic body of the alien has emerged, with head, torso and limbs all amalgamated satisfactorily, various adjustments and "cosmetic" touch-ups can be incorporated. There are three *Special Adornment* tables (Head, Torso and Arms) to choose from. The last feature to be decided is the creature's coat. Although the alien will consist of body parts resembling various animals, there is no reason that it must have a

patchy appearance. The alien would most likely have a coat/hide colour that gives it camouflage to avoid hunters, and catch prey.

Although all the steps described will very straightforwardly deliver an alien, this is not meant to be a rigid system. Feel free to at any time manipulate the description of the alien. Add or remove special adornments, slap in new eyes or antennae, change the mouth, re-roll the coat etc. Alter and mold the creation into the form of the perfect alien, creature, denizen, beasty, or whatever.

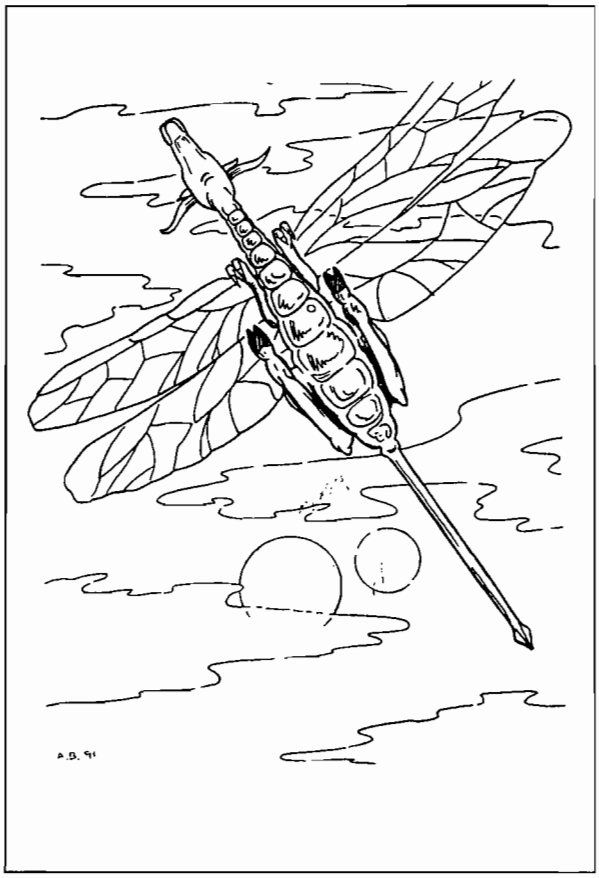
The alien description seems quite sterile, because it is. A mundane list of words and parts don't have the synergistic effect of seeing the whole creature. This is why a drawing is recommended. Regardless of how poorly the alien is rendered even the attempt to join all the body parts together will help solidify the alien description.

Description and Movement: Beside each creature type are letters contained in brackets. These letters indicate the types of earth terrain that the creature type is mobile in. Land creatures have an 'l' for land, flying creatures have an 'a' for air, and aquatic creatures have a 'w' for water. Sessile creatures have an 'n' for non-mobile. Sessile creatures are usually found in certain environment types as listed above. A rabbit is a land creature (l), an alligator is both aquatic and land (l,w), a hawk is airborne (a), a duck is all three (l,a,w), and an anenome is sessile aquatic (n-w). These parameters should be recorded on the persona record sheet.

Description Table Explanation: If the body part rolled is unknown to the players, or ref, it is best researched in a dictionary, or an encyclopedia. If the body type rolled should happen to be "None", then the alien does not have, or has no use for, that particular body part. A creature with no head may have sensors attached to the torso; a creature with no legs may move by means of the torso, or be immobile; an alien with no body parts at all is the type of non-entity that livens up campaigns.

Table 6.9: Example Alien Description

Alien Part	Die Roll	Creature Type	Familiar Terrain
1) Head	6, 38	Sheep (l)	land
2) Torso	5, 92	Wasp (l,a)	land, airborne
3) Arms	1, 80	Duck (l,a,w)	land, air, water
4) Legs	3,99	None	None



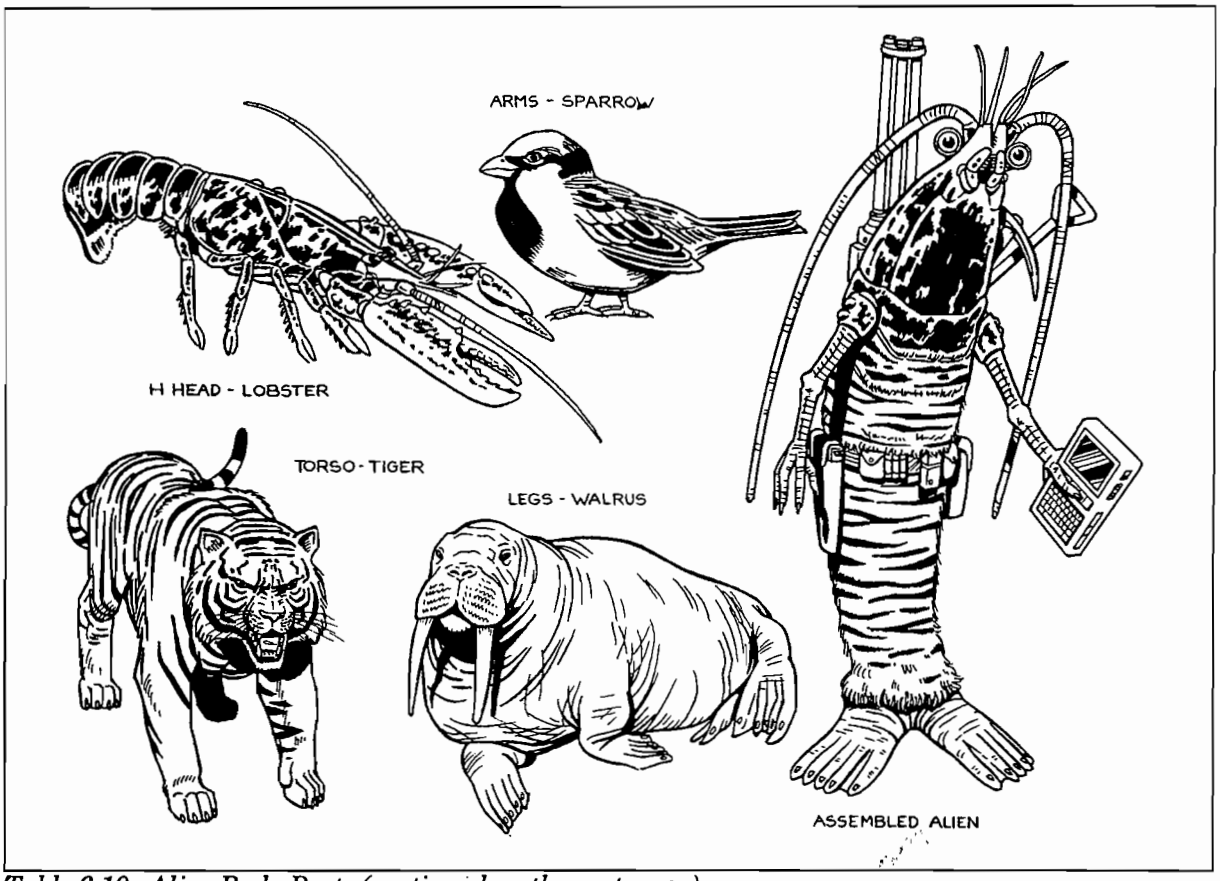


Table 6.10: Alien Body Parts (continued on the next page.)

DIE ROLL(d100)	DIE ROLL (d6) 1-2	3-4	5-6
01-02	Alligator (l,w)	Gorilla (l)	Platypus (l,w)
03-04	Amoeba (w)	Grasshopper (l,a)	Porcupine (l)
05-06	Amphioxus (n-w)	Guinea pig (l)	Preying mantis (l)
07-08	Anemone (n-w)	Hammerhead (w)	Priapolid (w)
09-10	Ant (l)	Hawk (a)	Pterosaur (a)
11-12	Anteater(l)	Hectapus (w)	Puffer fish (w)
13-14	Antelope (l)	Hippopotamus (l,w)	Rabbit (l)
15-16	Ape (l)	Horse (l)	Rat (l)
17-18	Armadillo (l)	Horseshoe crab (l,w)	Raven (a)
19-20	Barnacle (n-w)	Jellyfish (w)	Rhinoceros (l)
21-22	Bat (a)	Kangaroo (l)	Scorpion (l)
23-24	Bear (l)	Kelp (a,w)	Sea star (n-w)
25-26	Beaver (l,w)	Koala (l)	Sea spider (w)
27-28	Beetle (l)	Ladybug (l,a)	Sea urchin (n-w)

Table 6.10a: Alien Body Parts Continued.

DIE ROLL(d100)	DIE ROLL (d6) 1-2	3-4	5-6
29-30	Blimp (n-a)	Lamprey (w)	Seagull (l,a,w)
31-32	Blue whale (w)	Lemur (l)	Seahorse (w)
33-34	Brontosaur (l)	Leopard (l)	Seal (w)
35-36	Budgy (a)	Lion(l)	Shark (w)
37-38	Butterfly (a)	Lizard (l)	Sheep (l)
39-40	Cactus (n-l)	Lobster (w)	Shrimp (w)
41-42	Camel (l)	Lynx (l)	Skunk (l)
43-44	Cappybara (l,w)	Mammoth (l)	Sloth (l)
45-46	Cat (l)	Manta ray (w)	Slug (l)
47-48	Caterpillar (l)	Marmot (l)	Snail (l)
49-50	Centipede (l)	Mite (l)	Snake (l)
51-52	Chimpanzee (l)	Mockingbird (a)	Sperm whale (w)
53-54	Cicida (l,a)	Mole (l)	Spider(l)
55-56	Clam (w)	Moose (l)	Sponge (n-w)
57-58	Cockroach (l)	Morel (n-w)	Squid (w)
59-60	Conifer (n-l)	Mosquito (a)	Stegasaurus (l)
61-62	Coral (n-w)	Moth (a)	Swan (l,a,w)
63-64	Cow (l)	Mouse (l)	Tarantula (l)
65-66	Crab (l,w)	Mule(l)	Tarsier (l)
67-68	Crocodile (l,w)	Mushroom (n-l)	Tazmanian devil (l)
69-70	Dog (l)	Nototherium (l)	Termite(l)
71-72	Dolphin (w)	Opossum (l)	Tick (l)
73-74	Do-do bird (l,a)	Orangutang (l)	Tiger (l)
75-76	Dragon (l,a,w)	Orca (w)	Triceritops (l)
77-78	Dragonfly (a)	Osprey (a)	Trilobite (w)
79-80	Duck (l,a,w)	Ostrich (l)	Turtle (l,w)
81-82	Elephant (l)	Ox (l)	Tyrannosaurus (l)
83-84	Fern(n-l)	Oyster (w)	Viper (w)
85-86	Ferret (l)	Paramecium (w)	Vole (l)
87-88	Fly (a)	Penguin (l,w)	Vulture (a)
89-90	Frog(l,w)	Pihranna (w)	Walrus (l,w)
91-92	Ghila monster (l)	Pig (l)	Wasp (a)
93-94	Giraffe (l)	Pillbug (l)	Wolverine (l)
95-96	Goat (l)	Planaria (w)	Wombat (l)
97-98	Goose (l,a,w)	Plasmodium (w)	Worm (l)
99-00	None (n)	None (n)	Other

Roll once for each of 1) HEAD, 2) TORSO, 3) ARMS, 4) LEGS, and record.
a=airborne, l=land, w=water, n=sessile (non-mobile)

Table 6.11: Head Adormment

DIE ROLL(d12)	SPECIAL ADORNMENT
1	Antenna(e)
2	Antler(s)
3	Ears (roll body type)
4	Horn(s)
5	Knob(s)
6	Peak(s)
7	Plume(s)
8	Quill(s)
9	Spine(s)
10	Tuft(s)
11	None
12	Other

Combine with 1) HEAD if desired

Figure 6.12: Torso Adornment Table

DIE ROLL(2d8-1)	SPECIAL ADORNMENT
1	Bump(s)
2	Crest(s)
3	Feather(s)
4	Hole(s)
5	Knob(s)
6	Knurl(s)
7	Plume(s)
8	Ridge(s)
9	Ruff(s)
10	Spine(s)
11	Spout(s)
12	Wings
13	None
14-15	Other

Combine with 2)TORSO if desired.

Table 6.13: Arms Adornment

DIE ROLL (d10)	SPECIAL ADORNMENT
1	Adhesive
2	Claws
3	Hands
4	Hooves
5	Magnetic
6	Paws
7	Pincers
8	Talons
9	Tentacles
10	Other

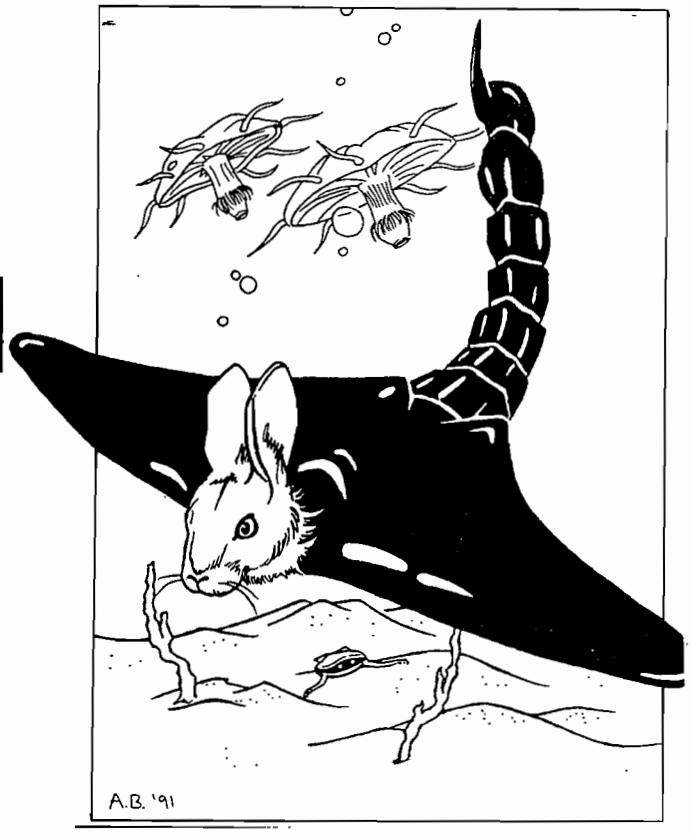
Combine with 3) ARMS if desired.

(9) Movement

Aliens can move up to one hex/unit per point of DEX. Denizens may hop, slither, scuttle, slime, or gallop along with whatever form of locomotion is listed as legs in their Description. The type of creature part that is used to describe the alien's locomotion will move at the designated movement rate regardless of what the description is. For instance, an alien that looks like a snail could move as fast as an alien that looks like a leopard.

If the creature type listed there does not have any obvious form of locomotion, it will still move, and the player must use her imagination. The chance that an alien will be sessile is quite rare, the alien must have a zero DEX, or all the creature parts must be non-mobile (n).

The fact that earth phrases like air, water and land have been chosen to describe alien movement should not limit the referee to these types of terrain. Aquatic (w) means liquid; it could be water, or liquid ammonia. Airborne flying (a) does not have to be air, but could any gaseous atmosphere, like carbon monoxide or smog. Let Table 6.19, *Alien Biome* , later in this chapter decide the alien's favourite atmosphere, not its movement type.



The system has some peculiarities which are not immediately obvious. If the alien has sea creature parts, but lives on an arid planet, it will merely be slowed down, but it will not die from dehydration. If the alien has parts all of one type then it will be restricted to that one environment. If the alien has body parts from amphibious creatures then it may be able to move equally fast on land as in liquid.

Movement and Description: The creature parts rolled do have an effect on the alien's movement rate, but not in the direct fashion that their description dictates their speed. As one would expect from **EXP** there is a much more convoluted way to determine the alien's movement rate (move). The alien's DEX represents the maximum movement rate that an alien can travel at. Thus an alien with 12 DEX would have a base movement rate of 12 h/u. The alien's movement rate is adjusted for different terrains, and it will rarely move at its given maximum movement.

For example, each creature part listed on the *Alien Body Part* table has a terrain familiarity listed after it in brackets. For example, pig (l), hippoptamus (l,w), and sea urchin (n-w). It is these designations that determine the alien's speed on land, in the air, and in the water. The terrain types are described under (8) Description earlier in this chapter.

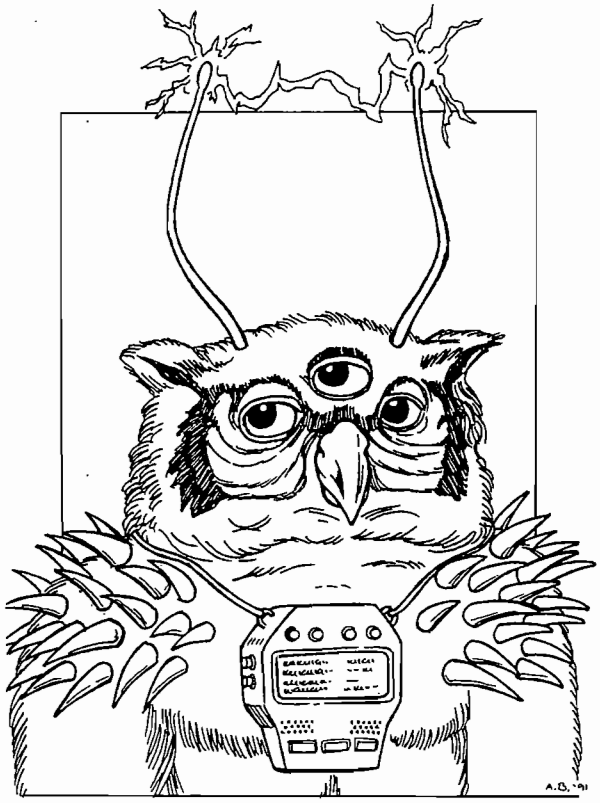
Quartering Movement: The three types of movement are land, air, and water, and the alien's movement rate is divided amongst these terrain types. Each of the four body parts is designated a certain terrain type(s). Every time that a certain terrain type appears, 25% of the aliens movement rate can be achieved on that terrain.

If all four of an alien's body parts (head, torso, arms, and legs) were derived from land creatures (l), then the alien would move at 100% on land. If it were an alien with a 12 DEX, it would move 12 h/u on land, but it could not swim or fly. If the alien were to have three land creature parts (l), and one sea creature part (w), then it would move 3/4 on land (9 h/u), and 1/4 in liquid (3 h/u). If the alien had 2 land creature parts (l), one aquatic part (w), and one flying part (a), then it would move at 1/2 on land (6 h/u), 1/4 in air (3 h/u), and 1/4 in water (3 h/u).

The *Example Alien Movement* table has the movement rates calculated for an alien with 3 land parts, 2 airborne parts, and 1 water part. Note that the none part simply reduces the alien's total movment.

Table 6.14: Example Alien Movement

Alien Part	Creature Type	Familiar Terrain	Movement Rate(16 DEX)
Head	Sheep (l)	land	land 75%, 12 h/u
Torso	Wasp (l,a)	land, air	air 50%, 8 h/u
Arms	Duck (l,a,w)	land, air, water	water 25%, 4 h/u
Legs	None (n)	none	



(10) Mutations

Aliens have a chance of getting mutations, however they are not generally considered mutations, but natural abilities that function the same as mutations. An alien's mutations apply to the entire race, and are more like naturally evolved defensive, or offensive, abilities. Therefore, alien mutations are not considered mutations in the usual sense—as if they were abnormalities or variations from the norm. Occasionally mutations may force changes in the creature's physical description, as determined in the Description section. If a player running an alien wishes to mutate she cannot adjust her chance of mutation like humanoid personas can.

Mental Mutations: The chance of an alien having a mental mutation is equal to the alien's MSTR attribute. An alien with a 15 MSTR would have a 15% chance having a mental mutation per mutation check. The player stops checking for mental mutations as soon as a roll is failed. So if the player were to roll 11, and 16 her alien would have one mental mutation. These mutations are described in chapter 58, Mental Mutations.

Physical Mutations: The chance of a creature having evolved a physical mutation is equal to the creature's CON. For example, a CON of 10 has a 10% chance of having a mutation. Once the alien has a mutation there is an equal chance of having another. The alien can keep getting additional mutation-like abilities if it keeps making its percent chance. If the player with the alien that has a 10 CON were to roll 3, 9, and 41, her alien would have two physical mutations. The mutations are described in chapter 59, Physical Mutations.

(10) Lifespan of Alien

All personas, except for robots, have a projected life-span. The ideal of an alien only living for a certain amount of time is a reflection of its biological nature. The life spans of aliens can be very alien indeed when compared to those of humanoid personas.

The referee should have the alien's life span reflected in the society of the alien species. Very long lived species would have fewer offspring, and possibly take less risks than short lived aliens. Possibly arguing that they have very much more to lose than a species that will only enjoy existence for a few years. They could equally likely get profoundly bored and take tremendous risks. Although this should not impinge on the way the player runs her persona, ignoring the fact that one is going to live several thousand years would not be very realistic role-playing.

Calculating Lifespan: Determining the alien's life-span is done in two parts. First the absolute life-span of the alien is rolled on the Alien Life-span Table. This deci-dice roll determines the longest that the alien can live in a number of years.

Peculiar things like differences in year lengths must be considered by the referee, but it is assumed here that all year lengths in **EXP** are equal. Second is the distribution of the alien's life stages. This part determines what percentage of the alien's life will be spent as a child, an adolescent, an adult, or as an older member of the race. The effects of these different life stages are the same for all aging personas, and are discussed in chapter 13, Health.

Table 6.15: Alien Lifespan

DIE ROLL	MAXIMUM AGE (years)	DICE USED
01-05	1-6	d6
06-15	10-60	d6 x 10
16-40	60-120	50 + (d6 x 10)
41-65	110-160	100 + (d6 x 10)
66-85	160-250	150 + (d10 x 10)
86-95	100-600	d6 x 100
96-99	100-1200	d12 x 100
00	100-100000	d1000 x 100

Alien Life Stages: The alien life stages are quite superficial indeed. They do not consider alien aging peculiarities like pupal stages, physical transformations, dormancy, or years of dependency. An alien persona will always start the campaign as a young adult, and most developmental problems, like dependency, and pupal stages should have been avoided. The referee could propose transformations that would alter the appearance of the alien as it passed from one life stage to another. Except for developmental changes unique to the alien, aliens suffer the same attribute adjustments as they pass through the various life stages. See chapter 13, Health.

Table 6.16: Alien Life Stages

LIFE STAGE	PROPORTION OF LIFE-SPAN
Child	first 1-10%
Adolescent	1-6%
Adult	10-80%
Older	Remainder
Aged	Last 1-4%

Example Alien Life Span: If a player were to have rolled 82 on the *Alien Life-span* table then her alien would have an age between 160 and 250 years old. She determines her personas maximum possible age to be 200 years. The results of her rolls on the *Alien Life Stages* table are given below. Note that the aged category must be rolled before the older category can be determined. The alien's start age should be about 29 to 30 years, and on its 169th year it will be in the older category, and at 197 years in the aged category, and after 200 years it has exceeded its life expectancy. For the effects of these age changes see chapter 13, Health.

Table 6.17: Example Alien Life Span

Based on a life-span of 200 years

Age Cat.	Percent Life Span	Length in yrs	Age in yrs
Child	First 10%	20 years	1-20
Adoles.	Next 4%	8 years	21-28
Adult	Next 70%	140 years	29-168
Older	Remainder	27 years	169-196
Aged	Last 2%	4 years	197-200

(13) Biology

All of the alien information up to this date is considered biology, but the biology covered here represents superfluous information that will only subtlely affect the nature of the alien. Where as the previous biology represented factors that affect the

attributes of the alien persona, like movement, combat abilities, size, etc.

Biology gives a very brief description of where the alien fits into its ecological system. The biome describes the terrain that the alien is accustomed to living in. The last five tables provide some extra insight into what makes the alien tick. They may seem trivial at first, but can be very important under certain circumstances.

For example, a carnivore would be a naturally better hunter than a herbivore (unless of course it hunts florians). And a creature which habitually lives in burrows, would be quite adept at traversing and fighting in tunnels. Besides furnishing a quick biological background for the alien, this section can also provide a good springboard for the ref's imagination. Items that should be generated for the alien are listed below.

Table 6.18: Alien Biology Checklist

i) Alien biome
ii) Energy source
iii) Procurement strategy
iv) Reproduction type
v) Habitation type
vi) Aroma

Table 6.19: i) Alien Biome

DIE ROLL	BIOME TYPE
01-08	Coniferous
09-16	Deciduous
17-24	Desert
25-32	Farm
33-40	Grassland
41-48	Industrial
49-56	Megalopolis
57-64	Oceanic
65-72	Ruin
73-80	Tropic forest
81-88	Tropic grassland
89-99	Tundra
00	Other

Roll on Table 6.20 also.

Table 6.20: Special Characteristic

DIE ROLL	SPECIAL CHARACTERISTIC
01-10	Normal
11-20	Toxic
21-30	High gravity
31-40	Low gravity
41-50	Thin atmosphere
51-60	Dense atmosphere
61-70	Underground
71-80	Aboveground
81-90	Mountainous
91-99	Extraplanetary
00	Other

Table 6.21: ii) Energy Source

DIE ROLL(d8)	ENERGY SOURCE
1	Carnivore
2	Chemosynthetic
3	Detritivore
4	Herbivore
5	Omnivore
6	Photosynthetic
7-8	Other

Table 6.22: iii) Procurement Strategy

DIE ROLL (d6)	PROCUREMENT STRATEGY
1	Ambush
2	Chase
3	Hunt
4	Trap
5-6	Other

Table 6.23: iv) Reproduction Type

DIE ROLL(d6)	REPRODUCTIVE METHOD
1	Mitosis
2	Oviparous (hatched)
3	Spores
4	Viviparous (marsupial)
5	Viviparous (placental)
6	Other

Table 6.24: v) Habitiation Type

DIE ROLL (d12)	HABITATION TYPE
1	Burrow
2	Cave
3	Dam
4	Hive
5	Hole
6	Hollow
7	Home
8	Nest
9	Web
10-11	None
12	Other

(13) Alien Society

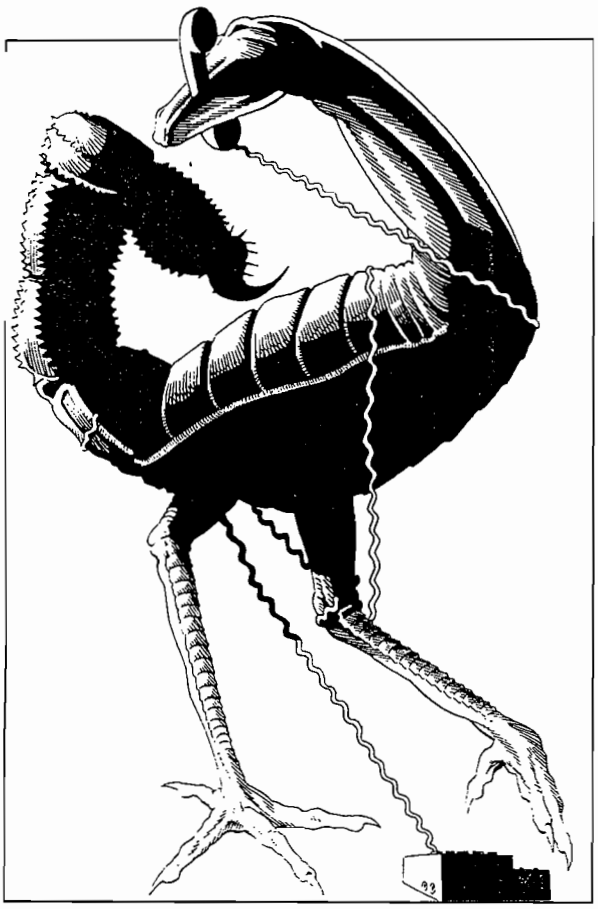
Alien society is something for the referee to carefully consider, and prepare for her campaign. Alien societies can even be the basis for an entire campaign. The differences in values, architecture, and social organization alone amongst alien cultures would be beyond the duration of a life time of study.

Most of the persona aliens will be rogues, or outcasts, that have rejected their alien culture. Thus allowing them to form their own cultural niche. The referee cannot possibly prepare a detailed alien society each time a player generates

Table 6.25: vi) Alien Aroma

DIE ROLL	ALIEN AROMA
01-03	Alcohol
04-06	Apples
07-09	Ashes
10-12	Bananas
13-15	Beans
16-18	Beer
19-21	Bologna
22-24	Bread
25-27	Chives
28-30	Chocolate
31-33	Cigarettes
34-36	Cinnamon
37-39	Corpses
40-42	Estrogen
43-45	Grease
46-48	Hay
49-51	Hemlock
52-54	H.P. Sauce
55-57	Ink
58-60	Leather
61-63	Lemons
64-66	Methane
67-69	Oats
70-72	Oranges
73-75	Pork
76-78	Rubber
79-81	Salmon
82-84	Sawdust
85-87	Spruce
88-90	Swamp
91-93	Tar
94-96	Tuna
97-99	Whiskey
00	Other

Roll twice and mix for effect.



an alien persona. For the most part alien personas will not be members of galactic societies, or developed countries. If some idea of the alien's society is necessary, but total preparation is not, the referee should turn to chapter 11, Referee Personas, and detemine the society's religious, political and philosophical beliefs.

Alien Communciations: The aliens that are generated as personas are usually from non-tool using, non-civilized, and otherwise un-organized species. For role-playing convenience the aliens almost always will be able to communicate with the other personas, and only the most malicious referee will not allow an alien persona this leniency. It is unrealistic to think that an alien will be able to converse freely with humanoid personas, but remember that this is science fantasy, and fun must win out over realism.

Tool Users: The most important roll for any player running an alien is whether her persona is a tool user, or not. There is a percentage chance that the alien species will be tool users equal to the alien's INT. Thus an alien with a 13 INT has a 13% chance of being a tool user. Aliens that are tool users are allowed one roll on the TOY system, chapter 41, to get one device which is adapted for their own use.

Tool users can easily use artifacts that are designed for them, and can adapt themselves to use artifacts that are designed for humanoids. An artifact would be considered alien to an alien if there were a drastic difference in size; if the alien had no digits that could obviously operate the artifact; or if the referee were in a petty mood. The chance of this happening can be determined by rolling Sphincter dice, as described in chapter 19, Special Rolls.

Adapting to a Tool: When a tool user encounters an artifact that it cannot manipulate easily then it must try to adapt to the artifact. This means that the alien will use its tongue instead of a finger, or a hoof instead of a hand. The chance of successfully adapting to an artifact is equal to twice the alien's DEX. If it cannot adapt itself then it CANNOT use the artifact. Thus a tool using alien with a 10 DEX that encounters an alien (to it) artifact has a 20% chance of manipulating the device. If it fails then the alien CANNOT use the device. Biologists can aid the alien in adapting to its device, and mechanics can adapt the device itself.

Non-Tool Users: According to the dice most aliens will be non-tool users. The referee may automatically allow alien personas to be tool users to increase their involvement in the game. The referee should not depend solely on the dice rolling of her players. If a player comes up with an ingenious idea about how her persona can manipulate a particular artifact then the persona should be able to do so. Role-playing should over come dice rolling.

Trying anyway: Non-tool users must make an INT check against percentile dice to see if they



can even begin to comprehend a particular artifact. Non-tool users must make this check for every artifact that they encounter. Even if they succeed in identifying an item as useful, then they must adapt themselves to the artifact as a tool using alien would have to adapt to a foreign artifact. It will be rare indeed when a non-tool using alien will be able to deploy a technological device.

Alien education: Alien education implies that the alien has developed a curiosity about the natural world that far exceeds the animal awareness that most creatures have. If an alien is a tool user then there is a percentage chance equal to her INT attribute that she will be educated. This roll is required by all alien personas whether they are run by a referee, or a player. It is not recommended that referees allow player run aliens to automatically be educated, as is done with tool users.

Educated aliens can pursue persona classes like anthropomorph personas. All requirements and abilities for these classes are the same as listed in chapter 8, Classes. Once an alien adopts a persona class it may become a very dangerous alien indeed. The referee may invoke class restrictions she feels are necessary to ensure a game balance. Could you imagine trying to fairly referee an invisible, 900 kg, flying spie? Just this one sentence may keep the referee from allowing alien personas from ever pursuing classes.

(14) Alien Name

Giving a name to an alien is different from naming any other character because the player must name an entire race as well as itself. A few pointers on naming aliens are listed below:

1) The denizens of unexplored planets on which there is no intelligent life do not have names, and it is up to the players to christen them. Until that time the ref must assign serial numbers for identification of the creatures.

2) Most denizens have more than one name. They have a scientific name that identifies the creature's kingdom, phylum, etc, and another "pet-name". Humans go by the "pet-name" of "man", but also have the more specific classification of: Animalia, Chordata, Vertebrata, Mammalia, Primates, Hominidae, Homo, Sapiens.

3) The alien's mode of communication (decided by the ref) may not allow for a regular name. If the creature uses binary clicks, body shapes, pheromones, or something even stranger to communicate, this has to be taken into account when naming it.

15) Alien Experience

What do aliens earn EXPS for? Aliens can earn EXPS for role-playing, just like any other persona, and they also have specific alien ways of earning EXPS. If an alien is a civilized tool user, and has a persona class then it will increase in levels according to that class's experience point table. Aliens earn full experience for combat when fighting with their natural abilities. When using weapons they only recieve 25% EXPS. Aliens that are pursuing a persona class will earn experience points according to that class.

The benefits of alien experience levels are quite simple. Their natural combat abilities will improve, which is reflected in an increase in their natural combat table. Type A attacks will add PSTR each level increase, type B attacks will add INT per level increase, and type C attacks will add DEX per level increase. Thus an alien with a 10 DEX, 15 INT, and a 20 PSTR would add 10 to her type C attacks, 15 to her type B attacks, and 20 to her type A attacks. Remember that not all aliens have all natural attack types.

In a more cerebral vien aliens can increase their likelyhood of becoming tool users, becoming civilized, or adopting a class. Non-tool using aliens can add their EXPS level to their roll when trying to comprehend and employ tools. They can also re-roll their chance to become a tool user (adjusted INT) each time they increase an EXPS level. Tool using aliens can also add their EXPS level to their DEX roll when attempting to adapt to foreign tools. Each new experience level that a tool using alien achieves indicates another chance (adjusted INT) to become educated, and pursue a persona class. If an alien suddenly becomes educated she will begin her new class as a first level with 0 EXPS.

Figure 6.26: Alien Experience Table

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-2000	1
2001-4000	2
4001-8000	3
8001-18000	4
18001-35000	5
35001-70000	6
70001-125000	7
125001-250000	8
250001-500000	9
500001-800000	10
310000 EXPS needed per level above 10th.	

EXP
ALIEN RECORD SHEET

ALIEN NAME: **CORPORATION:**

AWE	CHA	CON	DEX	INT	MSTR	PSTR
Awareness	Charisma	Constitution	Dexterity	Intelligence	Mental Strength	Physical Strength

I

WA:

Race Age(years) Hite(cms) Wate(kgs) Class/LVL EXPS

HEAD: _____
TORSO: _____
ARMS: _____
LEGS: _____

COMBAT TABLE

	BP	BNP	MR	DA
A				
B				
C				
	Bonus Proficient	Bonus Non-Proficient	Maximum Roll	Damage Adjuster

Hit Points

Maximum

Total

MOVE (H/U):	ARMOUR RATING	NUMBER OF ATTACKS (@ unit)	ATTACK TYPE	DAMAGE @ ATTACK
Land:				
Air:				
Water:				

DATA & INFORMATION

Chapter 7
Mutations

Surviving mutations, in our earthly biology, is a very rare occurrence indeed. In the mundane world most mutations are lethal changes in cells which can produce cancers, or arrest the development of the organism altogether. However, in the radioactive, poisoned science fantasy world of **EXP**, mutations are 100000 times more frequent, and infinitely stranger.

The mutations that invade the alleles of personas are far more exotic than any which exist today. Commonly, mutations are caused by the flip, or omission, of a section in an organism's DNA—usually rendering the organism unnoticeably different, or dead. None of **EXP**'s mutations are so realistic (read boring). Seemingly cancerous lumps, and bumps, can develop into complex organ systems that will fulfill some unimaginable purpose. Such mutations are described in chapter 58, Mental Mutations, and chapter 59, Physical Mutations. Even though the mutations represent biological systems as complex as a complete organism they are quite easy to play in the game.

For historical purposes the mutations have arisen from the effects of radiation, poisons, or ultra rare gene combinations. The acquisition of the mutations can generally be accredited to the parents (or the cloning tank) of the mutated offspring. Since we are dealing with the world of science fantasy it is not impossible for mutations to have arisen from post-gamete cells.

It is impossible for a referee to scientifically explain a mental mutation like *ESP* (#14) to a geneticist, but the pseudo-scientific justification should be reasonably plausible. The referee must be prepared to black box the biological aspects of her campaign as well as the technological ones. Lastly, not all mutations are beneficial to the persona. Many mutations are simply defects, and the player is going to have to deal with this burden on her persona continually.



Robots and Aliens

The *Mental* and *Physical Mutation* tables are not used solely to determine the genetic anomalies of mutant players. Aliens, robots, and computers can be referred to these tables to determine extra special abilities that may not actually be considered mutations. Rolls on the mutation lists can be made for randomly generated aliens to determine the natural abilities of an entire alien race. These alien mutations may not be mutations at all, but evolved parts of their physiology. Robot personas can use the mutation chapters to determine the

effects of special peripherals. Such robot peripherals are actually mechanical devices that imitate the mutation rolled, or are regular peripherals running amok, but they are not necessarily biological anomalies. Only anthropomroph personas use the mutation chapters strictly for mutations.

Acquiring Mutations

The susceptibility of personas to mutation is affected partly by race, and partly by choice. The races have varying frequencies of mutation that are based both on elements of popular fiction, and the ability of the species to adapt to mutation. The chance of mutation can be determined on the *Mutation Frequency* table. The players also have some input as to whether they mutate, or not. If the player desires to mutate, she can double her persona's chance of mutation. It is assumed that the parents of this persona were exposed to high levels of mutagens, or the persona herself was exposed to situations that increased the chance of mutations (e.g., she went skinny dipping in the glowing creek).

Generating Mutations

All players rolling up a persona must check against the *Mutation Frequency* table to see if they have mutated or not. The player checks against the frequency of both mental and physical mutations, as listed by her persona race.

A Humanoid persona would have an 18% chance of mental mutations, and a 23% chance of physical mutations. If she were to roll less than 23 on deci dice when checking for physical mutations she would be due for 1-4 physical mutations. The physical mutations are determined in chapter 59, Physical Mutations. In that chapter the exact mutation is determined and all important information about it is recorded. The same procedure is repeated for mental mutations.

Defects do not count as mutations. So if a persona is supposed to get 3 physical mutations, and the first one is No Resistance to Disease (physical mutation #31), she would have 3 more mutations to be rolled. Mutations that are considered defects are listed as such in their respective chapters.

Table 7.1: Mutation Frequency

Race	Mental Freq.	Mental Degree	Physical Freq.	Physical Degree
Aquarian	10	1-3c	3	1
Avarian	7	1b	5	1
Canine	18	1b	22	1-5a
Equine	8	1-2	8	1-2
Feline	10	1-3c	10	1-2
Florian	7	1-3	7	1-3
Humanoid	23	1-6	25	1-6
Insectoid	23	1-6	—	—
PSH	3	1	—	—
Reptilian	8	1-2	8	1-2
Rodentia	6	1-3	11	1-3c
Ursidae	13	1-2	15	1-3
Aliens	MSTR	1b	CON	1b
Robots	2	1	1	1

a Rolled on a d6-1; where 0 & 1 = 1
b One mutation for every continual roll under frequency
c Rolled on a d6. Where 1 = 1; 2, 3, 4 & 5 = 2; and 6

Mutation Parameters

Each mutation whether mental or physical has certain properties that describe what it is, and how it affects play. The parameters of each mutation are explained in the following paragraphs. Not only should the basic feature of a mutation be recorded, but the mutation number, and the page number where the mutation can be found.

Name: The name of a mutation can give an inkling to what the mutation does, or simply describe it outright. The title can be deceptive, so the mutation should be read in detail, and the mutation number recorded on the persona record sheet.

Range: The range of a mutation indicates how far away the effects of the mutation can be delivered to a target. Any exception to this meaning of mutation range will be specified in the mutation. Many mutations can affect targets hexes away, others require contact, and some have a radius of effect. Ranges are not devoted solely to offensive mutations, and even defensive mutations may be critically affected by range limits.

The intensity of a mutation cannot be regulated, and neither can its area of effect. Only a single target mutation can be adjusted for different ranges from the persona. Mutations that have areas of effect will indiscriminately affect all targets in this area of effect.

Nothing can stop a mutation which travels directly from one mind to another. E.S.P., gyrokinesis, telekinesis can pass through any barrier if the mutant has positive proof that the target exists. Those mutations which manipulate the environment to attack a target, such as mind blast, or launchable quills are subject to all terrain effects.

Distance: The most common is the ranged mutation. Ranged mutations can be directed at any target within range of the mutant. The range is determined by the MSTR, and EXPS level of the attacker. For example, a mutation may have a range of 1 hex @ MSTR. This means 1 hex per point of mental strength, and with a 12 MSTR a mutant could use this mutation 12 hexes away. There are variations to this common range format. 2 hexes per MSTR would yield a 24 hex range with a 12 MSTR. 1 hex per 4 MSTR would yield a 3 hex range with a 12 MSTR. If the range includes MSTR and experience level then the two are added. A 4th level persona with a 12 MSTR would have a 16 hex range with a mutation that was listed as 1 hex per (MSTR + level).

Area of Effect: Radius ranges are spherical, and use the location hex of the persona for the center. Thus a mutation with a 10 hex radius of effect would contain all targets within 10 hexes including above and below the mutant. The area of effect would include everything in the 20 hex diameter sphere.

Touch: Touch mutations are self explanatory. The mutant must touch the target to inflict the effects of the mutation whether benevolent, or not. The touch must be hand, paw, or claw to skin, fur, or scales. Some touch mutations can be conducted through material that would be considered conductive, like metal. Some touch mutations may still be effective if derma to derma contact cannot be made. They may be mutations with very short ranges, several millimeters, and a successful to hit roll may be all that is needed to get within range.

Duration: The duration of a mutation almost always refers to the length of time that the mutation effects last. If the mutant has telekinetic flight she can stay aloft for the duration of the mutation. Mutations usually require complete concentration on the part of the mutant. If a mutation obviously does not require complete concentration on the part of the mutant then then concentration need not be maintained. Mutations that are always in constant use do not require a significant portion of the mutant's mental, or physical, resources.

MSTR Dependant: Mutations usually last so many units per point of MSTR, and they may also be affected by the persona's experience level. If a mutation has a duration of 1 unit per MSTR, then the mutant can make the mutation last 12 units if she has a 12 MSTR. Other variations of duration exist and they all function identically to the range variations discussed earlier, except that units replace hexes.

Mutations with random durations are determined each time the mutation is employed. Such mutations indicate that the mutant has set in motion physical effects which she has no control over.

Until Saves: If the duration is 'until saves' the mutant may continue the attack, until the victim saves, or is dead.

Permanent: When the duration says 'permanent' it indicates that the effects won't dissipate on their own accord. For instance, permanent healing of HPS means that they will not disappear after a certain number of units, but it does not mean that the mutant has a cache of indestructible HPS.

Constant: Most mutations can be stopped whenever the mutant sees fit. Except those mutations that have a 'constant' duration, or an 'until dead' duration. These mutations will function until the mutant is dead, or has the mutation excised.

Frequency: The frequency of the mutation indicates how often it can be used during a daily cycle of the mutant. The frequency assumes a 24 hour day (see chapter 12, Time and Movement) where the mutant sleeps around 8 hours each day. If the mutant is in a situation where there is no planetary rotation, or one where there is no 24 hour cycle, a complete rest (8 hours sleep) will be equivalent to the completion of a daily cycle.

Most mutations can be used several times a day depending on the MSTR and level of the mutant. The more powerful the mutation, the less frequently it can be used each day. If the frequency of a mutation is 1 per 4 MSTR, a persona with a 12 MSTR could employ it 3 times each day, and would have to rest 8 hours before using it again. For this type of mutation rest for the brain is essential. Unless otherwise stated, a mutation can be used at least once a day. This is includes mutations which have very low frequencies e.g., 1 per 13 MSTR. This mutation could be used once a day even by a persona with a MSTR of 6.

Mutations which can be used more frequently are labelled 'as needed', and just as the title states, the mutant can use such a mutation as it is needed. 'Constant' mutations are usually defects, and they constantly project their effects regardless of what the mutant is doing. Constant mutations always function whether the mutant is asleep or awake.

Mutations cannot be stored. A mutant cannot use a mutation more often one day than the next because she saved some uses from the previous day. The mutant may use the mutation no more than the frequency states, and each use is cumulative until she rests. Mutations cannot be compounded to double an effect. The mutant can only use 1 mutation at a time, unless one of the mutations has a 'constant' or 'as needed' frequency.

The mutant has used a mutation whenever the effects start. Even if the target saves, and the mutation has no effect, the mutation has been used. If the mutant voluntarily stops the mutation then it has been used. If the mutant switches from one target to another, this will usually indicate another use.

General Bonus: The general bonus listing of the mutation could contain several arcane bits of information that are related to the use of the mutation in unexpected circumstances. If the mutation is particularly dangerous then there may be a combat ratio (CR) adjustment listed, see chapter 11, Referee Personas. The mutation may indicate a bonus for particular PT rolls, attribute rolls, or negotiation rolls. Any simple affect that the mutation has on the dice rolling of the persona should be included beside the general bonus listing.

Saves

Whenever a persona is subject to a psionic attack she may save versus a psionic attack. If a persona's body is threatened by poisons she may save versus poison. Saves represent the struggle of the body against intrusions of any sort. Saves are detailed in chapter 16, Special Rolls. A successful save will almost always negate an attack. If the mutation still has effects when the target saves, it will be stated in the description of the mutation.

Often inorganic objects will be subject to mutation attacks. When artifacts are about to be controlled by some mutation they will have an effective MSTR of zero. If inorganic artifacts are allowed some form of defence this will be because of weaknesses in the mutation, and not strengths in the artifact. Inorganic objects that are given mental defence will get an effective MSTR of 0 to 9 rolled on a d10. Objects being held by a persona will have a MSTR equal to the persona when saving.

General Queries

In general there are many questions which will arise when mutations are introduced into play. Some of the more obvious problems are included here, but many others are certain to arise during the heat of play. When this occurs the referee is

expected to ad-lib, and the complications covered here should give her a decent frame work with which to improvise.

Using Mutations: A persona must be conscious for a mutation to be used. Unless a contradiction to this is stated in the description of the mutation, this rule will stand. Like all rules in **EXP** there are exceptions. A mutation with a constant frequency will be functioning whether mutant wants it to, or not. Any degree of consciousness is sufficient for the mutant to use her mutation. Mutations may still be activated even if she is: stunned, dying, nauseous, falling, or worse.

Restraints: Just because the mutant can use her mutation doesn't mean that it will work. Physical restraint can render physical mutations useless, whereas complex interference patterns can deter mental mutations.

Detecting Mutations: The detection of a mutation attack is virtually impossible, unless the attack has some obvious physical characteristics. Even if the target saves, the attack may not be detected. Saves versus psionic attack involve little, or no, mental thought, and the brain acts subconsciously to defend against the intrusion.

New Mutations

New mutations can be acquired by the personas under the rarest of circumstances during the process of a campaign. Most mutants will never have any more than those generated with the persona. New mutations can be acquired though pharmaceuticals, exposure to mutagenic compounds, or by even more devious methods thought up by the referee.

Radiation and Mutations: Each time a persona takes damage from a radiation attack there is a chance that she will acquire a new mutation. Radiation damage is discussed in detail in chapter 16, Special Rolls. A persona that fails to save versus radiation poisoning will take a d4 in damage per level of radiation intensity. The referee can check against total radiation damage with either a deci-dice or a kilodice roll to determine if the exposure has mutagenic potential. If it does then the player can roll against her persona race's chance of mutation, and if a mutation is indicated then she will refer to the appropriate chapters.

If a canine persona were exposed to 38 HPs of radiation damage the referee may roll percentile dice to determine if the exposure was mutagenic or not. A roll of 38, or less, will indicate that the radiation will have a chance to mutate the persona whether she wants to or not. The persona is a canine so the player has to refer to the Table 7.1 to determine if her persona mutates or not. There is an 18 percent chance of acquiring a new mental mutation, and a 22 percent chance of acquiring a new physical mutation. If a new mutation is indicated then the mutant will only acquire 1 additional mutation of either type, regardless of whether it is a defect, or not.

I

Chapter 8
Classes

The character class represents the persona's profession, or career. Up to this point the character is nothing more than a list of attributes, a race, and maybe a few mutations. The class should give the persona certain standards to attain, a reason to be, or even an all encompassing outlook on life. This is obviously moderated by the wishes of the player running the persona, but the class will shape the goals that she chooses for her persona.

Nature of Classes

As implied in the opening paragraph, the class isn't just the profession of persona, but it is an attitude too. In actuality it may be more of an attitude than a profession. Choosing a class in **EXP** does not mean that the persona has had any special training. There are no diplomas, or degrees, granted by professional institutions. The majority of the information, or skills, that the player can utilize have been self-learned by her persona. This lack of unified training has left many gaps in their knowledge which accounts for the persona's frequent inability to properly perform some tasks (and botch others all together).

Even in the face of what appears to be continual failure a persona will still pursue her class because the class represents innate abilities, desire, and personal interest. A mechanic persona doesn't doesn't have an anti-grav maintenance diploma, but a mechanic persona does have a keen sense for interpreting the physical world— a miss-fix-it, or a bicycle repair person better fits the description. A biologist wouldn't have a B.Sc. in clone development, but more likely would be a gardener, a farmer, or an environmentalist. All of the classes are designed in this fashion. The personas have a natural aptitude, which is backed up by sparse bits of disorganized information. More detailed descriptions of each class are given in this chapter.

Classes and Role-Playing

The effect that the choice of class has on the persona should be quite obvious. The character should be played with an obsession, or at least a keen interest, in her area of study. **Veterinarians** should show compassion, and a desire to heal; **biologists** should show respect, if not awe, for the natural world; and no **anti-knite** should pass up the opportunity to increase the Universe's level of entropy.

One general rule to observe, is that the more skills that the class has, the more the class must be reflected in role-playing. **Nothings** have no abilities, and are free to act in any manner they wish; while knites, laden with powerful skills, must follow a stringent code of honor.

Players that do not role-play their class properly—villainous veterinarians, and altruistic anti-knites— are going to be punished. At first they are merely punishing their personas, cutting them out of class experience, and maybe even role-playing experience. If the transgressions continue, or are particularly severe, the referee may take other forms of punitive action. Veterinarians that have murdered other expedition members may find their skills ineffective on those who know the truth. **Nomads** that insist on living in the lap of decadent luxury, without at least complaining, may find some of their survival skills very rusty.

Specificity of Classes

Why are there classes? A class is a gross generalization of someone that is able to perform a group of procedures. **EXP** could very easily have 42 separate classes that have very specific skills and knowledge— such as street cleaners, ammo testers, etc., etc. There are a much smaller number of classes in **EXP**. Each class represents a collection of abilities that are considered similar enough that they can be performed by one persona.

These general categories are represented by the 8 separate classes. If the referee prefers many separate classes, or professions, more specialized sub-classes can easily be evolved from the general class. The newly spawned classes could even continue using the main class's **Performance Table.**

Robot and Alien Classes

Robots and **aliens** are also classes, but they are very different from those listed in this chapter. Robots and aliens are also classified as different races. In fact the two entities can be called **class-races** because these parameters are often inseparable. If a player wishes to run either of these peculiar classes she must say so before she rolls any attributes, chooses a race, or rolls for mutations. This preference must be stated early because robots and aliens have radically different procedures for generating their attributes. The finished products are far afield of the conservative, bipedal canines and florians that are described in previous chapters.

There is also little freedom of choice with aliens and robot classes because the dice determine every aspect of their nature, description and purpose. Beginning players probably should not attempt to play aliens or robots. It is difficult enough to relate to strange new humanoids, let alone non-articulated boxes and blobs of protoplasm. For much more information about Robots and Aliens see chapters 5 and 6.

Selecting a Class

The initial dice rolling that determines the persona's attributes also determines the persona's class. The persona must pass attribute requirements before she can be a particular class. These requirements exist to ensure variety amongst the personas, and to ensure that classes maintain certain requirements. For instance, certain classes have attribute requirements that must be met: trustworthy veterinarians must be charismatic; **spies** must be dextrous; **mercenaries** must have ample hit points; etc.

The referee must be absolutely ruthless when applying the *Class Requirements Table.*, Table 8.1. Absolutely no fudging should be allowed. Personas that lose attribute points during the generation of mutations, or the choosing of a race and consequently cannot pursue a class that they desire are out of luck. Players are welcome to plan ahead, and choose a race that will allow them to be a certain class, but once the path has been chosen there should be no turning back. Personas cannot be ejected from a class for attribute alterations that occur during the play of the campaign. For instance a veterinarian would not have to retire from that class because her CHA was reduced due to a facial scar. **Knites are an exception to this rule.**

The persona's attribute must have a value equal to or greater than the one listed on the Class Requirement Table. A nomad must have an AWE of 10 or higher— absolutely no exceptions. A biologist must have a combined AWE and INT greater than or equal to 18. Thus a persona with an INT of 4, and an AWE of 14 can be a biologist, because the combined value equals 18. Once a player has determined which classes she is eligible for she may choose freely from any of them.

Table 8.1: Class Requirements

PERSONA CLASS	ATTRIBUTE REQUIREMENTS
Biologist	INT+AWE 18
Knite*	MSTR 18; DEX 15; HPS 25; one level
Mechanic	INT 13
Mercenary	PSTR +DEX +CON 22; HPS 40
Nomad	INT 5; AWE 10; CON 6; HPS 20
Nothing	all attribute above 0, except CHA
Spie	total of attributes 92; HPS 30
Veterinarian	CHA 12; INT +DEX 16

*requires referee's permission also

Here is an example using a persona with the following attributes: AWE 6, CHA 15, CON 17, DEX 9, INT 14, MSTR 12, PSTR 6, and HPS 42. This persona could be any of the following: biologist, mechanic, mercenary, nothing, or veterinarian. The player has a wide selection of classes to choose from. It is recommended that the player read over all of possible classes in this chapter before choosing.

Example Use of Class Requirements Table

PERSONA CLASS	ATTRIBUTE REQUIREMENTS	
Biologist	INT+AWE 18	OK
~~Knite*~~	~~MSTR 18; DEX 15; HPS 25;~~ one level	
Mechanic	INT 13	OK
Mercenary	PSTR +DEX +CON 22; HPS 40	OK
~~Nomad~~	~~INT 5; AWE 10; CON 6; HPS 20~~	
Nothing	all attribute above 0, except CHA	OK
~~Spie~~	~~total of attributes 92; HPS 30~~	
Veterinarian	CHA 12; INT +DEX 16	OK

*requires referee's permission also

Multi-Class Personas

There are often conditions where a player wishes her persona to have more than one persona class. The conditions for this could arise from the player getting tired of certain persona class, the expedition needing a certain class, or the persona wanting to get more involved in the game. For instance a **mercenary mechanic** could be effective in combat, and also engage in artifact identification without risking the entire expedition. Multi-class personas are not recommended for inexperienced players. They are challenging to run from a persona, and a refereeing standpoint.

Combined: A player can combine persona classes from the beginning, advancing in each class at the same rate. This can only be done with two classes at time. If this is the case she will function equally with either class. For instance she could function on both the veterinarian and the mercenary performance tables; earning experience for maneuvers on both performance tables. The amount of experience required for each new level will will be equal to the sum of both classes plus 10% of the total. **So a combined knite-biologist would need 4675 EXPS for 2nd level.** A combined class will generate toys as if both classes were present. Lastly nothings can be combined with no classes, and knites cannot be combined with anti-knites. The referee is completely in control of what combined classes are appropriate for her milieu.

Switching: Switching classes is different from combined classes in that the persona neglects one class and begins to start fresh with another. For example, a mercenary may suddenly get a conscience and devote the rest of her life to the study of biology. If she has the appropriate attributes this switch can be done at any time. The new class is started a zero EXPS and advances in levels and EXPS acquisition as the new class. The mercenary skills can still be called on, but no experience will be earned for their use. If the persona does not have the attributes to make a desired switch she must pursue it through the nothing class.



Biologist

Biologists are personas which have inherent interest and skill in understanding nature. They are best described as self-educated naturalists that still have a lot to learn. Their personal interests could range from fungi to DNA; such knowledge may, or may not, have any practical field application. Biologists come through for the expedition when it is exploring unknown terrain. Such terrain may harbor unknown aliens, or hazardous plant life. The biologist is essential if the group expects to determine if these encounters are benign, dangerous, or worse.

Some biologists from popular film are Dr. Stane (The Gods Must Be Crazy) and Cal (Omnivore).

Biologists are free to act how they wish, but they are expected to at least try to identify a new specimen before vaporizing it. Specimens may be most easily observed when they are dead, but then subtle behavioral traits are impossible to detect. Thus there are definite advantages for the biologist to identify, and observe specimens before a hostile encounter takes place. In this regard the biologist may find herself directly opposed to the goals of other expedition members.

The haphazard nature of biological knowledge acquisition has already been alluded to. Their information sources are usually things like: gardening books, environmentalist leaflets, nature shows, sagely advisors, and maybe even the odd biology lecture.

Biologist Skills: The persona is expected to have had some special interests within the field of biology itself. These areas of interest are determined randomly on *Table 8.2, Biologist Skill*. **The player may make one roll for every four points of** INT. The biologist will also receive one additional roll for each new **experience level** attained. The rolls indicate areas of special interest which increase the biologist's chances when attempting to apply her skills. The persona can attempt to do any biological type of activity that is within, or not within, her areas of special interest. The special skills indicate that she will be more likely to succeed if what she is doing falls under one of her areas of special interest.

A player running a biologist with a 12 INT would get three rolls on the *Biologist Skill* table. Because the table is from 01 to 00 she should roll deci-dice. Her rolls are 11, 20 and 97. This indicates 3 major concentrations: **plants**, **animals**, and **camouflage**. Plants and animals also have specific concentrations and both require addition deci-dice rolls. She rolled 77 for plants which means she has a specific concentration of plants, **mosses**. A roll of 46 for animals would mean that she has further specialization in animals, **worms**.

The skills help her when she rolls on the **Biologist Performance Table (PT)**. Each concentration reduces the **degree of difficulty (DD)** by two. If the biologist were trying to identify

an animal that was a worm-type alien, she would receive -4DD (the higher the DD the more difficult the roll). If the worm also specialized in camouflage she would receive another -2DD reduction (because her other major concentration is camouflage), bringing her total bonus to -6DD increasing her chance of success greatly. For a much more detailed description of how performance tables (PTs) work refer to chapter 14, Performance Tables.

This particular camouflaging worm may be causing problems for the expedition because it keeps burrowing into the landing pads of their all terrain aircars. The worms are uncommon (DD6), but the ref feels that this is more rare a worm: she adjusts it upwards. The final DD is 7. Because of the player's special interests the DD is reduced to 1. Being first level she would have to roll 90, or higher, on percentile dice in order to successfully identify the alien. Since she also has an up to date note-book on worms, she can add her AWE to the deci-dice roll. After identifying the irritating worm she can determine why it burrows into the landing

Table 8.2: Biologist Skills

DIE ROLL	GENERAL STUDY				
01-30	**Biological Studies**	**31-60**	**Research Studies**	**61-90**	**Cultural Studies**
Die Roll	Biological Specialization	Die Roll	Research Specialization	Die Roll	Cultural Specialization
01-20	Animals (anenomes to vertbrates)	01-06	Aging	01-08	Community systems
		07-12	Alien theory	09-16	Economic structure
21-22	Annelids (worms)	13-23	Cloning	17-24	Family structure
23-24	Camouflage	24-29	Cryogenics	25-32	Languages, organic
25-26	Carnivores (meat eaters)	30-35	Cybernetics	33-40	Languages, written
27-36	Fungi	36-41	Eugenics	41-48	Mathematical development
37-38	Herbivores (plant eaters)	42-47	Genetics	49-57	Military structure
39-40	Herd animals	48-53	Immunology	58-69	Politics
41-60	Insects	54-59	Inorganics/robotics	70-81	Religion
61-62	Intelligence	60-65	Mutation/evolution	82-91	Social structure (sociology)
63-64	Monera (algae,bacteria, viruses)	66-71	Paleontology	92-98	Technological development
		72-82	Physiology	99-00	Other
65-66	Omnivores	83-88	Toxins	91-96	Roll Again (Extra)
67-87	Plants	89-94	Xenophysiology	97-00	Choose
88-89	Poisons/toxic	95-00	Other/Choose		
90-91	Predators/prey				
92-93	Protista (paramecium, etc.)				
94	Psionics				
95	Robotic systems				
96-97	Scavengers/detritovores				
98-99	Viruses				
00	Other/Choose				

First roll to determine study stream (biological, reasearch, cultural); then roll to determine specialization. Initially 1 roll per INT/3, then 1 roll per new level.

pads, and possibly even a way to prevent it.

Biologist Exps: The benefits of increasing experience levels are: more skills, increased performance, and marginally better combat skills. Biologists earn experience points for successfully completing PT rolls (90 Exps per DD). Only 20% of combat experience can go towards a biologist's experience point total. If a biologist is consistently destroying potential specimens, the ref may forfeit combat experience altogether. For more information about awarding experience see chapter 15, Experience.

Table 8.3: Biologist Exps

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-1250	1
1251-2500	2
2501-5000	3
5001-10000	4
10001-20000	5
20001-42500	6
42501-70000	7
70001-110000	8
110001-220000	9
220001-450000	10
230000 Exps per level beyond 10th	



Knite

Knites are interesting hybrids of the mystical and the military. They are more likely to draw on their mental strength than their physical strength. Knites are cerebral warriors that are as likely to overpower some one with their will, as with raw force. They have no adverse disposition towards using technological weapons, but knites feel most comfortable wielding their trademark energy sword.

Most referees will want to create their own mythos around such a powerful class, but a few standard guidelines are laid down here.

Mythos of the Knite: The class is divided into two separate sects that are as different as dark and light. Members of the sect which supports

compassion, goodwill, honesty, and humanity are referred to as Knites. Knites are essentially good, and will battle against injustice, intolerance and enslavement at every possible opportunity. Members of the opposite sect are called **Anti-knites**. They are anti everything. Anti-knites are the destined enemies of goodwill, humanity, and organized civilization. They are not interested in the long term collection of power per se, but with the spreading of chaos. Although their goal and purpose is the destruction of organization and the proliferation of entropy, this is not necessarily reflected in their personality. For instance, a very calculated and extravagant plan may be the best way for an Anti-knite to topple a benevolent government. Anti-knites are not played as malicious, off-the-wall, anarchists, but as extraordinarily systematic, ruthless and calculating nihilists.

It is not uncommon for Knites (good sect) to go off on "damn fool quests". On the other hand Anti-knites will not answer to anyone less powerful than themselves. All players in the expedition should realize that either sect can hinder the group's objectives. Knites cannot look away and ignore injustices carried out by other personas, and Anti-knites would be expected to systematically murder any persona which hinders their personal objectives. Some form of combat is the only possible outcome of a Knite/Anti-knite encounter.

Some knites from popular fiction are Yoda, Luke, Darth, Obi, and Lea (*Star Wars*), Poul Anderson's warriors from Kirlian Quest, and Paul Atreides (Dune).

Class Requirements: As you may have already determined, the knite class is a complex, and powerful, class to run. It is very difficult for a persona to become a knite, and the class is very rare. Not only must the persona have the required attributes, but she must also survive a trial period of an undetermined length of time. Any persona who has the requisite attributes may announce her desire to pursue knitehood. This intent may be secretly communicated to the referee, or announced to the entire expedition.

Before a persona can become a knite, she must survive **one experience level** in a trial class. The trial class may only be one of the following: **mercenary, nomad** or **nothing**. This trial period is one of the requirements that makes the knite class so radically different from other classes. It is the persona's actions during this trial period that determine whether she will become a Knite or an Anti-knite. Once potential knites have completed this level, they may be approached by a knite from either sect trying to enlist them.

Regardless of how much experience the persona attains during the trial level, upon becoming a knite, it is all lost. The persona will always begin knitehood as a first level knite (with no experience), and preceding that she may never progress beyond first level in her trial class.

Practising knites do not have to be present for a player to be initiated. Independently carrying out a particularly despicable, or gallant act may be sufficient to ascend the persona to knitehood. Slaughtering an unsuspecting expedition member, or killing a Knite, is usually good (bad) enough to become an Anti-knite. Attempting to rescue other personas, even evil ones, at extreme personal risk may be sufficient to become a Knite. Often, if the persona has acted accordingly during her trial period she will be accepted into knitehood without her knowledge. Thus a persona may be a knite without even knowing it. This can lead ascendant knites to be constantly be testing their potential knite abilities. The consequences of this peculiar behaviour can often be nothing less than hilarious.

Class Conduct: If members of either sect fail to act according to their doctrine, they will initially fail to collect experience, suffering the same experience penalties that other classes would. If the transgression is particularly bad, or just plain persistent, the knite may be expunged from the class. Any knite to whom this happens will lose all her knite abilities, and revert to first level of their trial class, losing all experience in the process. If a player feels that they are in danger of losing control of their persona, and are about to commit some act that may cost them their knitehood, they may voluntarily withdraw. Any persona that voluntarily

withdraws from being a knite will revert to their trial class, but will not lose any experience points.

Usually knites that are having problems functioning within the strict guidelines of their class will meet with other problems long before they have the opportunity to withdraw. Anti-knites are always prowling around in the dark waiting for Knites to falter. If a Knite is having problems being good, it is almost certain that an Anti-knite will have a cunning plan waiting to trick the Knite over to the dark sect. Consequences for Anti-knites are much more severe. If they begin to falter they will almost certainly be exterminated in the ruthless plans of other Anti-knites, or even their own underlings.

A knite must also keep her attributes up in order to maintain the persona class. In other classes the dropping of essential attributes will only affect their performance in the class, and will not result in their ejection from the class. If a knite's MSTR should drop below 18 for any reason she will cease to be a knite while her MSTR is decreased. During this time she will function as a persona in her trial class. If the status of 18 MSTR is recovered the knite will continue to function as a knite.

Switching Sects: Voluntarily switching from one sect to another is a one-way street. The switch for Knites is made easily enough, they can either say "yes", or they can fall for some cunning trick devised by the forces of darkness. Knites (good sect) can become Anti-knites through either route mentioned. Anti-knites can only become Knites if they elect to do so on their deathbed, thus an Anti-knite persona will never get the opportunity to be a Knite. The Anti-knite's only other option is to withdraw from the class, resulting in the same complications described earlier.

Once a psionically aware persona is caught up in the kirlian mystery, it is difficult for them to completely escape the effects of knitehood and will find they will often be approached by other knites for indoctrination or other purposes.

Any persona that dies while in the knite class cannot be revived, she is irretrievably dead to any form of technological, or biological, method of restoration. Dead Knites are required as ethereal, immaterial entities which will occasionally aid the ever-endangered forces of good. Anti-knites have an irrevocable, and eternal date with hell.

Knite Abilities: The basis of the knites' powers are psionic manipulations of the **kirlian auras** that surround all objects in the **EXP** universe. Kirlian auras are not described in too much detail here, because the referee may wish to base knites' powers on some other type of universal, undetectable force. The kirlian auras are bio-luminescent fields that when read by knites can yield essential information about the object or creature that it surrounds. The kirlian auras of sentient beings are constantly changing depending on their mood, intent and general outlook on life. The more powerful a knite the better they can interpret the auras, and the better they can manipulate them.

All of a knite's skills are present at first level, but their degree of clarity and refinement (which determines their chance of success), depends on the experience level of the persona. Although a knite may attempt to use any ability at any time, the chance for success depends on the knite's level, and the difficulty of the kirlian ability.

The player must successfully roll on the **Knite Performance Table** before her knite is able to manipulate the kirlian auras. Knites (generic) should be present to do their work. Kirlian auras are almost useless to a knite once they have been photographed, recorded, or transmitted.

Kirlian sight (automatic): The glowing, flickering kirlian auras allow the knite to maneuver easily in darkness. They can "see" in the dark. This night sight has a range of 1 hex per point of MSTR, plus one additional hex per experience level. Knites (generic) can use their kirlian sight to detect hidden objects more easily. When searching with their kirlian sight, knites can use their MSTR instead of their AWE to try and find hidden objects. This is because different types of wood, or layers of paint show up clearly to the kirlian detecting knite.

Mimic (d4 DD): A knite can perfectly reproduce a sound so well that it will even carry the emotional aspects it carried. The sound must be repeated immediately upon being heard, and

whether the knite is successful in doing this depends on her PT roll. A second successful PT roll will allow her to permanently memorize the sound. Before the recorded sound can be correctly reproduced after memorization, the knite must make another PT roll. Mimicked sounds can have any effect except physical damage.

Induce silence (d4 DD): A successful PT roll will create an area of silence within the knite's own hex. To continue the induced silence a PT roll must be made every five units. Sound cannot exit or enter the area of induced silence. It should be harder for the knite to induce silence as the volume of the hidden sound increases. This means that the knite can operate in silence, but it also means that she cannot hear any sounds that are produced outside of her hex.

False rest (d4 DD): A successful PT roll will allow the knite to see with her eyes closed. The images appear as hazy kirlian auras which become incomprehensible beyond one half her kirlian sight.

Defence shield (varies): A defence shield can only be used against projectile attacks directed at the ventral surface of the knite. The defence shield can be erected as soon as the knite can outstretch both palms in a defensive gesture. A defense shield can usually be erected before any attack can be launched. If there is some debate about getting the defense shield ready the knite may be forced to make an initiative roll using her MSTR. If the knite's arms are bound behind her back she can create a defense shield with her feet at double the degree of difficulty.

A successful PT roll will allow the knite to **deflect** some attacks and **absorb** damage from those that are not deflected. Defense shield allows the knite to absorb 5 hit points of damage, and increase her AR by 30 per experience level. A 3rd level knite could absorb 15 HPS of damage from those attacks that penetrated her increased AR (+90). If the player fails the PT roll her persona will take full damage if a hit is scored.

Pre-empting (special): This ability allows the knite to put words into the mouths of weaker people. A successful PT roll may cause the victim to repeat what the knite has spoken. The victim receives a save vs. psionic attack. If the victim fails to save she will repeat what the knite has said (or thought), but will not necessarily carry out the action. Pre-empting can only hope to succeed if the knite can speak the same language as the victim. There is a much better chance of success if the knite speaks the words aloud.

Telekinesis (d6 DD): A successful telekinesis roll will allow the knite to move an object by mental concentration. The object must first be within a range equal to the knite's adjusted MSTR in hexes. If the object is an unwilling creature, it will receive a save vs psionic attack to avoid being telekinesed. The wate of the telekinesed object cannot exceed the knite's weight allowance, using MSTR as PSTR. This amount is then multiplied by one half the knite's experience level. So a knite with a 20 MSTR can telekinese 17 kg at 1st level, and 68 kg at 4th level. The knite should note that the referee is allowed to make the DD more difficult depending on the size of the item being telekinesed. If the knite wishes she can split the total wate of her telekinetic ability amongst one target per 3 levels of experience.

Pressure (DD7): This skill has different effects, but the same result, for the two different sects of knite. A Knite can employ pressure to instill overwhelming incapacitating guilt. Anti-knites can project a sense of asphyxiating fear. Either format immobilizes its victim. The victim will remain incapacitated until she saves versus psionic attack, or until the knite releases her. The pressured victim can save versus psionic attack once every 5 units (10 seconds). A knite can operate pressure on up to 1 target per 3 levels of experience.

Psionic defence (4 DD): The knite can focus her MSTR to defend against the mental attack of another knite, or the psionic attack of some other opponent. Psionic defence will allow the knite to save versus any psionic attack, regardless of whether a saving throw is allowed or not. If she saves while employing this mutation the attack will have no affect on her. While employing psionic defence the knite cannot use any of her psionic knite abilities, and must cease using any that are being employed. These include detections, pressure,

and telekinesis, but do not include lite saber abilities, or kirlian sight. If the PT roll is successful, the knite can add her experience level to her MSTR. Thus a 4th level knite with a MSTR of 19 would have an MSTR of 23 when employing psionic defence. The knite must make a PT roll for each attack directed against her.

Detections: The knite can attempt to read kirlian auras in her immediate surroundings. Successful PT rolls will provide the knite with some information, but failed rolls will reveal nothing more than the typical kirlian jumble.

Danger (4 + d6 DD): When being actively employed by the knite, a successful PT roll will indicate to the knite the location and possibility of impending danger.

Intent (8 + d6 DD): The knite may use this ability to determine the intent of any biological entity. Objects radiate kirlian auras, but they have no conscience that can reveal actual intent. The extent of the information revealed by this skill is minimal. All that can be determined is whether there is good or bad intent directed towards the knite. Consider some malicious person that wants to throw a fusion grenade at a knite. A successful detection of intent will only reveal "bad" intent, not the fact that the perpetrator has a grenade ready. Many creatures auras cannot be read for intent. Their auras are disguised through skill (e.g., a spie lying), or just plain stupidity.

Lies (11 + d6 DD): When a knite is actively observing a creature, she can determine if the spoken dialogue is truthful or not. The kirlian auras of machines, or robots, cannot be read for truthfulness. The knite may observe for one unit per point of MSTR.

Life (12 + d6 DD): Knites (good sect) may only detect life, and Anti-knites may only detect death. The knite may detect life/death at a range of up to 5 hexes per point of adjusted MSTR. If used properly, this ability can be of equal value to either sect.

Fate (14 + d6 DD): This is an ability for personas involved in campaigns of truly epic proportions. Referees and players alike should note that predicting the fate of personas in a situation can lead to sticky entanglements of refs "forcing" situations on players regardless of dice rolls.

Lite sabre abilities: The Knite's special weapon is the force field sword, lazer sword, or **lite saber**. These special weapons are described in detail in chapter 49, Miscellaneous Weapons. The knite can do certain things with a lite sabre that no other persona can. All lite saber abilities can be used simultaneously.

Deflections (Special): The lite saber can be used to deflect an attack. The DD for this action is 1/50 of the to hit roll made on her. Attacks can be deflected without affecting the knite's combat in any way. Attacks can be deflected from any direction, provided that the knite hasn't been surprised. The knite can deflect two attacks per unit per experience level. Thus a 4th level knite could deflect 8 attacks per unit, and she need only deflect those attacks which are going to hit her.

Multiple Attacks (automatic): A lite saber can also be used as a lethal attack weapon. A knite can attack more than once per unit with her lite saber. She can make one extra attack per unit per two levels of experience. This is only when using a lite saber, and the number of attacks cannot exceed 3 per unit.

Amputation (Special): The last and most devastating lite saber skill that the knite has is amputation. The lazer lite of the lite saber is capable of excising any limb that it hits. There is a percentage chance depending on the damage inflicted (this is described under lite sabers), and then a PT roll against a DD equal to 1/50 the target's AR. Thus knites get 2 chances to amputate each time they score a hit with a light saber.

Knite Experience: Knites (generic) earn 20 EXPS per DD for successful completion of skills on the performance table. Knites gain full experience for combat. The more experience points that the knite collects, the higher the experience level that is attained. The gathering of experience levels allows for more refined interpretations, and manipulation, of kirlian auras, and thus a higher proficiency with the knite skills. For more information about earning experience see chapter 15, Experience.

Table 8.4: Knite Experience

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-3000	1
3001-6000	2
6001-12000	3
12001-24000	4
24001-48000	5
48001-100000	6
100001-200000	7
200001-400000	8
400001-600000	9
600001-850000	10
850001-1200000	11
1200001-1600000	12

400000 additional EXPS per level above 12th.



Mechanic

The class of mechanic encompasses all skills and knowledge of a technical nature—whether it be electronic, mechanical, structural, etc. They are generally good handy-people. Their skills can range from lazer technology to unclogging drains. Unfortunately, they only have bits and bytes of rudimentary knowledge at their disposal. Mechanics are especially beneficial to the expedition when artifacts need identifying. They are essential if the expedition expects to repair damaged equipment, or attempts to construct unique contraptions.

Examples of mechanics from popular media include Scotty (*Star Trek*), The Professor (*Gilligan's Island*), Q (James Bond), Brain (*Escape*

From New York), and Bicycle Repair Man (Monty Python).

Abilities: The mechanics have some special abilities related to their class that other personas cannot attempt. These are different from skills in that the persona can call on them in any capacity.

Mnemonic Trapping (d8 DD): Using finely trained memory skills the the mechanic can memorize addresses, instructions, serial numbers, or procedures for later use. The referee can adjust the degree of difficulty of the maneuver depending on the complexity of the sequence or its length.

Brainstorming (d20 DD): This ability allows the mechanic to solve complex problems by relating incongruous pieces of information, by thinking laterally, and by thinking imaginatively. If the brainstorming attempt is failed, the persona will most likely come up with a hair brained idea instead of no idea at all. The effect of this ability can be to solve a problem completely, partially, or to earn a PT roll bonus of 1 to 4 DDs. Brainstorming can be limited by the referee, and its degree of difficulty adjusted as needed.

Mental Patenting (Triple DD): The mechanic can memorize a maneuver that she has successfully completed in such a fashion that she can repeat the maneuver flawlessly. If upgrading a certain item is a DD4 procedure, she should mentally patent this maneuver (DD12), and repeat it flawlessly on future occasions. The situation must be nearly identical, and *no performance table Exps should be granted for repeated procedures.* This can be done with **research teams.**

Skills: Mechanics, like all other classes, have gained their knowledge from an array of inconsistent sources: plain curious observation, books like "101 Fission Projects for Kids", or typewriter manuals. The skills are probably more accurately referred to as pursuits—old hobbies that the mechanic still has an interest in and likes to tinker around with.

The player is entitled to one roll on the *Mechanic Skill* table for every three points of INT. For example, a persona with a 16 INT would get 5 rolls on the *Mechanic Skill* table. If the player rolls the same skill more than once, she gains added

Table 8.5: Mechanic Skills

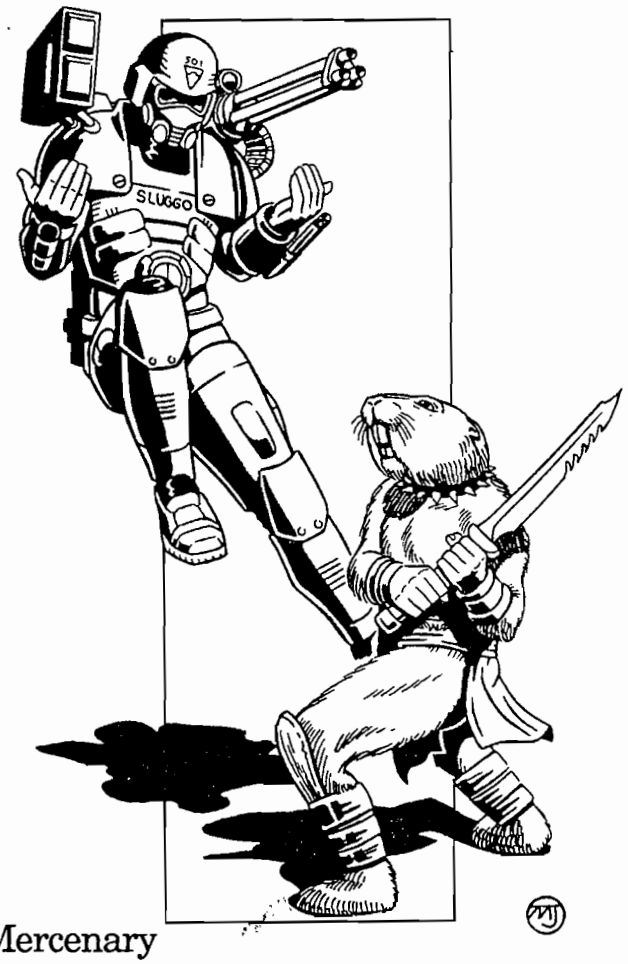
DIE ROLL	MECHANIC SKILL
01-02	Adhesives
03-04	Aerosols
05-06	Armour
07-08	Artillery
09-10	Batteries
11-12	Bombs
13-14	Carpentry
15-16	Ceramics
17-18	Chemistry
19-20	Climatology
21-22	Communicators
23-24	Computers
25-26	Detectors
27-28	Diving
29-30	Driving
31-32	Electronics
33-34	Engines
35-36	Explosives
37-38	Fuels
39-40	Geology
41-42	Gravetics
43-44	Grenades
45-46	Industrial Equipment
47-48	Jewelry
49-50	Leather work
51-52	Leverage
53-54	Magnetics
55-56	Medical Equipment
57-58	Metallurgy
59-60	Mining
61-62	Navigation/Astrogation
63-64	Plastics
65-66	Power Plants
67-68	Power Systems
69-70	Robotics
71-72	Shipman
73-74	Piloting
75-76	Vehicles
77-78	Weapons, non-powered
79-80	Weapons, powered
81-90	Mending
91-99	Roll again
00	Other
Initially 1 roll per 3 INT, plus 1 per level	

proficiency by advancing levels in that area. For example, if a player rolls engines twice, she has level two skill in engines. This could be recorded as **Engines 2**, and whenever she works with engines she will earn a DD bonus of -4. The mechanic also gets a new **random skill** for every new **experience level** she earns. The higher the skill level, the better chance the player has for success on the **Mechanic Performance Table**. For more information about PT rolls see chapter 14, Performance Tables.

Experience: Successful rolls on the performance table will earn the mechanic experience points. How much experience depends on the DD of the accomplished task. The mechanic will earn **80 Exps per DD.** Mechanics can also gain a portion of combat experience. They receive **20% of allotted combat experience**. As mechanics accumulate experience points they may advance levels. Higher experience levels aid the player on the performance tables and in combat. For more information about earning experience levels see chapter 15, Experience.

Table 8.6: Mechanic Exps

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-2750	1
2751-5500	2
5501-12000	3
12001-24000	4
24001-45000	5
45001-95000	6
95001-175000	7
175001-350000	8
350001-700000	9
700001-1050000	10
1050001-1400000	11
350000 Exps per level above 11th.	



Mercenary

Mercenaries are generally hardy, ready-to-fight sorts. They are the fighters, the tough gals, and the paramilitary types of the expedition. Mercs are valuable for the hodgepodge of combat skills that they possess. They represent the dog-meat essential for the survival of any expedition in combat, though they may not personally regard themselves as such.

Typical mercenaries from popular entertainment and fiction include the *A-Team* (cretin-fodder TV "entertainment"), Bill the Galactic Hero (by Harry Harrison), the Storm troopers, and almost any cowboy or war movie hero.

The skills that mercs possess have been acquired mostly through plain old blood-thirsty interest—and a liberal dose of on-the-job training. The skills rolled by mercs represent weapon skills. These weapon skills allow for bonuses to hit, and increased chances of successfully doing merc-like things with the particular weapon type. The players receive one roll on the ***Mercenary Skills Table* for every four points of INT.** The player is also entitled to one roll on the *Mercenary Skills* table for every new experience level.

Theatrical Combat System Skills

When using the **theatrical combat system** the mercenary skill table offers no bonuses to hit. When a player rolls a weapon type on the Mercenary Skill Table, it indicates that she can use this weapon. So a merc that rolled **hand to hand striking weapons** could use swords, maces, and hammers without penalty. The theatrical combat system is for combat resolution in non-combat campaigns. It is explained in chapter 26, Theatrical Combat

Tactical Combat System Skills

The **tactical combat system** allows mercs to shine, if you can call efficient killing in armed combat shining. There are many skills beyond weapon proficiency that the mercenary can employ in the tactical combat system. For more information about the tactical combat system see chapter 27, Tactical Combat.

Weapon skill bonuses: For the tactical combat system mercs not only become proficient in the weapons rolled, but they earn bonuses to hit also. Let's use a persona with four skills as an example:

Hand to hand; striking
Pistol weapons; revolver; XLP
Pistol weapons; revolver; MP
Grenades; buildings

Each fraction of a weapon skill is worth +20 to hit. This means that +20, or more, is added to the player's kilo-die roll when trying to score a hit.

If the persona were attacking with a sword, she would get +40 to hit because it is both a hand to hand weapon, and a striking weapon. If she were using a bow, she would get +20 to hit because the bow is considered a hand to hand, but not a striking weapon.

If this merc were using a lazer pistol she would get +40 to hit because the skill **Pistol weapons** appears twice. If she were using a HP revolver, her bonus to hit would be +80, this is because both Pistol weapons, and revolver skills appear twice. Note that these skills are not randomly applied. For example, the **medium powered (MP)** calibre skill can only apply to **revolvers**. Also a semi-automatic pistol skill cannot be applied to a semi-automatic rifle.

This persona would also receive +20 to hit with grenades, and +40 to hit when using grenades inside buildings.

This persona is most skilled in using a MP, or XLP revolver. With an XLP revolver she would get +100 to hit. On the other hand, this mercenary is least skilled in rifle weapons, and would receive no bonuses to hit.

Bolstering of armour rating: A mercenary does not have to use all of her Bonus Proficient solely to increase her chance to hit. A special skill of the mercenary can make her much harder to be hit, instead of concentrating on hitting a target. This could prove to be necessary for a number of peculiar reasons.

A mercenary can bolster her AR by up to 20 points per experience level. The total of this AR bonus is subtracted from the merc's to hit roll in the same unit. The player running the merc must announce that their intention to bolster their persona's AR in the preceding unit.

The total amount of bolstering available is limited by several factors. The merc can never use an amount that exceeds her BP for the attacking weapon type. So if a merc's BP for type A is 158 she can never bolster her AR against type A attacks by more than 158, special weapon bonuses do not apply. The AR bolster can only be used against one attack per level, per unit. This means that a 1st level merc could add 20 to her AR against 1 attack,

while a 5th level merc could possibly add100 to her AR versus 5 attacks. Experience level is the only limit to the number of attacks that the persona can defend against.

Multiple attacks: Mercenaries can increase the number of attacks they get with type A and type B, and some type C weapons. They can get 1 additional attack per 2 experience levels per unit. This means 2 attacks at 2nd level, 3 attacks at 4th level, and 4 attacks at 6th level. The number of attacks cannot exceed 4 per unit. If the player elects to have her persona attack more than once per unit she must divide her BP (plus applicable skill bonuses) amongst the attacks.

For instance, a 6th level merc with a BP for type A of 210 could attack 3 times at +70; 2 times at +105; 1 time at +210; or 1 time at +200 and 2 times at +5, etc. The player must determine how many attacks she is going to make, and what the bonus will be per attack in the unit preceding the multiple attack. Once she has stated that she is going to make multiple attacks she is committed to the pattern chosen.

Note that combining multiple attacks with bolstering of the AR can produce some pretty wild calculations, and the players applying these merc skills must ensure that they are properly prepared each unit, and that they are not slowing down combat for everyone else.

Ambidextrous combat: A mercenary can fight as an **ambidextrous persona** if the player running her successfully makes a PT roll each unit of combat. Personas using two weapons simultaneously would normally suffer a penalty of -200 and -300 on the two attacks. This is a penalty of -200 on the persona's dominant paw and -300 on the persona's non-dominant paw.

This penalty applies to any combination of two weapons: rifle and pistol; two rifles; pistol and sword; two swords; etc. If the player makes her PT roll the persona can use two weapons simultaneously, without suffering the -200, -300 penalty. This penalty is described in better detail in chapter 35, **Combat Adjustments**. If she fails the PT roll the merc will suffer the penalty as would any other persona.

Combining ambidextrous combat with multiple attacks can create a formidable hand to hand combatant indeed. If ambidextrous combat is attempted the degree of difficulty will be doubled. If the performance table roll fails, the merc will subtract 200 from good handed to hit rolls and 300 from her weak handed to hit rolls.

Absolute proficiency: Mercenaries are the only class that are proficient in any personal weapon that they can identify, and understand the workings of. A merc could use any rifle with her BP provided that she can identify it as a rifle. This skill only applies to weapons of a personal nature, and not to weapons of mass destruction or of a strategic nature.

Snap reload: A mercenary can reload and fire in the same unit if she successfully makes a PT roll. If the PT roll is unsuccessful, she will lose combat time to reloading, like any other persona. If the merc is using ambidextrous combat she must make two successful PT rolls. Failure in either roll will leave both weapons unloaded. The snap reload ability of mercenaries can also be used as a snap weapon exchange, switching from one weapon to another, and still being able to attack in that unit.

Experience: Mercenaries gain experience from combat that they directly engage in. If the mercenary does not inflict damage during combat they do not receive EXPS. If the merc was successful in combat then she will receive 100% of the experience point value of what ever she was fighting. Mercs will also receive 25 EXPS per DD of successful PT maneuvers. The more experience gained, the higher the level the merc attains. Higher levels allow for more weapon skills, and a greater chance of success in performing class skills. For more information about earning experience see chapter 15, Experience.

Table 8.8: Mercenary Skills I

DIE ROLL	GENERAL SKILL	SPECIFIC SKILL	EXACT SKILL
01-12	Hand to hand	Striking	
13-16	Hand to hand	Thrusting	
17-20	Hand to hand	Throwing	
21-23	Hand to hand	Missile	
24	Hand to hand	Other	
25-28	Pistol weapons	Revolver	Refer to subtable A
29-32	Pistol weapons	Semi-automatic	"
33-36	Pistol weapons	Full-automatic	"
37-40	Pistol weapons	Lazer	"
41-44	Pistol weapons	Lazer; semi-automatic	"
45-48	Pistol weapons	Lazer; full-automatic	"
49	Pistol weapons	Other (energy)	
50-53	Rifle weapons	Pump; bolt action	Refer to subtable A
54-57	Rifle weapons	Semi-automatic	"
58-61	Rifle weapons	Full-automatic	"
62-65	Rifle weapons	Lazer	"
66-69	Rifle weapons	Lazer; semi-automatic	"
70-73	Rifle weapons	Lazer; full-automatic	"
74	Rifle weapons	Other	
75-81	Grenades		Refer to subtable B
82-83	Aerosols		"
84	Artillery		"
85	Bombs		"
86	Combat driving		
87	Demolitions		
88-90	General bonus		
91	High/Low gravity combat		
92	Naval artillery		
93	Powered armour		
94	Shield skill		
95	Tactics		
96-97	Unarmed combat		
98	Underwater combat		
99	Zero gravity Combat		
00	Other (Refer to ref's imagination)		

Initially 1 roll per INT/4, plus 1 roll per new level

Table 8.9: Mercenary Skills II

SUBTABLE A Die Roll	Weapon Calibre	SUBTABLE B Die Roll	Weapon Specialty
01-05	Extra lo powered (XLP)	01-12	Aircraft
06-15	Lo powered (LP)	13-24	Buildings
16-85	Medium powered (MP)	25-36	Extraplanetary vehicles
86-95	Hi powered (HP)	37-48	Ground vehicles
96-00	Extra hi powered (XHP)	49-60	Personnel
		61-72	Sub liquid vehicles
		73-84	Water vehicles
		85-00	Other

Table 8.7: Mercenary Exps

EXPERIENCE POINTS	EXPERIENCE LEVEL
0-2000	1
2001-4000	2
4001-8000	3
8001-18000	4
18001-35000	5
35001-70000	6
70001-125000	7
125001-250000	8
250001-500000	9
250000 experience points per level above 9th.	

Essay: Mercenaries

Mercs are tough, ruthless, courageous, and always ready to fight. Their motto is "shoot first, ask questions later". Unfortunately, they often take this quite literally, and refs occasionally find their painstakingly created RPs slaughtered before they've even been properly introduced. Players running other classes (especially vets) find this trigger-happy attitude a trifle irritating at times—especially when mercs happily eliminate possible sources of help.

Mercs tend to be rather single-minded. If it moves kill it. If it doesn't move destroy it—unless its a weapon. Mercs are good at what they do (e.g., violence and action of any kind), but tend to be impatient with the more intellectual procedures. However, even if they find vets, biologists, knites, etc. annoying, they do regard mechs with a limited measure of respect. This is because mechs are able to identify and repair weapons—and weapons are a merc's only friend (guns don't kill people, mercs do). Their preoccupation with armaments can be quite remarkable at times. They have been known to go to extraordinary lengths (at great personal risk) to acquire weapons or retrieve personal favorites. Their perseverance is impressive, although occasionally it seems excessive, and unnecessarily dangerous to the expedition. The others realize that mercs know their stuff, and can often make a crucial difference in the survival of an entire expedition.

Mercs are the meat and potatoes of any expedition. Valuable in battle, with the courage (read stupidity) to undertake dangerous, risky, Rambo-like feats—which often succeed spectacularly. Although they tend to place a high priority on their own skin and weapons (they are not known for their altruism) they are an invaluable asset to any expedition—don't leave home without them.



Nomads

Nomads are survivalists supreme. They are experts at finding their way, constructing shelter, and doing well with nothing more than their bare hands. Nomads can aid the expedition by providing a source of intuitive survival skills. Nomads have an initial home base, or **biome** (a biome is any easily distinguishable subsection of an ecosystem. Such as: deciduous forest, tropical savanna, or radioactive ruins). It is in such familiar territory that the nomad functions best. The nomads skills are not limited to just these biomes, but she will prefer them, and enjoy DD bonuses when within their boundaries. Nomads from popular fiction are Borellian Nomen (*Battlestar Galactica*), Ki (*The Gods Must Be Crazy*), Daniel Boone, Uil Gibbons, Fremen (Dune), and your friendly neighborhood baglady.

Nomads and Technology: Nomads will generally shun technology if it is unnecessary for survival, usually preferring to sleep in a hollow log or in a Smithrite garbage container rather than a hotel room or tent. Nomadic skills are essentially unteachable. The other classes are not able to grasp the subtleties necessary to adapt to and live off an environment. This is something that players must remember, and not waste role-playing time trying to do. The nomadic skills were most likely acquired by the persona after she found herself isolated in some perilous situation, and had to make do or die. It is very unlikely that there are accredited schools of nomadic adventure.

Nomadic Biomes: A biome is an environmental region that the nomad is familiar enough with that she will be able to survive within it. The biome that the nomad originated from can be randomly determined on Table 8.10, *Nomadic Biomes*, chosen by the ref, or chosen by the player. All nomads will have a start-up biome.

The nomad can acquire a new biome by gaining a complete experience level in a new area. This means that a first level nomad from the **desert** travelling around on the **tundra** (a foreign biome) would gain **tundra** as an additional biome upon reaching second level. The higher the experience level of the nomad, the more difficult it is to learn a new biome. This is because the nuances and pitfalls of previous biomes cloud the newer ones, and make them harder to learn. This effect is reflected in the increasing experience level of the nomad.

Biomes are not planetary specific. A biome on one planet is the same as an identical biome on another planet, only the species are different. Available biomes are listed on the Nomadic Biome table. The same table is used if the biomes are being randomly generated. A biome may have special characteristics if the referee deems them necessary.

Table 8.10: Nomadic Biomes

DIE ROLL	BIOME TYPE
01-08	Coniferous
09-16	Deciduous
17-24	Desert
25-32	Farm
33-40	Grassland
41-48	Industrial
49-56	Megalopolis
57-64	Oceanic
65-72	Ruin
73-80	Tropic forest
81-88	Tropic grassland
89-99	Tundra
00	Other

Roll on *Special Characteristic* Table also.

Table 8.11: Special Characteristic

DIE ROLL	SPECIAL CHARACTERISTIC
01-10	Normal
11-20	Toxic
21-30	High gravity
31-40	Low gravity
41-50	Thin atmosphere
51-60	Dense atmosphere
61-70	Underground
71-80	Aboveground
81-90	Mountainous
91-99	Extraplanetary
00	Other

Nomadic Skills: These are example skills that can be employed by the nomad. These skills are generally personal, and are harder to employ for another persona. So a nomad may be able to find enough food for herself, but unable to find food for another persona also. The DDs vary because the nature of a biome is dynamic, and what might be shelter one night might not be the next night. The referee may also adjust the DD as she sees fit. For instance finding water while floating in a vac suit in outer space may be increased many times over finding water in a rain forest. If the nomad were to still succeed the referee must be prepared to explain the success in a fashion that doesn't seriously alter the nature of her milieu.

Shelter (d4 DD): This is the ability to either find, or build, shelter employing nothing other than the biome's materials. The shelter can protect from the elements, local pests or toxins. The nomad must roll once per specific protection required. Hiding out from local animals, and background radiation would require 2 PT rolls. Remember that the number of expedition members included increases the DD.

Clothing (d6 DD): This involves the design of protective clothing. It could offer warmth, ventilation, or protection from inhospitable environments. **Camouflage** clothing can also be fashioned from the local materials if another PT roll is made. The nomad must roll once per set of clothing required. Finding clothing for other personas increases the DD by 2.

Safe Passage (d12 DD): The nomad can determine a **safe passage through seemingly impassable terrain**: mountain ranges, toxic areas, or a red light district. It is potentially the most abused nomadic ability available. The nomad must remember that the skill cannot be used to avoid a referee's detailed scenario, although a good PT roll may alter the scenario's presentation. A safe passage roll is required for each component of the safe passage required. If the nomad wants safe passage through a city (a route through), and safe passage from the police (evasion) she would have to make two PT rolls. A failure of this roll can mean either that no passage could be found (normal

travel applies), or an unsafe one was determined (a critical failure on the PT roll).

Poison Cure (special): How difficult it is to cure the effects of a poison depends on the intensity of the poison. The DD = **poison intensity**. Thus an intensity 12 snake bite would require DD12 performance table roll. There is no DD penalty for employing this skill on another persona.

Husbandry (special): Nomadic husbandry involves the befriending and training of alien creatures. If the ref has deemed the creature befriendable by the nomad, the DD is equal to the INT of the creature. So trying to befriend a wumpus (a pointed furry creature with a 4 INT), would be DD4.

Once befriended, the nomad can train the beasty to do various tricks. The DD, and time requirement is determined by the ref. Some aliens cannot be trained at all, especially those with an organized social structure, or sufficient free will to pursue their own class. Robots cannot be trained by a nomad. The ref should watch for abuses of this nomadic skill. Pets will often run away if mistreated, and the more intelligent the creature the more difficult it is for the nomad to maintain a dominant relationship. It will be difficult for the nomad to convince animals to leave their biome.

The nomad will be able to teach tamed animals up to one trick per experience level. The tricks can only be simple commands, but it will take a PT roll versus d12 DD to make the trick stick.

Once the trick has been learned the nomad will also have to check to see if the command itself is successful. The DD of successfully commanding the animal depends on how many tricks that the animal has learned, and nothing else. If the animal knows 2 tricks commanding it will be a DD2 maneuver. Command failure in animal husbandry should have humorous effects if at all possible.

Tracking (special): Nomads can track anything that they want. A successful PT roll will indicate that their prey has not escaped. Complications such as flight, burrowing, and phasing out will adjust the DD. The DD should be decreased for larger prey, or prey that is ignorant that its being tracked.

Once the nomad has decided to track something, it is determined how long the chase will take (2-200 hours), and at the end of this the PT roll is made. Thus tracking time can indicate the number of hours to discovery, or the number of hours until giving up. Distractions and diversions during the chase can alter the chance of success (adjusted as the ref sees fit).

Reverse tracking is used by the nomad to determine if she is being followed. It is a much harder skill to employ, but it yields an answer immediately. Reverse tracking is a personal skill.

Food (special): Here are four skills relevant to the acquisition of food in the wild. They are based on the requirements of one normal sized person for one day. **Find and gather** (3 + d6 DD), **prepare safely** (4 + d6 DD), **cook**(1 DD), and **preserve** (6 + d6 DD). Only the first two PT rolls (gather and prepare) are necessary to supply the daily nutritional needs of the nomad.

Fire (1 DD): The ability to produce fire from local materials. The DD should be increased in poor atmospheres or climatic conditions.

Safe Campsite (d8 DD): Successful use of this skill can determine if the chosen camp is safe from natural disasters e.g., avalanches, floods, fallout, or worse. Safe campsite designates an area that is safe, and any persona within this area is safe from the biomes natural disasters. This skill can be used to reduce the chance of being found by local hungry life forms.

Water (special): Collecting water is a 3 + d4 DD action, and it can only supply enough water for **one person for one day**. To locate a **continual** source of water (spring, well, or water main) is a 8 + d4 DD maneuver. All collected water should be routinely **purified** (5 + d4 DD). This will eliminate any bacteria or toxins that are unaffected by boiling.

Nomadic Experience: Nomads get **half** experience for combat, and 30 EXPS per DD for successful PT rolls. Increasing levels allows the nomad a greater chance of survival in the wild or combat. For more information about earning experience see chapter 15, Experience.

Table 8.12: Nomad Exps

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-2000	1
2001-4200	2
4201-8400	3
8401-16800	4
16801-33600	5
33601-67000	6
67001-127000	7
127001-190000	8
190001-380000	9
380001-580000	10
580001-800000	11

220000 Exps per level above 11th.



Nothing

The **nothing**, or civilian, is more of a consolation class than anything else. Those personas with attributes insufficient to enter any other class are forced to become nothings. There are no attribute requirements for nothings (other than being alive). The nothings are allowed to pursue any civilian employment provided that their skills can in no way aid them in regular adventure gaming. The nothing serves little or no purpose for the expedition. Some nothings from popular fiction and film are: Arthur Dent (Hitchhikers Guide to the Galaxy), Otto (*Repo Man*), and Pinback (*Dark Star*).

The most important factor to a civilian, a nothing, is her ability to perform her mundane task, and her **social standing**. The importance of

these variables can vary depending on the milieu that the referee has created. For example, going to the best parties may be the drive of nothings in one culture, while getting enough to eat may be the drive in another. All nothings should determine their social standing, their wealth, and what they want to do with their life. A nothing may pursue a real persona class, or may specialize in becoming a high level nothing.

Social Standing: The social standing is of great importance to the nothing. It indicates where they are socially oriented in their society, and how much money they tend to have. A high social standing is synonymous with wealth and power. Nothings determine their social standing with a kilo-die roll. The higher the roll the greater the social standing. What form this social standing takes—famous celebrity, corporate power, or bureaucratic influence—is up to the ref and the scenario in which the nothing appears.

The higher the social standing, the more likely a nothing is able to apply pressure on another civilian. The mechanics of this is dependent on the milieu and the ref. Nothings may have connections to lodges, clubs, or other such groups which will allow them to order other nothings around.

The simplest rule for which this can be played is by comparing the two persona's social standing (SS). If a persona's SS is more than 200 points higher than a referee persona, then the player's persona could subtly apply pressure to the other and maybe force her to capitulate in circumstances where she otherwise might not.

If the player has chosen to pursue nothing as a persona class she can increase her social standing as her experience level increases. Each level that the nothing acquires she may add 20 to her social standing. This means that a 1st level nothing with a social standing of 367 would have a social standing of 387.

This is something that can only occur between nothings, and other classes should be relatively exempt. This feature of nothing SS should be applied with moderation, it would be unrealistic for one nothing to drastically affect the life of another, but it would be likely to play a part in a mundane type thing, such as butting in line, or getting correct change.

Origin of Nothing: All nothings receive one roll on Table 8.17, the *Nothing Skill Table*, and Table 8.13, the *Origin of Nothing Table* to give the persona some background history.

Nothing Wealth: Unlike the other classes the nothings receive rolls directly on the treasure tables. How many rolls on the **treasure table** the nothing gets depends on her social standing. The Treasure Table is found in chapter 53, Treasure. Table 8.14, *Nothing Treasure* is used to determine how the player will roll wealth for her nothing. A campaign could easily revolve around a nothing that has spectacular wealth and connections. How the wealth is represented—information, savings, land, stocks, technology or industry—depends on the milieu and on the mood of the referee.

Table 8.13: The Origin of Nothing

DIE ROLL	NOTHING'S ORIGIN
01-10	City
11-20	Complex
21-30	Farm
31-40	Fully Operational City
41-50	Institute
51-60	Ruin
61-70	Town
71-00	Other;choose

Table 8.14: Nothing Treasure

Social Standing	Treasure Rolls	Roll Adjustment
001-099	1	-50
100-199	1	-25
200-299	1	-12
300-799	1	0
800-899	2	0
900-949	3	+12
950-989	4	+25
990-999	5	+50
000	Other.	

Nothing Experience: Nothings gain experience points differently from their pursued classes. All nothings, regardless of pursued class, earn **10% of combat experience,** and one experience point for every **10 eps** earned. "Earned" monies must be collected while exploring, and cannot be gifts, stipends, grants, awards or salaries gathered without personal risk. The pursuit of gold will no longer generate Exps once the nothing has entered the new class. If the player has chosen to pursue the nothing as a class she can use the *Nothing Experience* table to determine her level of experience.

Table 8.15: Nothing Exps

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-3000	1
3001-6000	2
6001-12000	3
12001-24000	4
24001-48000	5
48001-100000	6
100001-200000	7
200001-400000	8
400001-600000	9
600001-850000	10
850001-1200000	11
1200001-1600000	12
400000 additional Exps per level above 12th.	

Nothing Class Pursuits: All is not lost for impoverished nothings. They (and wealthy ones as well) may directly pursue any class except for **knite, alien** or **robot**. The class of knite can be indirectly pursued via the appropriate class (see knite in this chapter). They will remain as nothings until they survive a trial period, after which they can become first level of a chosen class.

The trial period consists of about four experience levels of Exps determined by the pursued class. Once a nothing has achieved fifth level of a particular class she can become a first level persona in her new class. Upon reaching this point, they lose all experience accumulated as nothings and begin to gain it as the learned class normally would. For example, a nothing aspiring to become a **mercenary** must collect 18001 experience points to become a first level merc. Once she has earned 18001 Exps as a nothing she would begin playing as a first level merc with 0 Exps .

Table 8.16: Experience for First Level

CLASS DESIRED	EXPS REQUIRED
Biologist	10001
Mechanic	24001
Vet	18401
Mercenary	18001
Nomad	16801
Spie	50001

Nothing Skills: Nothings can have some skills that are very significant in their social world, but not too important in the world of gaming. The nothing skills represent mundane and repetitious talents like: baking, accounting, bricklaying, etc. It will be a rare and unique circumstance when a nothing persona will be able to use her skills to assist the expedition.

There are certain skills that a persona may wish to hone for purely academic reasons. For instance a nothing may wish to become the best chef in the city, an established accountant, or the

fastest cage cleaner. If the nothing class has been chosen the persona can add a skill roll for each level that she increases, or she can increase her initial skill level by one. A persona with accounting 3 would earn a 3DD bonus on the **General Performance Table** when carrying out accounting maneuvers.

Table 8.17: Nothing Skills

DIE ROLL	NOTHING'S SKILL	DIE ROLL	NOTHING'S SKILL
01-02	Accountant	51-52	Maid
03-04	Actor/tress	53-54	Mail person
05-06	Baker	55-56	Meter watcher
07-08	Barber	57-58	Milk person
09-10	Bricklayer	59-60	Nut threader
11-12	Bureaucrat	61-62	Operator
13-14	Butcher	63-64	Painter, artistic
15-16	Butler	65-66	Painter, commercial
17-18	Cage cleaner	67-68	Philosopher
19-20	Cashier	69-70	Police person
21-22	Cement mixer	71-72	Principal (school)
23-24	Chimney sweep	73-74	Receptionist
25-26	Comedian	75-76	Reporter
27-28	Dancer	77-78	Salesperson
29-30	Embezzler (roll cover)	79-80	Sculptor
31-32	Farmer, animal	81-82	Tape roller
33-34	Farmer, fish	83-84	Tax collector
35-36	Farmer, herd	85-86	Taxi driver
37-38	Farmer, plant	87-88	Tele-marketer
39-40	Film producer	89-90	Telephone cleaner
41-42	Fire person	91-92	Typist
43-44	Gardener	93-94	Window washer
45-46	Inspector	95-96	Writer
47-48	Interior decorator	97-98	Roll two
49-50	Janitor	99-00	Other



Spie

Spies, simply put , are tough, mean, ruthless and lethal personas. They are highly skilled in unarmed combat, deception and murder. Spies can employ any combination of these abilities to satisfy their goals. Spies can be of value to the expedition if they feel like it. Often they will be disguised as some other class (yes, even a Vet) which pretends to function as part of the expedition. For the party, Spies are an excellent source of dangerous assignments (from *governments, corporations, societies* or *private citizens*). Spies are not totally dependent on a commission and can carry out a little extortion or kidnapping for their own profit (or fun). Spies from popular fiction are James Bond, Flint, Sten, and the Stainless Steel Rat.

The cut-throat nature of the spie world does not mean all spies must be ruthless assassins and terrorists. But in the realm of international and extra-planetary espionage it is very difficult to distinguish the bad from the not-so-bad. Spies very rarely operate freelance, and usually depend on some source for assignments and possible remuneration. How deeply involved the expedition gets with a spie's source depends on the milieu or scenario set up by the ref. It is also not uncommon for spies to be members of secret guilds or naughty lodges which can offer training in the clandestine arts. Any spie that initiates an act of counter-espionage (turning on her employer), whether by a higher authority or personal decision is almost certainly in big (like massive) trouble.

The skills of spies are fairly strict, and new ones must be carefully analyzed to ensure they do not infringe on those of mercenaries. Spies almost certainly have attended some sort of "spie school", or special forces training, and they may be the only class to have had any formal training. The pre-gaming history of a spie's education can be left up to the ref or the player.

Martial Arts: Spies also have their own form of very deadly hand-to-hand combat. The spie's martial arts abilities include kicks, punches, elbows chops, head butts and body slams. *None of these hand to hand attacks vary in damage from one type to another*, and none of them have any special significance (other than the damage they produce).

Armour Rating: This martial arts training adjusts the spie's **armour rating**, as she employs throws, parries, blocks and rolls to increase her AR. If the spie is wearing no protective covering she will always have the armour rating bonus listed on the *Spie Martial Arts* able. If the spie wishes to combine her defensive martial arts with armour she must make a successful PT roll, or have the lesser of the two armour ratings. The DD of this maneuver is equal to the armour rating of the armour divided by 100 plus its **restrictiveness**. The player should have this DD memorized if she wishes her persona to carry out that maneuver.

Number of Attacks: The number of attacks applies to the number of martial arts attacks that

the persona can make. If she wishes to make additional attacks with other weapons she must make a successful PT roll. If this performance table maneuver is failed she will suffer a **to hit roll penalty** of -300 on the weapon attack and -200 on her martial arts attacks.

Attack Damage: Martial attacks can only be used on targets in an adjacent hex. The damage inflicted is added to the regular PSTR bonus awarded for hand-to-hand combat. This is the same as the damage adjustment for **type B attacks**, and it is equal to 1/2 the persona's PSTR. The persona uses her **type A weapon attack** on her combat table. For martial arts refer to chapter 25, the Combat Introduction for more information.

Attack Sequence: The **attack sequence** is very important to the spie. Using her martial arts, she can alter the course of initiative by getting attacks in before others can act. **'Normal' attacks** are self explanatory, and the spie attacks in normal combat order. **'Before' attacks** allow the persona to make the given number of martial arts attacks before her opponent can attack her. The before attacks are granted even if the spie loses initiative. **'During' attacks** are launched simultaneous to any attacks on the spie regardless of whether she wins the initiative or not.

Thus a 5th level spie that loses initiative would get one attack before her opponent attacks, and one attack while her opponent attacks, and then one normal attack. If the spie wins initiative she has earned 3 attacks before her opponent can act. Note that the spie cannot move until her turn, and the martial arts attacks have a **limited range** of the adjacent hex.

Stun Opponent: If the spie does not desire lethal combat, but wants to incapacitate her target she may attempt to **stun** her opponent. The stun is a specialized martial arts attack. The ideal opportunity for stunning the opponent is during an **ambush**, when the spie can get a chance to stun before the target can even react. If the spie must stun during combat the skill is equally effective, but the degree of difficulty is increased.

Stunning the opponent requires a successful to hit roll, and then a successful PT roll. The DD of the stun depends on the target's experience level, and a random factor. If the PT roll is successful the target is stunned. Only the first attack in a martial arts sequence can be considered an ambush stun. Unsuccessful stuns inflict no damage, and have no effect on the target.

Table 8.18: Spie Martial Arts

EXPS LEVEL	AR ADJUST	NUMBER of ATTACKS	ATTACK DAMAGE	ATTACK SEQUENCE
1	+40	1	d4	Normal
2	+80	2	d4	2 Normal
3	+120	2	d6	before, Normal
4	+160	3	d6	before, 2 Normal
5	+200	3	d8	before, during, Normal
6	+240	4	d8	before, during, 2 Normal
7	+280	4	d10	before, 2 During, Normal
8	+320	5	d10	before, 2 During, 2 Normal
9	+360	5	d12	2 before, 2 During, Normal
10	+400	6	d12	2 before, 2 During, 2 Normal

Assassinate: Under optimal conditions, and with the correct weaponry, a spie may carry out an **assassination**. The attempt must be made under the conditions of complete surprise. This excludes assassination attempts on victims during combat, or with weapons that announce their approach. A flame thrower would be an inappropriate weapon, but a rifle fired some distance from the target would be adequate (the bullet arrives before the bang). Once the spie and the ref have finished arguing (er, discussing) whether the situation is an acceptable one, the spie must attempt a roll to hit. Only after a hit has been scored can an assassination attempt be made. The DD for the assassination depends on the victim's experience level, AWE, and a random factor.

If the PT roll is successful, the victim is dead. There is no turning back, no saving throw, the victim is deceased. If the roll is unsuccessful, the victim takes damage as from the hit. If this normal damage kills the victim, it is not considered an assassination by the spie. Getting caught, whether successful or not, depends on the scenario being played out by the ref, and the players.

Spie Tricks: Neat little tricks are the trademark of any qualified spie. Several are listed here. Before adding a new trick, the ref must analyze it in excruciating detail, ensuring that it is different from the other class' skills, spie-like, and not excessively ridiculous. The tricks are not hard and fast rules. They are very dependent on ref-player interaction, and are included mostly to explain some of the things that our favorite spies can do.

Table 8.19: Spie Skills

DIE ROLL	SPIE SKILL
01-06	Assassination
07-12	Bribery
13-18	Climbing
19-24	Concealment
25-30	Cryptography
31-36	Disguise
37-42	Forgery
43-48	Interrogation
49-54	Lock picking, electronic
55-60	Lock picking, mechanical
61-66	Lying
67-72	Martial arts
73-78	Stealth movement
79-84	Stunning
85-99	Choose
00	Choose one, roll again.
One roll per EXPS level	

Concealment (d6 DD): **Concealment** is the art of hiding objects on the body of the spie. It allows weapons, detectors, money, etc, to be hidden in the fat folds, armpits, fur, and orifices of the spie. A successful PT roll means that the spie can avoid discovery of items if she were subjected to a cursory strip search. The DD can (and should) be adjusted by the ref for more lenient, or stringent, searches.

Cryptography (8 +d8 DD): This skill can be used to encode, or decode data. The encrypted material can take on any form the spie sees fit. The ref should adjust the DD so that the complexity of the code is reflected in the DD assigned. Players must remember that many codes exist that cannot be broken without computer aids, or other special keys.

Disguise (d8 DD): A masquerading spie can make herself appear about 50% taller, or heavier, or about 25% shorter, or lighter. Whether or not the disguise is detected depends on the AWE of the observer, and the complexity of the disguise. Generally, it is an **Improbable** attribute roll (D100)

(see chapter 16, Special Rolls) that an observer will notice that something is wrong. The more extravagant the disguise, the less difficult the Attribute roll. If the initial PT roll is failed, the spie may still be unidentifiable, but the disguise will appear more as a costume. If an observer notices that a spie is disguised, the spie is not necessarily identified, just uncovered. Further action must be taken to ascertain the spie's identity.

Escape (d6 DD): The escape roll may be applied as an absolute last resort. The escape roll is merely a way of delaying impending doom. The skill is best described as 'out of the frying pan and usually into the fire'. An escape roll can only be used by the spie to physically avoid the impending doom. For example, the spie can only jump out of the way of the speeding two tonne robot, she cannot disable it or make it crash. The danger continues on its merry way; only the spie may change. The referee can deny an escape whenever she sees fit.

Traps (5 + d6 DD): A successful PT roll with this skill will indicate the laying of a deadly booby trap. It could be as complex as a grenade triggered by an opening door, or as simple as a concealed tripwire. The better the description of the trap, the more likely it will succeed. The ref can adjust the DD depending on the complexity of the trap, or other factors unforeseen by the spie. Disarming traps can be done by spies or mechanics.

Thieving Abilities: Spies will find a need to employ thieving abilities on a regular basis. These skills are ones that deal exclusively with skulking around, and deception. They can be used for a host of things other than theft, but that is the easiest way to describe them.

Slight of hand (special): Several examples of slight of hand are assigned DDs on the **spie performance table**. One DD is added for every experience level possessed by the primary observer. It is assumed that the more experienced the observer, the less likely that she'll fall for the spie's deceptions.

Pocket (3+ d4 DD) represents the removal of items from the pocket, flap, purse or pouch of the primary observer. For example, stealing candy from the bib of a 3rd level baby would add 3 DD. The other two examples (**table** and **demo**) represent pilfering something from a display, and simple magic tricks.

Failure indicates that the spie has been caught out, and that fast talking, fast feet, or fast weapons are in order. Success indicates that the victim, primary observer or audience has been fooled. The action rarely will deceive electronic surveillance equipment such as hidden cameras or alarm systems.

Case (Special): This skill should be carried out by the spie before any other skulking action is taken. **Casing** can the determine potential difficulties that may have to be overcome in order to successfully bypass security, bribe, etc. The DD of casing depends on how elaborate the protections are (if any), and how large an area is being cased. If the spie fails to case the "joint" properly, unsuspected bits of security may foil even her best laid plans.

Successfully casing may yield specific information of importance to the spie, like there is a trap/alarm over there, someone is watching the building, or the safe is behind the aquarium. If there is no specific gaming information to be had by the persona, there will at least be a -2 DD bonus on performance table rolls following a successful case.

Forgery (Special): This is the spie's art form. Forgery skill ranges from falsifying initials on legal documents to **counterfeiting** campaign currency. In some circumstances, the chance of successful forgery can be aided by previous casing. Forgery is very time consuming. Either the finished product takes a long time to create, or there is tremendous amounts of practice involved. The referee can upwardly adjust the DD level for counterfeiting as she sees fit.

Bribery (Special): This is a skill that must be run very subjectively by the referee. Some upstanding citizens may refuse any attempt at bribery (it being a criminal offence on some planets may aid in their morality). While others will gladly accept the additional renumeration. Successfully casing a potential bribee will increase this skill's chance of success.

The players and ref should remember to **role-play** the situation whenever possible. One quick die roll does not give service to a situation potentially as fun as this. Bribery skill can be used by the persona to slip across a border line, get into a rock concert, or avoid a traffic ticket. Personas cannot bribe people into damaging themselves, and the greater the physical risk involved the higher the DD should be. Failure at bribery could result in any reaction other than a successful bribe, and the response could be vary from snickers to violence.

Lying (Special): A successful PT roll will allow the persona to deceive lie detectors, immigration officers, legal cross examination, or close scrutiny. Again, good opportunities for role playing should not be replaced with a die roll.

Camouflage (Varies): Spie camouflage is representative of such abilities as hiding in the shadows, moving quietly, remaining motionless, or playing dead.

Spie Experience: Spies obtain **three quarters experience for combat**. Successful PT rolls are awarded by 50 EXPS per DD. The acquisition of EXPS will allow the spie to increase in experience levels thus increasing her combat skills, and spie skills. For more information about earing experience see chapter 15, Experience.

Table 8.20: Spie EXPS

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-2750	1
2751-5500	2
5501-12000	3
12001-24000	4
24001-45000	5
45001-95000	6
95001-175000	7
175001-350000	8
350001-700000	9
700001-1000000	10
450000 EXPS per level beyond 10th.	



Veterinarian

Vets (or Veterinarians) are a combination doctor, homeopath, surgeon, paramedic, faith-healer. They are called vets instead of doctors, shaman or whatever, because they are trained to heal the diverse races found in **EXP**. They can utilize whatever odds and ends they may know about the base races to implement a temporary or permanent, sometimes incompetent, and often miraculous cure.

Veterinarians have at their disposal millennia of medical science's discoveries and accomplishments. Hence, what may appear as faith healing to the ignorant peasants, of which there are many, may actually be sound medical practice. A good example of a vet is Bones (*Star Trek*) and Crusher (*Next Generation*).

Vet Conduct: The vet must strictly adhere to certain rules of class conduct. In general, they cannot employ any weapon which will cause people (all base races) to come to harm, although the use of other, harmless weapons is admissible. They cannot initiate violent combat, though they are permitted to take up arms in self-defense. Ideally, vets are altruistic people-lovers who will avoid killing the proverbial insectoid. Realistically, vets are at least required to make an effort to avoid wanton bloodthirstiness.

Indeed, repeated displays of a violent nature are bound to have adverse effects on the morale of personas about to be treated by the vet. It is understandably difficult to muster the courage and faith to trust a doctor that has just hurled a hand grenade into a crowded room. Vets may also be responsible (and this is up to the ref) to certain guilds or associations which may frown upon such violent action. The simple fact is that vets are a non-combat class, and engaging in combat threatens their ability to function as vets.

Comatose Versus *Unconscious*: Players must remember that very few of their refs will hold medical degrees, and the actual DDs of various medical procedures are subject to the arbitrary, perhaps inaccurate, discretion of the ref. In the hopes of avoiding some confusion, the difference between (in game terms) coma and unconsciousness will be covered here.

Any persona whose hit point total is below zero is **comatose**. They are completely devoid of any physical (voluntary or otherwise) action, and will **die** without medical attention. A persona with a non-negative hit point total may also be immobilized. This condition is not due solely to the number of HPs the persona has, but due to circumstance: damage system shock, knock-out gas, blow to the head, etc. *Eventually these unconscious personas will regain consciousness.* Refer to constitution in chapter 3 Attributes, or chapter 13, Health.

Veterinarian Skills: Veterinarians can specialize in certain areas of their profession, and these specializations will offer DD bonuses when PT rolls related to these skills are carried out. For instance a veterinarian with emergency medicine 3 would subtract 3 DDs from her PT roll when attempting **quick fixes**, or attempting to **stabilize** a comatose persona.

The medical skills employed by vets have been picked up from a variety of sources: the local shaman, old husbands' tales, first aid kit manuals, band-aid boxes, and good old trial and error. The performance table Degree of Difficulty list should give some idea of how to handle certain situations, although the persona will need to be innovative in dealing with unusual circumstances. There are several "skills" or talents that all vets have which require some explanation. These are described below.

Quick fixes (DD varies): This skill can repair a persona's physical damage. The medical attention is reflected in returning HPs to a damaged persona. If the PT roll for a 5% quick fix is successful, the patient will get **5% of her maximum** hit points added to her current total. Thus, a player with max HPs of 30 would get "healed" for 2 HPs.

Before more in-depth quick fixes can be attempted (**10%, 15%** and **20%**), the lower ones must be successful. No more than the four listed quick fixes can be attempted. How often a vet can do this is up to the ref, however the persona should not be receiving healing (recovering HPs) more than *once a day*. Conscientious players will record the values of 5%, 10%, 15%, and 20% of their HPs max on their persona record sheets in order to speed up the play of the game.

Subliminal suggestion (MSTR/2 DD): Words can be popped into the minds of unsuspecting victims. Simple commands such as "Don't jump", "Wait", "Give it" may be forced upon the victim. The more reasonable the suggestion, the more likely that it will succeed. There is no save versus a successful PT roll.

Paralyzing pinch (CON/2 DD): The vet applies a crushing grasp to essential vessels and nerves located in the neck. The grip must be held for 0-2 units, and a successful PT roll made at the end of the required time. The vet must first make a successful to hit roll on an unwilling target. If successful, the victim is completely immobilized

Table 8.21: Veterinarian Skills

DIE ROLL	VETERINARIAN SKILL
01-03	Aging
04-06	Anesthesia
07-09	Auditory, hearing
10-12	Burns
13-15	Chiropractic
16-18	Cosmetic surgery
19-21	Dentistry
22-24	Epidimiology
25-27	Forensic medicine
28-30	Genetics
31-33	Infections
34-36	Internal organs
37-39	Mental mutations
40-42	Neurological
43-45	Ophthalmology
46-48	Pathology
49-51	Pediatrics
52-54	Pharmaceuticals
55-57	Pharmacology
58-60	Physical mutations
61-63	Podiatry
64-66	Psionics
67-69	Psychiatry
70-72	Radiation therapy
73-75	Rehabilitation therapy
76-83	Surgery
84-91	Emergency medicine
92-99	Choose one
00	Choose one, roll extra

for one minute, if not the vet is left standing there holding onto the persona's neck. This can be used as a non-pharmaceutical **anaesthetic** by the veterinarian. If the PT roll is successful the target receives no saving throw.

Death pinch (CON + d8 DD): This is the more deadly version of the paralyzing pinch. If the crushing grasp is successful, it will leave the victim with a negative hit point total. How far below zero the victim is depends on the ref, and on the vet's level. The vet must score a to hit roll on unwilling victims, and maintain a neck hold for 0-2 units. It would have to be very drastic circumstances for the vet to have to use this terrible ability.

Vet Experience: Vets gain experience for successful executing of their medical functions, as determined by rolls on their performance table. They earn 70 EXPS per DD. Since vets are a non-combat class, they may only receive **10% of combat experience.** Gaining experience allows for an increase of experience levels. The higher the experience level, the better chance the vet has of having a successful practise in a fashionable part of the universe.

Table 8.22: Vet EXPS

EXPERIENCE POINTS	LEVEL OF EXPERIENCE
0-2300	1
2301-4600	2
4601-9200	3
9201-18400	4
18401-36000	5
36001-65000	6
65001-120000	7
120001-220000	8
220001-430000	9
430001-850000	10
850001-1270000	11
1270001-1695000	12
425000 EXPS per level above 12th.	

References

Of course, no role-playing system, however complex, could hope to present a set list of character classes that would accurately describe all the character types from all the pages of science fiction. Below are listed the best prominent examples of EXP's persona classes. The reader might take issue with some of these examples, but then, that's why you always have the option of sitting down and creating your own versions!

Multi-Class Persona: 'Dr. Buckaroo Banzai' from *The Adventures of Buckaroo Banzai: Across the Eighth Dimension,* Neil Cantor and W.D. Richter (producers), 1984, [film] 20th Century Fox

Biologist: 'Cal' from Omnivore, Piers Anthony, 1968, Ballantine.

Knite: 'Lensmen' from Triplanetary, E. E. Smith, 1948, Fantasy Press.

Mechanic: 'Chief Engineer Montgomery Scott,' from *Star Trek*, 1966-1969 [TV], Paramount Productions.

Mercenary: Bill the Galactic Hero, Harry Harrison, 1965, Doubleday.

Nomad: 'The Fremen' from Dune, Frank Herbert, 1965, Chilton.

Nothing: 'Arthur Dent' in The Hitchhiker's Guide To The Galaxy, Douglas Adams, 1979, Pan.

Spie: 'Jim DiGriz' in The Stainless Steel Rat, Harry Harrison, 1961, Pyramid.

Vet: 'New Jersey' from *The Adventures of Buckaroo Banzai.*

Chapter 9
Combat Tables

Section Three of **EXP** describes in detail the rules and guidelines for resolving **combat** during play. It is recommended that you read Chapter 25, *Introduction to Combat* before attempting to compose any ambitious battles for your players, or before sending your persona into a confusing bloodbath. The whys and wherefores of clashing arms, or tentacles, or fusion grenades is discussed in Section Three.

What you *do* need to know immediately is how to put down on paper the characteristics that determine a persona's combat ability. Chapters 26 and 27 discuss the two combat systems employed by **EXP**. The more complex of these is the **Tactical Combat System**, which attempts to account for factors like **terrain, weapon type** and persona **experience** and how those things affect the outcome of a heated battle. Both the Tactical and **Theatrical** Combat Systems enable the player and referee to simulate anything from vast nuclear exchanges between deep-space dreadnaughts down to personal conflict between two martial artists.

The Tactical Combat System requires some information about the persona and her attributes. The persona's inate physical and mental finnesse will influence how effectively she can wreak destruction on her opponents. In order to make the whole act efficient and playable (and hence, fun), the calculation of combat adjustments is completed during persona generation. Each persona has her own **Combat Table**. The table is organized by weapon type, and for each type gives a value by which the persona's chance of scoring a hit on her target is *increased*.

There are three weapon types that appear on the Combat Table: **A, B** and **C**. A detailed description of these weapons and how they are used appears in Chapter 27 Tactical Combat, and Chapter 28 Weapons. Suffice it to say that Type A weapons are **non-powered thrusting and striking weapons**, Type B are **non-powered projectile weapons** and Type C are **powered weapons.** The distinction between the three types is made because different attributes come into play when determining ability at using the different weapons. For instance, PSTR will obviously have an effect on how well a persona can wield her battle axe, but it will have virtually no effect on her marksmanship with a lazer pistol.

Generating the Combat Table

The important components of the combat table are: **Bonus Proficient (BP), Bonus Non-Proficient (BNP), Maximum Roll (MR),** and **Damage Adjustment (DA).** The player must record each of these values for each weapon type. Weapon types A, B, and C will each have its own BP, BNP, MR, and DA. These 12 values, even if they are zero, should be recorded on a 3 row by 4 column matrix called the combat table. The combat table will be cumbersome at first. Once players become more familiar with the table it will reveal itself as a simple and efficient way to store the persona's combat bonuses.

There are no tables, and no reference charts; simply add the appropriate bonus to the kilodie roll and see if it is higher than the target's armour rating.

An Example Combat Table

	BP	BNP	MR	DA
A	**Thrusting & Striking, Claws**			
B	**Throwing, Spitting, Bows & Slings**			
C	**Powered Weapons**			
	Bonus Proficient, add to "to hit" rolls	Bonus Non-Proficient unskilled attacks	Maximum Roll highest to hit roll possible.	Damage Adjuster add to damage rolls.

Bonus Proficient (BP)

A **bonus** is anything that adds to the chance of success of an attack. All bonuses increase the chance of a to-hit roll being successful because the value is added to the roll. **"Proficient"** indicates that the persona is skilled at using a certain weapon. Proficiency is discussed more thoroughly later in chapter 27. The **BP** is added to any to-hit roll made by the player when her persona is attacking with a weapon she is proficient with. The roll to hit is increased, and thus the persona's chances to inflict damage are increased also.

Attribute Bonuses: Certain weapon types (A, B, or C) are best employed by personas with specific attributes. There is no rule that says a physically weak persona cannot wield a sword, but a physically strong persona will be much more effective.

The attribute bonuses are not specific to each each conceivable weapon in existence, but they are modelled around the weapon types described earlier. The attributes that improve each weapon type are reasonably self explanatory. Some justification of how they improve each weapon type's BP are given.

To calculate the persona's attribute bonus component of the BP refer to Table 9.1, *Attribute To Hit Bonus*. A persona with a high PSTR can increase her chances to hit when attacking with a type A weapon. Type A weapons depend on force to inflict damage. Physically stronger personas can generate greater force which in turn requires less contact to impart damage to the target, hence the chance of hitting is increased. High DEX values increase the persona's ability to hit with **projectile**, or aiming, weapons. Eye-hand co-ordination, range judgement, and balance are the major components of both the DEX attribute, and aiming. Weapon Types B and C are predominantly projectile weapons, and the major component of their attribute bonus is from *dexterity*. When a persona uses type D, E, F, or special weapons the player will use the type C to hit bonus.

Table 9.1: Attribute To Hit Bonus

TYPE A	TYPE B	TYPE C
5xPSTR	2xPSTR	1xPSTR
2xDEX	4xDEX	9xDEX
1.5x(AWE+INT)	1x(AWE+INT)	1x(AWE+INT)
total for type A	total for type B	total for type C

The attribute bonus is the major component of the first level persona's BP. A persona named Bob Too has the following attributes: AWE 10, DEX 16, INT 12, and PSTR 12. According to the *Attribute To Hit Bonus* table, Bob Too's attribute bonuses are calculated below on the *Example Attribute To Hit Bonus* table .

Example Attribute To Hit Bonus

TYPE A	TYPE B	TYPE C
5x12	2x12	1x12
2x16	4x16	9x16
1.5x(10+12)	1x(10+12)	1x(10+12)
type A= 125	type B= 110	type C= 178

Bob Too's player would add 110 to her to-hit roll whenever the persona were using a type B weapon. If any of Bob Too's attributes were to change then her combat table would be altered also. It shouldn't be necessary to recalculate the entire combat table, and simple subtraction from the bonus should be accurate enough. If Bob Too's PSTR were to drop two points, for what ever reason then it should suffice to subtract 10 from the type A BP, 4 from the B BP, and 2 from the type C BP. If the attribute adjustments are only transient then the referee may omit the calculations to ensure playability.

Experience Level and the To Hit Bonus: The BP is contingent on two factors: the persona's attributes, as just described, and **experience level.** These two factors are added to complete the BP for characters as they attain higher levels. At first, low level personas will be dependant mostly on the persona's natural attributes, and not on her experience level. The BP will increase as the persona gains EXPS, and increases her level.

Eventually, the to-hit bonus will be more dependant on the combat experience of the persona than the persona's attributes. This is reflected in an increase of the bonus proficient for each new experience level that the persona advances. The BPs increase incrementally every experience level regardless of the persona's class. Combat classes have a much greater BP increase per level than the non-combat classes.



For each combat situation that the persona survives she earns experience points. EXPS can be earned for carrying out class skills, and the combat classes receive more experience for combat than the other personas. Each experience level represents a higher level of combat experience, and a higher level of expertise in general combat. Chapter 15 provides a detailed explanation of experience, and explains how each class improves its Combat Table statistics with experience.

Bonus Non-Proficient (BNP)

The **BNP** is used for to-hit rolls when the persona is *not* proficient with a particular weapon. How to determine whether a persona is proficient with a certain weapon, or not, is explained in chapter 27, under Proficiency.

Whether or not a persona is proficient in a particular weapon, depends on the player. The weapons that a persona is proficient in are chosen by the player, and are recorded on the persona record sheet. Proficiencies are related to specific weapons, and not weapon types. So a persona could be proficient with a bow, but not with all type B weapons. The BNP is the second of the four columns on the combat table.

When the persona is using a weapon that she is not familiar with the player may only add the Bonus Non-Proficient (BNP) to her to hit roll. The BNP is intimately linked to her BP, and does increase her chance to be successful in combat. However the bonus non-proficient is much less than the bonus proficient, and in lethal personal combat every edge increases the persona's chances of survival.

Calculating the BNP: The BNP is calculated separately for all three of the weapon types. Each BNP is a fraction of the BP for the same weapon type. The values listed on the *Bonus Non-proficient* are percentages. A spie's BNP for a type A weapon would be 25% of her BP for type A weapons. This means that whenever the persona's BP changes so does her BNP. The percentages listed on the Bonus Non-proficient Table are multiplied by the BP to create the BNP. For example, if a first level nomad's BP for weapon Type A were 100, then her BNP would be 15 (100 times .15). When making a roll to-hit with a non-proficient Type B weapon, the player would add 15 to her to hit roll instead of 100. Personas will find themselves using proficient weapons as often as possible.



Table 9.2: Bonus Non-Proficient Percentage

PERSONA CLASS	WEAPON TYPE A	TYPE B	TYPE C
Biologist	00	00	13
Knite	28	20	30
Mechanic	13	10	15
Mercenary	100	100	100
Nomad	15	23	5
Nothing	05	04	10
Spie	25	20	23
Vet	10	10	10
Alien	100	100	100
Robot	0	0	0

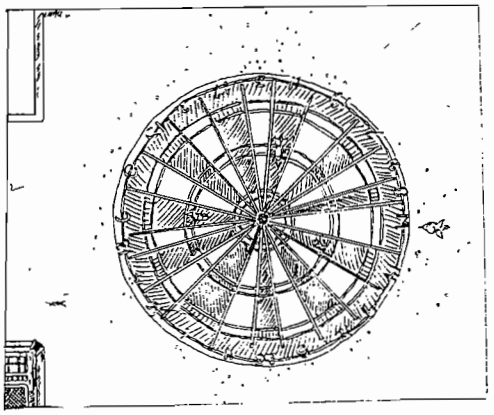
Maximum Roll (MR)

The **maximum roll** is the third column of the combat table. It is simultaneously the most important component and the most frustrating component of the tactical combat table. The maximum roll is the highest to-hit roll that the player can make. If her maximum roll is 894 then anything that she rolls on kilodice that is higher than 894 is announced as 894. If her kilodie roll is 987, plus a BP of 134, her final to hit roll is 894, not 1121.

The MR is directly tied to the persona's BP, and increases with experience levels. Thus the higher the persona's level, the higher the maximum roll, and the more that she is capable of scoring a hit on. To calculate the persona's maximum roll refer to the Maximum Roll Table. The player adds her persona's bonus proficient to the base MR for each of the weapon types. That is her persona's MR for that weapon type regardless of whether she is using her BP or BNP.

Table 9.3: Maximum Roll

WEAPON TYPE	MAXIMUM ROLL (MR)
A	625 + BP for type A
B	650 + BP for type B
C	675 + BP for type C



If a veterinarian persona has a BP of 95 for type A weapons, her maximum roll for type A weapons would be 720. Any to hit roll that the player made for type A weapons could be no higher than 720. The MR is calculated for all three weapon types, and applies to any weapon in that category, be it proficient, non-proficient, or skilled (only mercenaries have weapon skills). If the same veterinarian's BP were to increase to 106 then her MR would increase to 731, and any to hit roll greater than 731 would be announced as 731.

Damage Adjustment (DA)

Damage adjustments are made for any non-powered attack that the persona uses. A stronger persona could generate more killing forces, more damage, than a weaker persona when using a weapon that depends on PSTR for damage.

The damage adjustment is the last column of the combat table. The DA represents the affect of physical strength on non-powered weapons. *Damage adjustment only applies to type A and type B weapons.* There is no damage adjustment for type C weapons because these are powered weapons, and the PSTR of the attacker does not affect the damage inflicted.

Type A weapons have a DA equal to the persona's PSTR. Any persona attacking with a type A weapon can add a number of HPS in damage equal to their PSTR. If a persona with an 11 PSTR were to hit with a long sword she would add 11 HPS to her d8 damage roll. Type B weapons are less dependant on PSTR, and only add one half the persona's PSTR when they inflict damage. If the same persona hit with a throwing dagger she would increase her damage by 6 HPS. Consult the *Damage Adjustment* table for more information.

Table 9.4: Damage Adjustment

WEAPON TYPE	DAMAGE ADJUSTMENT
A	DA = PSTR
B	DA = 1/2 PSTR
C	no DA

Initial Proficiencies

"Proficient" means that the persona can use the design of a weapon so that it aids her in combat. Proficiency is more akin to weapon *familiarity* than it is to weapon *skill*. It allows the persona to hit with the edge of a sword, use the full leverage of a pike, and point a gun in the right direction. Each single proficiency refers to a single weapon. Thus a persona that can have 3 proficiencies can choose 3 specific weapons that she is proficient in. If a persona is proficient in a weapon it means that her player can add the BP to any to hit rolls that she makes. Proficiency does not increase the persona's ability to score a hit by increasing her bonus proficient, but it allows the player to add her entire BP to any to hit rolls that she makes.

Acquiring Proficiency: Personas are not automatically proficient in all weapon types, and they must choose them carefully. For example, being proficient with a lazer may be really fun until its batteries run out, and in the long run a crossbow proficiency may have been a better choice. What weapons a persona is proficient in is completely determined by the player. Weapon proficiencies need not be chosen all at the same time, and the player can wait until the right weapon for her persona comes along.

The number of weapons that a persona can be proficient in is limited, and is dependant on her class. Combat classes start with more proficiencies and learn new ones faster, while non-combat class personas will become proficient in very few weapons.

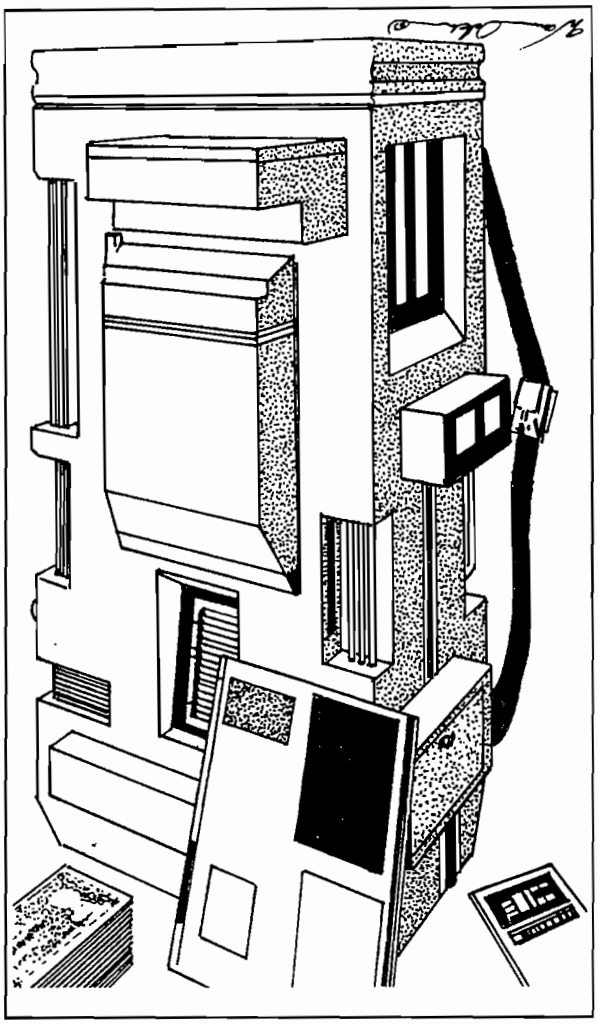
Each persona has an initial number of proficiencies when she starts at first level. The number of proficiencies is determined on Table 9.5, *Weapon Proficiency*. Each proficiency represents familiarity with one particular weapon. According to this table a nomad could be proficient in up to three powered (type C weapons), and three non-powered weapons (types A, and B) at first level. She does not have to choose all three of these proficiencies in first level, and in the case of type C weapons the persona may not even encounter them.

Table 9.5: Weapon Proficiency

	WEAPON TYPES A & B		WEAPON TYPE C	
	INITIAL # of PROFICIENCIES	ONE MORE AT LEVELS	INITIAL # of PROFICIENCIES	ONE MORE AT LEVELS
Biologist	1	3, 6, 9, 12	1	5, 10, 15, 20
Knite	2	2, 4, 6, 8, 10	2	2, 4, 6, 8, 10
Mechanic	2	3, 6, 9, 12	2	4, 8, 12, 16
Mercenary	-	As needed	-	As needed
Nomad	3	3, 6, 9, 12	3	2, 4, 6, 8, 10
Nothing	1	None	1	None
Spie	2	2, 4, 6, 8, 10	2	2, 4, 6, 8, 10
Vet	1	4, 8, 12, 16	1	5, 10, 15, 20
Alien*	None	None	None	None
Robot*	None	None	None	None

*If class skilled use the class proficiency.

Chapter 10
Incidentals



The **incidentals** chapter includes several things that are needed to complete a persona, but are not substantial enough to warrant their own chapters. The subjects in this chapter have very cursory explanations. Detailed explanations are omitted so that specific interpretations are not foisted onto a campaign. Nothing in here is a hard and fast rule—nothing in this *book* is for that matter.

This chapter has the potential to remove some of the imagination from persona creation. If the referee requires that all PSHs have grey eyes in her campaign, then ignore **persona appearance** in this chapter. If iron products do not exist in her milieu then omit iron products from the **equipment lists.**

The incidentals chapter is divided into two distinct categories, the **material** and the **immaterial**. The material part consists of condiments such as **money** and **toys.** The immaterial part helps the player define her persona's **appearance, history,** and **personality.**

Material

Start money: Personas get a certain amount of start up funds. These monies are usually enough for the persona to equip herself. If the money isn't enough to equip the persona, then it acts as an excellent incentive to go exploring. Money is covered in greater detail in chapter 23, *Money*. All players make a roll on the *Persona Money* table according to their persona's class. If the personas are living in a fully functional society, a roll in the Treasure chapter (chapter 53) may be more appropriate.

Table 10.1: Persona Money

PERSONA CLASS	START MONEY(eps)
Biologist	10-100
Knite	1-20 gps
Mechanic	4-400
Mercenary	40-160
Nomad	0-5 gps
Nothing	See class
Spie	5-250
Veterinarian	3-300
Alien	None
Robot	None

Start Toys: **Toys** are special equipment generated on the **Technological ObjectYield System**. The toy system is found in chapter 41, *Outline of Toys*. This system is notorious for countless deci-dice rolls that produce nothing more than a non-descript black box. The same dice rolling could just as easily generate the persona a **space-vehicle**.

How many toys a persona can start the campaign with depends in part on her rolls, and in part on her class. If the player rolls **random junke**, it doesn't count as a roll, and if the persona gets a toy related to her class *she must stop rolling*. The most toys a persona can get is three. So each persona can expect to get between 1 and 3 toys, with a sprinkling of random junk in between.

Start equipment: If the referee permits, the expedition may start the campaign with a supply of equipment. This equipment will be of the mundane low tech variety, and does not include the types of toys found in the Technology part of this book.

High tech mundane equipment functions the same as low tech equipment except that high tech equipment is lighter, and costs more. The wates and costs of equipment are listed in kg and electrum pieces. The **Mundane Equipment Lists** are found in chapter 24, Equipment Costs. The effect of equipment wate is covered in chapter 18, Encumbrance, and the value of money is discussed in chapter 23.

The equipment lists are divided into groups that make equipment purchase easier. Example groupings include **Armour, Type A Weapons**, and **Miscellaneous Equipment**. A complete equipment list should be included on the persona record sheet. The persona's equipment list can be quite important for role-playing. How does a persona spike a door without spikes? What do personas eat if they cannot hunt? How do they start a fire to cook with? How do they carry water? These questions, and more, are easily answered by the persona's equipment list.

In order to save the player the effort of pouring over the equipment lists, and possibly making a fatal error, a **basic survival pack** is included in the equipment lists. This pack supplies all the necessary survival equipment for a flat cost.

Robots and Aliens: Robots and aliens receive none of the start up particulars that humanoids do. They must fend for themselves, using their natural, or mechanical, abilities to survive. This means that bots and aliens do not get to roll start up money, or start up toys, and they cannot use start up equipment. There are exceptions though. Any bot or alien persona with a persona class (androids, or highly intelligent aliens) may use mundane equipment, however they must obtain it through avenues pre-determined by the referee.

Immaterial

Persona appearance: There are no tables for determining persona appearance like there are ones for referee persona appearance. The looks of the persona are determined by her race, and the descriptive species chosen by the player. How a persona dresses, what jewelry she wears, her fur colouring, beak shape, and eye colour are chosen by the player.

Players with robot personas have the option of describing themselves or using the **robot shape tables**. The tables are present to accommodate referees, and unimaginative players. Combots

may look ferocious, and relation bots may look friendly.

Aliens must randomly determine their appearance on the *Alien Appearance* table because their movement rate is determined from their description. Alien size and Wate must be randomly determined in that chapter.

Detailed aspects of the persona's description will very rarely come into play. Unless the expedition manages to get into trouble with the local law, things like hair (fur) colour, eye colour, skin (scale) colour, and distinguishing features (horns, antennae) will be of little significance. Players should remember that in most campaigns bots and aliens are very rare, and a detailed description of them may be no more elaborate than 'bot', or 'creature'.

Persona History: The history of the persona should be developed during the campaign. Pre-campaign history is determined by class, race, and maybe place of birth. Place of birth depends heavily on the campaign of the referee, and may be determined by race, class, or random rolls. For example, **ursidae** may come from the cold mountains, **humanoids** may habit a local tropical forest, while **robots** may not even know why they were built.

Social standing is generated on a kilo-die (d1000) roll. This social standing can be altered drastically by the persona's actions during the campaign. A complete explanation of social standing is found under Nothings in chapter 8.

The pre-campaign history of the personas, or maybe just the expedition, is usually used by the referee to brief the players on the milieu in which they must survive. From that point on, the players control the destiny of their personas, and the referee supplies the milieu in which they create their own history.

Persona personality: Both description and history are merely the basis for the most important part of the persona, her personality. The personality of the persona is likely to differ from the player's, although what the player believes will greatly affect the actions of her persona. The persona may exude extroverted traits like distrust of veterinarians, abject fear of reptilians, compulsive desire for battle, or overwhelming worry about present predicament, but these are all injected by the player. How constant the persona's personality is doesn't really matter, because most players will find themselves switching from trusting to paranoid in an instant. The most important factor is that if the persona has some particular point of view then the player can have fun by exercising it.

Persona Name: The player *must* name her persona. Of all the components of her description she must ensure that her persona has a monicker. Using her persona's instead of her own when role-playing makes the whole fantasy more real and more fun.

A mechanic could be called 'Hans Tinker,' a mercenary called 'Hans Grenade,' a sensitive nothing called 'Hans Ophe.' A robot could be called 'QT,' Sybilarium, Quilt,' or 'Robert Ott.' Aliens can call themselves anything that they want.

I

Chapter 11
Referee Personas

A Referee Persona (or RP) is any persona—alien, bot, or anthropomorph—that is not run by a player. Anything not run by a player must be brought to life by the referee. Any entity the ref controls is essentially an RP of one type or another, and only the degree of the referee's involvement varies. The referee is responsible for controlling the planetary denizens that wander about on uncharted planets, and she is also responsible for portraying the personas that may join the expedition in their campaign. The difference in preparation of these two examples is enormous yet they both fall under the category of referee personas.

Referee Role-Playing

It is the responsibility of the ref to role-play RPs to the best of her ability. For example, intelligent aliens must seem, and act, intelligently; nomads must never sleep in a bed if it can be avoided; anti-knites must be absolutely ruthless, sparing no personas in their path; aliens must be alien in personality as well as structure; robots do not have facial expressions, or body language.

Presenting these sorts of character identities is the responsibility of the ref. Referees must be as diligent in ensuring the uniqueness of the various personas as they are in ensuring the originality of their scenarios. They must be prepared for a form of controlled schizophrenia, as it may be necessary to switch from one RP to another in an instant.

Limiting Referee Personas

Referees cannot expect of themselves repeated brilliant performances, of wholly unique personas, nor will the players always notice, or appreciate, such displays. The players are there to role-play and have fun, and the referee is there to role-play and have fun too. It is also the referee's job to ensure that precious game time is shared between personas and referee personas.



To be more blunt, referee's have to be egotistical attention seekers (or they wouldn't be referees), *and* they must ensure that they don't take over the show and bore the rest of the players. (Enough of this referee-player pseudo-psychological investigation!)

Referee Detachment

Regardless of the involvement of a referee with her RP, she cannot afford to get attached to her personas like the players do. RPs may serve no purpose other than cannon fodder, they may depart the

scenario at any time, either violently, or by choosing a separate path from the expedition. Often referee personas will simply be dispatched by paranoid players. Regardless of the importance of a referee persona, the referee must be ready to part with them at any moment, because they will always end up on the referee persona scrap heap.

Generating a Referee Persona

An RP includes all the components a persona does, plus a few more. An RP is expected to have **experience levels,** and a collection of **toys**. A simple system is given to randomly determine a RP's type, attributes, class, level, personality, etc. The system is outlined in the *Referee Persona Checklist*. Most often the ref will have some idea of what kind of an RP is desired. This system can be used to supply some (or all) of the information which the ref has not already decided on.

Table 11.1: Referee Persona Checklist

1) Create an **origin, presence,** and **goal** 2) Choose an RP **type** 2a) Aliens 2b) Anthropomorphs 2c) Robots
3) Determine its **class** 4) Determine its **level**
5) Determine its **age** 6) Generate its **combat table**
7) Determine its **equipment** 8) Generate some **qualities**
9) Calculate its **combat ratio** 9a) Alien combat ratio 9b) Humanoid combat ratio 9c) Robot combat ratio 10) Name referee persona

1) Origin, Presence and Goal

As previously stated referee personas can have a wide degree of involvement in a campaign, or with an expedition. All referee personas must have an origin, presence and a goal. The **origin** of an RP should explain where it came from and why it thinks the way it does. The **presence** of the RP will dictate how, and why, it interacts with the expedition. The **goal** of an RP is what it wants from the campaign, dictating what it will do with the expedition, and when it will part company.

For 95% of the RPs the expedition will encounter, the Trinity of the RP (origin, presence and goal) will be pre-determined. Referee personas such as innocent civilians and animals will have simplistic origins, such as migrating through the area, or on their way to work. Their presence might be riding on the subway, or rummaging through the bushes. Their goal may be to find some berries to eat, or to get to work on time. If the expedition impinges on such unimportant referee personas the referee need have no more prepared than what was just described.

If the persona is a more involved one, and will be spending more time with the expedition then the referee must have a more detailed origin, presence and goal. Let's consider a young man from the farming district of his impoverished planet (origin), is willing to hire on for the expedition as a porter (presence), if they will take him off planet (goal). Another RP could be a very hungry alien that just jumped out of a tree (origin), and is ferociously attacking the expedition (presence), because the alien's hungry and the expedition members look like something good to eat (goal).

Other RPs may have much more complex origins, presences, and goals. Vishna Shraloor is an referee persona with death field generation (a mental mutation). She matured not knowing that this lethal power was within her. She grew up through a series of profound personal tragedies. The death of her parents, the death of ambulance attendants, the death of mourning relatives, the death of her playmates, the death of social workers, the death of foster parents. Many of these deaths

may have been caused by her misunderstood mental ability. That is her sad origin.

Her presence is one of a lonely unhappy persona who constantly associates with persons she does not like because people still frequently die around her. Her profession is that of a orbital satellite repair person, a solitary job for certain. She has chosen to hang around with the expedition because she does not particularly like them much. This is her presence.

Her goals are varied. She would like to destroy the society that has rejected her so totally, and she sees the expedition's mentality as something that she can exploit to this end. If an expedition member should happen to befriend her, show her the nature of her mutation, and nurse her through the subsequent guilt she may follow another path, and desire to help the society that continued to reach out to her despite their extreme risk. These are her potential goals.

This chapter provides no guidelines on preparing an origin or goal for the referee's personas, but it does help with the presence of the RP. In fact this chapter could be considered a guide on how to prepare RP presence. If the ref knows that she needs RPs, but has no origins or goals, then it might help to create the persona presence first. This is an excellent procedure for sparking the imagination, or solidifying an watery idea.

2) Referee Persona Type

The **type** of RP chosen by the referee should be pre-determined by the nature of the campaign that she is running. This should also dictate the depth of persona development required. There are three persona types that the referee can choose from. As a rule the most frequently chosen will be that of *anthropomorphs*. **EXP** is a humano-centric game in that the rules are best suited for play by upright, bipedal, anthropomorph personas. The other two distinct RP types are aliens and robots. Highly developed alien and robot personas will be extremely rare, but this depends on the ref's milieu.

The referee should know exactly what type of persona she wants, and the RP creation system should be used to flesh out this pre-cast persona. If, and only if, the referee is completely and utterly stumped should she refer to the *Referee Persona Type* table.

Table 11.2: Referee Persona Type

DIE ROLL	PERSONA TYPE
01-15	Alien
16-85	Anthropomorph
86-99	Robot
00	Other

2a) Alien Referee Personas

When a referee is creating an alien RP encounter she must keep in mind that she is creating an entire alien **species**. Aliens don't merely exist unto themselves as a singular entity, but are components of a species as are the humanoid races. Alien species are generated by the referee either to supply background and interest to a campaign, or to provide the primary focus and/or conflict around which to design a campaign. The reason the aliens are referred to as species and not races is because they can be unsophisticated animals of an unexplored world, or highly developed conquering alien hordes.

There is always the possibility that an alien is the singular creation of a biological research laboratory gone civilized, or some other such cloning cliche. Whether the alien is singular in existence, or a member of a species the referee should have it properly prepared.

Generating the Alien: The basic RP alien is generated in chapter 6, Aliens. In that chapter the referee should record all the pertinent information about the alien created. For RP aliens details, like: whether they are tool users, or educated, are very important. Referee persona **qualities** (8) only apply to an alien RP if it expresses a civilized or tool using nature. The communication method used between the alien and the expedition is determined by the referee.

Refs should create their own aliens. Aliens custom-designed by the referee are certain to fit into the campaign, or terrain, that they were designated for. Creating original aliens eliminates the problem of finding that perfect creature necessary for the moment. The alien generation system creates basic creatures that do not have a place in any existing food chain, pre-designed environment, or social system. All these important points that make an alien race more realistic are left to the ref to design around the generated race. Many referees will discover that rolling up aliens will almost certainly jog their imaginations.

Alien RP Attributes: Not every referee wants their aliens to have the attribute ranges listed in the alien persona chapter. Often a referee will want a small alien, or a dumb alien, or a slow alien, or even a dumb, slow, small alien.

For special attributes for special aliens refer to Table 11.3, *Alien RP Attributes*. The corresponding alien adjectives, such as tough, strong, smart, are not included, and when desired regular alien attribute generation should suffice. Alien HPS should be recalculated for every alien encountered as suggested under *Alien HPS* in chapter 6.

Table 11.3: Alien RP Attributes

Alien Specific	Attribute Affected	Die Roll	Specific Range
Unaware	AWE	d6	1 to 6
Ugly	CHA	d12-6	-5 to 6
Wimpy	CON	d8	1 to 8
Slow	DEX	d8	1 to 8
Dumb	INT	d6	1 to 6
Docile	MSTR	d6	1 to 6
Weak	PSTR	d8	1 to 8
Little	SIZE	-30 on Alien Size Table roll	
Big	SIZE	+20 on Alien Size Table roll	

Special Alien RP Sizes: Any alien that is Tiny may be Minute instead. There is a 1 in 6 chance of a tiny alien being minute. Minute aliens are very small, and cannot be reasonably run by a player, but can be introduced by a referee.

Minute aliens have a Wate of 1 to 1000 grams (d1000), no minute alien will have a Wate greater than a kilogram. The minute size is generated the same as a tiny alien, and is similar in most respects. Minute aliens have half the HPS that were rolled for the corresponding tiny alien, and PSTR is reduced to one quarter that of the tiny alien's. All other attributes and measurements remain the same.

Any alien that is **Gigantic** may be **Humongus** instead. There is a **1 in 6** chance that a gigantic alien is humongus. Humongus aliens have a Wate of 6 to 300 tonnes (6d50). Such aliens are impossible for a player to run, but can be introduced by the referee. None of the Humongus alien's attributes are different from those of the corresponding gigantic alien.

2b) Anthropomorph Referee Personas

Anthropomorph RPs will be the most common type that the referee will introduce to the expedition. Such RPs can vary from altruistic veterinarians that are placing themselves at risk to heal the expedition to ruthless anti-knites that are using the expedition as a disposable tool in their quest for universal chaos.

Other RPs will be mere colourful campaign descriptors like meaningless civilians that clog slide walks, or mutant markets. Such humanoid referee personas should require no more personification than an accented voice, or a marker on the table. If it is the poor innocent civilian's misfortune to happen upon the expedition during a combat situation then a little more preparation is required.

Sidewalk Civilians: These are the **unprepared** personas that simply fill the streets of a city, village or spacecraft in an effort to describe a crowd. Such personas will generally have no more than 12 HPs, no weapons, and no combat table. Any civilian attributes that are required are rolled as needed, are usually need not be recorded. If the ref is suspicious of the expedition's intentions when entering a civilian area, she may generate several sets of attributes for those exceptional civilians that are capable of defending themselves.

True Referee Personas: In those instances where the expedition comes across a **true** RP, the ref must be fully prepared with: attributes, race, mutations, class, level, personality and equipment. There is no telling what will be required of the persona once it is introduced to the expedition. These are the referee personas where the ref must have a reasonably detailed origin, presence and goal.

Most referees will be reading this chapter already knowing exactly what they want to create, and the data here will supply a guideline. For instance she may need a knite to give the indication that one of the personas is ready to ascend, she may need a veterinarian to help the expedition stay healthy, or she may even need a spie to track them down to settle some score that has been left unbalanced.

The largest source of detailed humanoid RPs is the **persona morgue**. These are ready-made RPs, that may even include a personality. It is not recommended that the ref directly plagiarize a player's old persona, but merely use it for inspiration.

Anthropomorph race: The referee may not be certain which anthropomorph race she wants her RP to have. This can be determined on Table 11.4, *Anthropomorph RP Race* . Regardless of whether the race was predetermined, or randomly generated there are other factors that she must consider.

The referee must choose a **decorative subspecies** for the persona. Florians may be petunias or fungi; Insectoids may be ants, spiders, or manti; and so on. The available choices of subspecies are so extensive that no tables have been prepared, and the ref must choose the decorative subspecies on her own.

Also pending on the race roll are: hite, wate and mutations. Each race's hite equation, and base wate is listed on the *Anthroporph RP Race* table for convenience. The explanation of these values are detailed in chapter 4, Anthropomorphs. Also included on the table are the mutation frequencies for each race. These are included for convenience, if more information is needed see chapter 7, Mutations.

The sex of an RP is chosen randomly (**1-3, female; 4-6, male**).

Anthropomorph race attributes: Any attributes not given special racial or class ranges are rolled on 4d6, *where the lowest valued die is not included in the total.* For example, 4, 6, 6 and 6 would total 18, and not 22 (disregard the 4). Once all of the attributes are determined, the referee must refer to chapter 3, Attributes, and record movement rates, wate allowances, and other pertinent attribute data.

To ensure that RPs meet the attribute requirements of their races, there are some special attribute rolls that must be made. E.g., an avarian must have an AWE of at least 12, and a feline must have a DEX of at least 13. Therefore any RP that is a avarian will have an AWE range of 13-24. There are other attribute ranges which ensure mechanics

Table 11.4: Anthropomorph PR Race

DIE ROLL	PERSONA RACE	BASE HITE(cm)	BASE WATE(kg)	MUTATIONS CHANCE: MENTAL	PHYSICAL
01-03	Aquarian	150+(6d20)-50	60	10	3
04-10	Avarian	175+(3d20)-40	71	7	5
11-25	Canine	150+(d12-8)	48	22	25
26-30	Equine	186+(2d20)-20	81	8	8
31-34	Feline	150+(d20)-9	45	10	10
35-44	Florian	165+(2d20)-30	50	7	7
45-65	Humanoid	169+(2d20)-20	62	18	23
66-72	Insectoid	150+(8d20)-40	55	23	—
73-79	PSH	169+(2d20)-20	62	3	—
80-84	Reptilian	165+(3d20)-30	50	8	8
85-93	Rodentia	175+(2d20)-20	71	6	11
94-00	Ursidae	208+(2d20)-20	139	13	15

I

are smart, ursidae are strong, felines are dextrous, etc. If the persona has an attribute designated "special" by both race, and class, the higher of the two rolls should be recorded. To determine which attributes have designated ranges for a specified race refer to Table 11.5, *Anthropomorph RP Race Attributes.*

If the RP still does not meet class, or racial, requirements, remember: RPs are assumed to have a origin of some sort, and those missing the required attributes may have originally been nothings, or lost the attribute points during some traumatic part of their origin. If the referee feels that RPs must have the required attributes for their class, the offending attributes may be re-rolled. Remember that racial attribute requirements only apply to personas while rolling up, and any attribute changes that subsequently occur cannot force a persona from her race.

Table 11.5: Anthropomorph RP Race Attributes

RP RACE	SPECIAL ATTRIBUTE	ATTRIBUTE SCORE
Avarian	AWE	12 + d12
Feline	DEX	12 + d12
Rodent	CHA or 6 ≤ CHA ≤ d10	12 + d8
P.S.H.	CHA	12 + d8
Reptilian	MSTR	12 + d6
Ursidae	PSTR	14 + d10

2c) Robot Referee Personas

If the referee is at a loss for determining what kind of robot to introduce to the expedition her best bet is to generate a robot persona, and play it as a RP robot. Chapter 5is dedicated to the creation of robot personas, and the majority of the RP robot will be developed there. The referee must remember to return to this chapter in order to give the robot pertinent RP details like EXPS level, and persona qualities.

Selecting a Robot Type: Often the referee desires a certain robotic type for an RP. For instance, a collection of insane janitorial bots might be needed, and heavy offensive combat robots would not suit the scenario. The difficulty with this is that the *Robot Type Determination* table (found in chapter 5) does not easily lend itself to reverse use. Table 11.6, *Robot RP Attribute Level,* is designed so that the referee can choose a type of robot, and then continue on with the process of generating a robot.

The *Robot RP Attribute Level* able is not at all self explanatory. The referee must look along the row that corresponds with the type of RP robot that she desires. The numbers listed under each attribute give the level for that robot type for that attribute. Attribute levels are also explained in detail in chapter 5.

If the referee wanted to have an emergency rescue robot save the expedition from a toxic spill, or a fire, she would get the following data from the table. The bot's CON level is 4, a single digit indicating that this is the only CON level available. For a DEX level the value is (22 + d3). When there is an equation listed in brackets the robot's attribute is generated with that value. The rescue bot's DEX would be between 23 and 25. For INT level there are a range of levels available: 2-3. This indicates that the referee must randomly choose between the two values. A d2 would determine the rescue bot's INT level. Lastly is PSTR level. Listed there is a 1/3 this means that the PSTR level can be 1 **or** 3, but does not include 2.



3) Referee Persona Class

The RP persona class table should only be used for those RPs that can pursue a class. Not all aliens can pursue a class, and very few robots have class skills. This dialogue is mainly included for humanoid RPs which are created mostly for their class skills. The humanoid persona's most important factor will be her class. The nature of classes is discussed in chapter 8, Classes. The *RP Class* table is included for those instances where the referee cannot decide what class she wishes her referee persona to have. Once the class is determined, the rest of the persona should be generated before referring to the class description in chapter 8.

Multi-class personas simply roll as often as the dice indicate. If the same persona class is rolled twice then the experience levels, determined later,

Table 11.6: Robot RP Attribute Level

DIE ROLL	ROBOT TYPE	CON LEVEL	DEX LEVEL	INT LEVEL	PSTR LEVEL
01-07	A Analog	1-2	1-2	4	1-2
08-14	B Hobbot	1	1	3-4	1
15-21	C Industrial	1-4	2-3	1-2	4
22-28	D Relations	1-2	1-2	3-4	1
	E Janitorial				
29-35	Domestic	1	1-2	2	1
36-39	Industrial	1	1-2	1	2
	F Explorations				
40-33	Planetary	4	2	1	3
34-36	Extra-plan.	4	2	4	3
	G Combat				
37-39	Expendable	2	3	1	4
40-42	Defensive	(19 + d6)	3	1/3	4
43	Offen., lite	(18 + d6)	(14 + d10)	1/3	4
44	Offen., Heavy	(22 + d3)	3	1/3	4
	H Police				
45-48	Riot	(14 + d6)	3	3	3
49-55	Civilian.	3	3	3	3
56-59	Special ops	3	3	(14 + d6)	3
	I Medical				
60-66	Diagnostic	1-2	3-4	3-4	1
67-70	Cosmetic.	1-2	(22 + d3)	3	1
71-74	Surgical	3	4	(22 + d3)	1
	J Emergency				
75-78	Rescue.	4	(22 + d3)	2-3	1/3
79-82	Spillage	4	2	2-3	1/3
83-89	K Maintenance	1-2	2-3	2-4	1
90-95	L Transport	1	1/4	1/4	1
96-00	M Android	4	4	4	4

are added together. There is no limit, other than realistic probability, to the number of classes that a referee persona can have. The first roll on multi-class will indicate that the referee will roll twice, and any further rolls on multi-class will indicate another roll. Knites cannot be multi-classed.

Class Attributes: Any attributes not given special racial or class ranges are rolled on 4d6, where the lowest valued die is not included in the total. For example, 4, 6, 6 and 6 would total 18, and not 22 (disregard the 4). Once all of the attributes are determined, the referee must refer to chapter 5, Attributes, and record movement rates, wate allowances, and other pertinent attribute data.

To ensure that RPs meet the attribute requirements of their classes and races, there are some special attribute rolls that must be made. E.g., a knite must have an MSTR of at least 18, and a DEX of at least 15. Therefore any RP that is a knite rolls MSTR from 18-25, and DEX from 15-20. There are also attribute adjustments that ensure mechanics are smart, ursidae are strong, felines are dextrous, etc. If the player should have an attribute designated "special" by both race, and class, the higher of the two rolls should be recorded. Multi-class RPs will only receive class attribute ranges for the first class that they roll.

4) Experience Level of RP

An RP's EXPS level is chosen randomly, on the *RP Experience Level* table, and functions, in all respects, the same as a regular persona's. If the RP's class should happen to be a nothing the experience level will represent the number of rolls she is entitled to in chapter 53, Treasure.

If exact experience point totals should become important a RP is considered to be halfway to their next experience level. If an RP is spending considerable time with the expedition there is no reason why her EXPS level cannot increase along with the other personas. Referee personas earn experience points as would any other persona, except that they cannot receive role-playing EXPS.

Multi-class personas roll EXPS level for each class that they have. An RP could be a 4th level

Table 11.7: Referee Persona Class

DIE ROLL	PERSONA CLASS
01-15	Biologist
16-17	Knite
18-32	Mechanic
33-47	Mercenary
48-62	Nomad
63-78	Nothing
79-83	Spie
84-98	Veterinarian
99-00	Multi-class

Table 11.8: Class Attributes

RP CLASS	SPECIAL ATTRIBUTE	ATTRIBUTE SCORE
Knite	MSTR	17+d8
	DEX	14+d6
Mechanic	INT	12+d12
Mercenary	HPS	40+d6 per EXPS level
Spie	AWE	12+d6
	INT	12+d6
	DEX	12+d6
	CON	12+d6
Veterinarian	CHA	12+d8
	INT	10+d8

mechanic and a 2nd level veterinarian. If the multi-classes are the same then the RP could be a 7th level biologist, and a 5th level biologist, making her a 12th level biologist.

Table 11.9: RP Level

DIE ROLL	PERSONA LEVEL
01-09	One
10-29	Two
30-49	Three
50-64	Four
65-74	Five
75-82	Six
83-88	Seven
89-92	Eight
93-97	Nine
98-99	Ten
00	Other

5) Referee Persona Age

The **age** of a referee persona can be determined on the Table 11.10, *RP Age*. Each alien species has its own life-span table that is calculated when the alien is created. A record of the alien's life-span should be recorded along with other vital data. The *RP Age* table indicates the age range in which the referee should roll on Table 11.11, *Anthropomorph Age*. The effects of aging for all personas is discussed in chapter 13, Health.

Robots have an age like other personas, but because their mechanical systems don't have as severe a form of planned obsolescence as biological ones the effect of aging is inconsequential. The *RP Age* table for robots is purely in jest. A robot's age should depend on the age of the technology it was created in. A simple rule could be 1 to 1000 years old.

Level and Age: When using the *RP Age* table +2 should be added to the die roll for every level of experience that the RP has. For example, a 5th level mercenary would have to at least be an adolescent (+10% added to the roll). The die roll adjustment cannot exceed 15% for the combat classes (knite, mercenary, nomad, and spie). It is strongly recommended that the referee choose the age category of anthropomorph RPs. It is very implausible that aged mercenaries would be romping around the universe.

Determining Age: If a referee were to roll 54 on the age table when generating an anthropomorph RP, the referee persona would be an adult. If it were an adult **avarian** the persona's age would be between 17 and 36. Rolling 11 on the d20 gives the adult avarian an age of 27 years. A child avarian would have an age between 1 and 12 years, and an aged avarian an age between 67 and 72 years.

Table 11.10: RP Age

DIE ROLL	BIOLOGIC AGE	ROBOTIC AGE
01-05	Child	Newly manufactured
06-15	Adolescent	Un-packaged
16-65	Adult	Broken in
66-90	Older	Past warranty
91-99	Aged	Beyond maintenance
00	Other	

Effects of Aging: The attribute adjustments for RP age are cumulative. A child would add 4 to her CHA, while an adolescent would subtract 1. An older persona would subtract 2 from her PSTR while an adult PSTR is unaffected. All of the attributes, except INT, are balanced at adult. For more information about aging and personas refer to chapter 13, Health.

Table 11.11: Anthropomorph RP Age

RP RACE	AGE CATEGORY Child	Adolescent	Adult	Older	Aged
Aquarian	1-4	4 + d50	54 + d50	104 + d10	114 + d6
Avarian	1-12	12 + d4	16 + d20	36 + d30	66 + d6
Canine	1-4	4 + d20	24 + d20	44 + d20	64 + d6
Equine	0-9	9 + d20	29 + d20	49 + d50	99 + d6
Feline	1-4	4 + d20	24 + d20	44 + d20	64 + d6
Florian	1-20	20 + d50	70 + d20	90 + d20	110 + d6
Humanoid	1-12	12 + d8	20 + d20	40 + d50	90 + d6
Insectoid	1-20	20 + d20	40 + d20	60 + d20	80 + d6
PSH	1-12	12 + d8	20 + d20	40 + d50	90 + d6
Reptilian	1-20	20 + d50	70 + d50	120 + d50	170 + d6
Rodentia	1-4	4 + d50	54 + d10	64 + d20	84 + d6
Ursidae	1-8	8 + d6	14 + d50	64 + d20	84 + d6

6) Referee Persona Combat Table

The **RP combat table** is calculated the same as any other persona's combat table. Aliens use their natural attack table if they have no class abilities. Anthropomorphs and class skilled aliens use the combat table described in chapter 27, Tactical Combat. Robots have their own combat table regardless of whether they are class skilled or not. The robotic combat table is described in chapter 31, Robotic Combat. The referee may wish to simplify her RP combat tables to increase the speed of combat. It is assumed that the referee will be ethical, and round the RP combat tables (CTs) down.

7) Referee Persona Equipment

Referee personas do carry equipment: they should be supplied with food, survival equipment, and funds. What the referee persona is carrying as survival equipment will vary from terrain to terrain. These personas are also assumed to have collected **artifacts** throughout their travels.

RPs get one roll on the Toy Table (chapter 41) for every experience level--this includes multi-class levels. Treasure does not count as a roll, so RPs can accumulate considerable wealth in addition to their personal collection of artifacts.

Table 11.12: Age Effects on Attributes

AGE CATEG.	ATTRIBUTE EFFECT AWE	CHA	CON	DEX	INT	MSTR	PSTR
Child	-1	+4	-3	+2	-2	-4	-3
Adolescent	+1	-5	+2	-3	-1	-2	+2
Adult		+1	+1	+1	+1	+2	+1
Older	-1	0	-2	-2	+2	+2	-2
Aged	-2	0	-3	-4	+1	+1	-4

Nothing RPs do not get a roll on the Toy Table, but they do get additional treasure rolls. This tends to make RP nothings tremendously wealthy. If the referee desires impoverished nothings she can save herself a whole lot of rolling in the Treasure chapter, chapter 53. Nothings RPs also receive their complimentary one piece of **miscellaneous equipment.**

8) Referee Persona Qualities

An RP does not consist solely of a group of attributes, and some toys. They are expected to have all the personal qualities that are found in any other persona. This is difficult, because the referee must supply different personality traits, and appearances for each of the referee personas. Most referees will generate quadzillions of referee personas. If the referee does not already have a particular appearance, personality, or set of beliefs in mind for her RP, she may find the tables provided useful. The referee persona qualities are on the *RP Qualities Checklist.*

Table 11.13: RP Qualities Checklist

8A)	Appearance
8B)	Personality
8C)	Beliefs
8A)	Appearance

8A) Appearance: An RP's appearance is divided into two categories: **hygiene** and **dress.**

Hygiene: Hygiene represents the persona's normal level of personal care. The hygienic habits of the RP are determined on the *RP Hygiene* table. Hygiene is not unwavering like an attribute, but is dependant on the scenario at hand. For example, a habitually immaculate RP that just dived into mud would look like someone who dived into mud; a habitually filthy spie would not arrive un-groomed at an aristocratic function she was trying to infiltrate. However the immaculate RP would clean the mud off herself sooner than the filthy spie, and the filthy spie would be the first to get soiled at the aristocratic bash.

Table 11.14: Hygiene

DIE ROLL	GENERAL HYGIENE
01-05	Filthy
06-15	Dirty
16-35	Dishevelled
36-65	Non-descript
66-85	Clean
86-95	Well-groomed
96-99	Immaculate
00	Other

Dress: The dress of an RP is subject to even more variability than its hygiene. An RP may have several favorite styles, and may even combine them in some random arrangement. Table 11.5, *RP Dress,* indicates which type of dress chosen: shoes, shirts, blouses, pants, hair-dos, etc. Appearance is mostly directed at anthropomorph RPs, but it can also include aliens. It is easy to imagine a filthy canine lumberjack, but an immaculate six legged alien dressed in traditional tribal gowns is harder to visualize. Robots can certainly have hygienic qualities, appearing dirty, or well washed, but robot dress may be just too absurd. For instance, would a '60's style robot have fins and chrome bumpers?

8B) Personality: When determining a referee persona's personality the referee rolls once on Tabel 11.6, *Extroverted Personality*, referring to whatever subtable is indicated. Aliens and robots most certainly get a roll on the *Extroverted Personality* table. Aliens are played essentially the same as an anthropomorph persona would be. Properly functioning robots should have not a shred of personality what-so-ever, but the free willed robots of **EXP** are loonies, and extroverted personalities and even insanities should not be that uncommon.

Extroverted Personality Table: This table indicates the personality type that should be displayed by the referee whenever the RP is

Table 11.15: Referee Persona Dress

DIE ROLL	PERSONA'S STYLE OF DRESS
	Traditional
01-02	African
03-07	Arabian
08-09	Arctic
10-11	Asia Pacific—Chinese to Malaysian
12-13	Native North American
14-15	Indo Asian—parjee to loin cloth
16-17	Germanic
18-19	Turkish
20-21	Russian
22-23	Mexican
24-28	Celtic—furs to plaid kilts
	Historic
29-30	Aztec
31-35	North American—cowboy, lumberjack
36-40	Egyptian
41-42	Roman
43-47	Greek
40-49	Renaissance—Merchant
50-51	Renaissance—peasant
52-53	1800's—wealthy
54-55	1800's—impoverished
56-57	Medieval—serf
58-59	Medieval—noble
60-61	Western—1930's fidoras
62-63	1940's
64-65	1950's
66-67	1960's perms, nylons
68-69	1970's
	Fashionable / Cultural
70-71	Rocker
72-73	Mod
74-78	Punk
79-80	Hippy
81-82	Monk
83-84	Pilgrim
85-86	Joe redneck
87-91	Military
92-96	Farmer
97-98	Business suit
99	Jock, athletic
00	Other

challenged. The referee is expected to play up these extroverted traits in every aspect of the RP's role-playing. Extroverted personality traits are NOT irrational: a **diplomatic** RP will not try to play consul to a crazed combat robot, but she may intercede between inter-expedition differences.

Introverted Personality Subtable: The *Introverted Personality Subtable* indicates subtle personality traits. These traits are not too strong, and should only be employed by the referee when decisions must be made by the RP. Such traits are played discreetly by the referee, and may only occasionally be used or noticed.

Insane Personality Subtable: Table 11.8, the *Insane Personality Subtable* produces very irrational actions that are basically pathological. Insane personality traits can appear in completely unexpected situations, endangering the referee persona and the expedition. The easiest and most fun RP to play is an insane one, but they should be kept relatively rare, since **EXP** is an insane enough game as it is. Referees are not expected to be psychiatrists, and can role-play the mental illness however they interpret them.

8C) Beliefs: The referee should be prepared to have the RPs possess some personal beliefs that may affect their attitude, and how they act while role-playing. Beliefs are divided into three categories: political, religious, and philosophical. The player will have from **0-3 (d4-1)** separate beliefs, where 0 is none, and 3 is one of each.

The beliefs are more transient than the RP's personality, and they will often conflict directly with the persona's emotions (personality). The belief tables are somewhat self explanatory, and are mostly used as the tack that a particular persona will take when arguing ethics with expedition personas. In the case of aliens these beliefs may be the basis for their entire culture. For example, an alien that is militaristic and believes religiously in anonymous writings may be a member of a war-like invading race.

Table 11.16: Extroverted Personality

DIE ROLL	EXTROVERTED PERSONALITY	PERSONALITY DESCRIPTION
01-77	Non-descript	See Introverted Personality Subtable
78	Aesthetic	Appreciating good taste and beauty
79	Altruist	Concerned with welfare of others
80	Barbarian	Crude and wild in taste and manner
81	Coward	Lacks courage in face of danger or pain
82	Dandy	Extreme elegance of clothes and appearance
83	Diplomat	Innate skill for dealing with others
84	Egoist	Devoted to own interest and advancement
85	Fanatic	Excessive zeal for a cause
86	Fop	Same as dandy
87	Hedonist	Believes pleasure is chief good
88	Iconoclast	Hater of icons
89	Liar	No trepidation in lying
90	Martyr	Willing to sacrifice self for cause
91	Miser	Deprives self in order to hoard wealth
92	Optimist	Habitually expects positive outcome
93	Pervert	Habitually turns from morally acceptable
94	Pessimist	Habitually expects bad outcome
95	Ponderer	Continually reflects at excessive length
96	Prankster	Often plays tricks or pranks
97	Sadist	General delight in cruelty
98	Schemer	Constantly plotting and planning
99	Zealot	Fanatically committed person
00	Insane	See Insane Personality Subtable

Table 11.17: Introverted Personality Subtable

DIE ROLL	INTROVERTED TRAIT	DIE ROLL	INTROVERTED TRAIT
01	Aloof	45-47	Loquacious
02	Altruistic	48	Lustful
03	Amoral, unscrupulous	49	Lusty
04	Arrogant	50	Malevolent, hostile, mean
05-07	Barbaric, vulgar, foul, tacky	51	Mischievous
08	Callous, harsh, unfeeling	52-54	Miserly, avaricious, greedy, parsimonious
09	Capricious, impulsive	55	Moody
10	Careless	56	Morose, depressed
11	Cautious, conservative	57	Obsequious, sycophantic, servile
12	Cheerful	58	Obsessive
13	Compassionate	59	Opinionated
14	Contrary	60-62	Optimistic
15	Covetous	63-65	Perverted, depraved
16	Cowardly, craven	66-68	Pessimistic
17	Curious	69	Pious, reverent
18	Deceitful	70	Ponderous
19-21	Diplomatic, courteous, well-spoken	71	Proud
22	Driven	72-73	Sadistic, cruel
23	Easy-going	74	Scheming
24-26	Egotistical, self-centered	75	Scrupulous, moral, virtuous
27	Even-tempered	76	Secretive
28	Exacting, precise	77	Sensitive
29	Fanatical	78	Slothful
30	Fearless	79	Sober
31	Foppish, dandyish, haughty	80	Studious
32	Forgiving	81	Suspicious
33	Friendly	82	Taciturn, solitary, reclusive
34	Hedonistic	83	Thrifty
35	Hot-tempered	84	Trusting
36	Humble, modest, retiring	85	Truthful
37	Iconoclastic	86	Unforgiving
38	Immoral	87	Vengeful
39	Imposing	88-90	Violent, warlike
40	Inquisitive	91	Wasteful
41	Insensitive	92-00	Other
42	Irreverent, impious		
43	Jealous		
44	Kindly, helpful		

Table 11.18: Insane Personality Subtable

DIE ROLL	INSANITY TYPE	
01-03	Amnesia	Loss of memory
04-06	Anxiety	Abnormal and overwhelming sense of apprehension
07-09	Hypochondria	Extreme depression due to imaginary physical ailments
10-12	Hysteria	Unmanageable fear or emotional excitability
13-15	Melancholia	Severe depression, delusions moodiness, gloominess
16-18	Paranoia	Delusions of persecution; irrational suspiciousness
19-21	Pathological Liar	Compulsive liar
22-24	Schizophrenia	Loss of contact with environment/personality
	Manias	
25-26	Dipsomania	Uncontrollable desire for alcohol
27-28	Jornemania	Conviction of safety at journey's end
29-30	Kleptomania	Compulsion to steal without economic motive
31-32	Mechanomania	Conviction that technology is all-powerful and supreme
33-34	Megalomania	Infantile feelings of personal omnipotence
35-36	Monomania	Fixation with one object or idea
37-38	Pyromania	Irresistible impulse to start fires
	Phobias	*Fear of...*
39-41	Acrophobia	...heights
42-45	Agoraphobia	...large, open spaces
46-48	Aichmophobia	...sharp instruments
49-51	Ailurophobia	...cats
52-54	Anthropophobia	...humans
55-57	Astrophobia	...space travel
58-60	Bibliophobia	...books
61-62	Claustrophobia	...closed spaces
63	Compuphobia	...computers
64-66	Ergophobia	...work
67-69	Gonnephobia	...guns
70-72	Hydrophobia	...water
73-74	Linonophobia	...string, rope
75	Necrophobia	...death
76-78	Mysophobia	...dirt
79-81	Nyctophobia	...night, dark
82-84	Opthalmophobia	...being stared at
85-87	Phobophobia	...fear
88-89	Practicophobia	...classes
90	Robophobia	...robots
91-93	Technophobia	...technology
94-96	Xenophobia	...strangers, foreigners, aliens
97-99	Zoophobia	...animals
00	Other	

Table 11.19: Political Belief

DIE ROLL	POLITICAL BELIEF	SYSTEM DESCRIPTION
01-05	Anarchism	All govt. should be destroyed
06-10	Aristocracy/ Oligarchy	Govt. by the best individuals; small privileged ruling class
11-15	Bananarchy	Peaceful, non-regulated existence amongst tropical fruits
16-20	Bureaucracy	Administration follows complex procedures, fixed rules; efficiency condemned
21-25	Capitalism	Economic system of private business, free enterprise; economic free-for-all; money is king
26-30	Communism	Classless society; common ownership of all; equality for all in the brotherhood society is the individual
31-35	Democracy	Random selection of most popular person.
36-40	Despotism/ Autocracy	Rule and complete control by one person
41-45	Egalitarianism	Belief in race equality
46-50	Environmentalism	Protection of natural environment against technology/people
51-55	Fascism	All power in single party; one charismatic leader
56-60	Feudalism	Numerous lords with vassals indebted
61-65	Imperialism	Power through Colonial territorial acquisition. Control by one power over dependant peoples
66-70	Matriarchy/ Patriarchy	Inheritance of power through female/male line
71-75	Militarism	Exaltation of military virtues and ideals
76-80	Monarchy	One person inherits throne; power for life
81-85	Technocracy	Govt. by technicians/scientists or computers
86-90	Theocracy	Govt. by immediate divine guidance
91-95	Totalitarianism	State controls all activities of people
96-00	Ismism	Other

Table 11.20: Religious Beliefs

DIE ROLL	RELIGION DESCRIPTION
01-10	Anonymous writings
11-20	Charismatic leader
21-30	Icon, object, creature worship
31-40	Joining force
41-50	Many creators
51-60	Martyr
61-70	Messiah
71-80	One creator
81-90	One creator, and hierarchy
91-00	Other

Table 11.21: Philosophical Beliefs

DIE ROLL	PHILOSOPHY TYPE
01-05	Atomism
06-10	Cynicism
11-15	Deism
16-20	Enthalpism
21-25	Excessivism
26-30	Existentialism
31-35	Hedonism
36-40	Idealism
41-45	Ismism
46-50	Materialism
51-55	Mechanism
56-60	Metaphysicism
61-65	Monetarianism
66-70	Pantheism
71-75	Pragmatism
76-80	Rationalism
81-85	Realism
86-90	Stoicism
91-95	Technocracism
96-00	Other

9) Combat Ratios

The **combat ratio** aids the referee in objectively rating how tough an RP has been created. The combat ratio indicates *the number of expedition personas that should be needed in combat for a fair fight with that one referee persona.* The higher the combat ratio the stronger the RP. In other words, if 1 persona vs. 20 referee personas constitutes a fair fight, this is a pretty feeble RP. If the combat ratio indicates 20 personas vs. 1 RP is a fair fight, then it is a tough referee persona.

The combat ratio is just an indicator of the RP's combat strength; the number of RPs appearing depends on the type of referee persona, its social behaviour if applicable, and the setting of the scenario. If the combat ratio is 1/20, it does not necessarily mean that 20 RPs will automatically show up for every persona.

The combat ratio is not solely devoted to the preparation of referee personas for combat. The CR is also essential for estimating a referee persona's EXPS value. The expedition can earn EXPS points from an encounter by methods other than combat, and this makes the combat ratio useful in even the most non-violent of campaigns. Experience points are explained in chapter 15, Experience.

(9a) Alien Combat Ratio: The calculation of the combat ratio is reasonably self-explanatory. Simply follow the *Combat Ratio* tables (11.22-11.43), and adjust the **number of personas** that are indicated for each of the alien's combat parameters. Assume that the ratio begins at 1 (1 persona to 1 alien).

If the alien has an AR of 553, then **halve** the number of personas required for a fair fight. The combat ratio is now 1/2, which indicates that 2 aliens are needed for each persona, for a fair fight.

If the same alien moves at 11 h/u, then 3 more personas are required for a fair fight. The combat ratio is increased 3.5. In other words three and half personas needed for every alien present if there is to be a fair fight.

The combat ratio can get an alien into a lot of trouble. Aliens with high combat ratios (requiring many personas for a fair fight) can get a reputation for being violent and combative. The aggressiveness of the alien is determined by its psychology, not its combat ratio. The corollary is true also, and aliens with low combat ratios may be very dangerous if they happen to use weapons, or travel in massive numbers. The combat ratio merely represents the alien's natural ability to hold its own, against average personas.

Table 11.22: Alien Combat Ratio (AR)

ARMOUR RATING	PERSONAS NEEDED
<550	times 1/4
551-600	times 1/2
601-650	no change
651-700	add 1
701-750	add 2
751-800	add 3
801-850	add 5
851-900	add 6
>901	add 8

Table 11.23: Alien Combat Ratio (Movement)

ALIEN MOVE (h/u)	PERSONAS NEEDED
<2	times 1/4
3-4	times 1/2
5-6	no change
7-8	add 2
9-10	add 3
11-12	add 4
13-14	add 5
>15	add 7

Table 11.24: Alien Combat Ratio (HPS)

MAXIMUM HPS*	PERSONAS NEEDED
<10	times 1/4
10-20	times 1/2
21-30	no change
31-60	add 2
61-100	add 4
101-150	add 8
151-250	add 14
251-350	add 20
>350	add 25

*maximum HPS including force fields.

Table 11.25: Alien Combat Ratio (# of Attacks)

NUMBER of ATTACKS	PERSONAS NEEDED
1/2 per unit	times 1/2
1 per unit	no change
2 per unit	add 2
3 per unit	add 3
4 per unit	add 5
5 per unit	add 7
6 per unit	add 9

Table 11.26: Alien Combat Ratio (Damage)

MAXIMUM DAMAGE	PERSONAS NEEDED
<10	times 1/2
11-20	add 1
21-30	add 3
31-40	add 5
>40	add 7

Add once per attack, if <10 add 1

Table 11.27: Alien Combat Ratio (BP)

ALIEN BP	PERSONAS NEEDED
<50	1/2 times
51-100	no change
101-150	add 1
151-200	add 2
>200	add 4

Add once per attack, if <50 ignore

Table 11.28: Alien Combat Ratio (MSTR)

ALIEN MSTR	PERSONAS NEEDED
<4	times 1/2
5-9	no change
10-12	add 2
13-18	add 4
>19	add 6

Table 11.29: Alien Combat Ratio (Special Things)

ALIEN ABILITIES	PERSONAS NEEDED
Deadly mutations,	listed with mutation
Offensive mutations	listed with mutation
Flying	times 2
Ranged attacks	add 2 per attack

9b) Anthropomorph Combat Ratio

The **anthropomorph RP combat ratio** is very difficult to calculate in that their use of artifacts can greatly alter their deadliness regardless of what their class is, or their attributes are. Even the most deadly referee persona can be handled easily by the expedition if the referee makes a mistake, also the most benign referee persona can become extremely dangerous if she manages to get a hold of a deadly weapon.

When preparing an anthropomorph's combat ratio the referee should try to take into account all the equipment that the RP has access to. This means that considerable time may have to be spent in the **toy section** before the combat ratio can be calculated. Experienced referees will find that the combat ratio is not needed for estimating equivalent combat conditions, but more useful in calculating the RP's experience point value which includes EXPs for encounters other than combative ones.

Table 11.30: Anthropomorph Combat Ratio (AR)

ARMOUR RATING	PERSONAS NEEDED
<550	times 1/4
551-600	times 1/2
601-650	no change
651-700	add 1
701-750	add 2
751-800	add 3
801-850	add 5
851-900	add 6
>901	add 8

Table 11.31: Anthropomorph Combat Ratio (HPS)

MAXIMUM HPS*	PERSONAS NEEDED
<10	times 1/4
10-20	times 1/2
21-30	no change
31-40	add 2
41-50	add 4
50-70	add 8
71-80	add 14
81-100	add 20
>100	add 25

*maximum HPS including force fields.

Table 11.32: Anth. Combat Ratio (# of attacks)

NUMBER of ATTACKS*	PERSONAS NEEDED
1/2 per unit	times 1/2
1 per unit	no change
2 per unit	add 4
3 per unit	add 6
4 per unit	add 10
5 per unit	add 14
6 per unit	add 18

*includes use of type D, E, F or special weapons

Table 11.33: Anth. Combat Ratio (Damage)

MAXIMUM DAMAGE*	PERSONAS NEEDED
<10	times 1/2
11-20	add 1
21-30	add 3
31-40	add 5
>40	add 7

*per attack, including DA, and weapons

Table 11.34: Anth. Combat Ratio (BP)

BONUS PROFICIENT	PERSONAS NEEDED
<25	1/4 times
25-50	1/2 times
51-100	no change
101-150	add 2
151-200	add 3
201-250	add 4
251-300	add 6
301-350	add 8
>350	add 10

Added per attack per unit

Table 11.35: Anth. Combat Ratio (MSTR)

ANTHROPOMORPH MENTAL STRENGTH	PERSONAS NEEDED
<5	times 1/4
5-9	times 1/2
10-12	no change
13-18	add 2
>18	add 4

Table 11.36: Anth. Combat Ratio (Specials)

HUMANOID ABILITIES	PERSONAS NEEDED
Anti-knite	add 4 per level
Deadly mutations,	listed with mutation
Knite	add 3 per level
Mercenary	add level
Nothing	times 1/2
Offensive mutations	listed with mutation
Ranged	attacks add 2 per attack
Spie	add 2 per level

9c) Robotic Combat Ratio

Robots are considerably easier to prepare a combat ratio for than other persona types because they are so structured. Robots are not near as flexible as the biological RPs, but they can very deadly. The most important point about robots is that they are difficult to destroy, but easy to damage. The following tables can be used as a general guideline as to how challenging a robot is in combat.

Table 11.37: Robotic Combat Ratio (AR)

ARMOUR RATING	PERSONAS NEEDED
<550	times 1/2
551-600	no change
601-650	add 1
651-700	add 2
701-750	add 3
751-800	add 5
810-850	add 6
851-900	add 8
>901	add 11

Table 11.38: Robotic Combat Ratio (Movement)

ALIEN MOVE (h/u)	PERSONAS NEEDED
<2	times 1/4
3-4	times 1/2
5-6	no change
7-8	add 2
9-10	add 3
11-12	add 4
13-14	add 5
>15	add 7

Table 11.39: Robotic Combat Ratio (HPS)

MAXIMUM HPS*	PERSONAS NEEDED
<10	times 1/4
10-20	times 1/2
21-30	no change
31-60	add 4
61-100	add 8
101-150	add 16
151-250	add 28
251-350	add 40
>350	add 50

*maximum HPS including force fields.

Table 11.40: Robotic Combat Ratio (# of attacks)

NUMBER of ATTACKS	PERSONAS NEEDED
1/2 per unit	times 1/2
1 per unit	no change
2 per unit	add 2
3 per unit	add 3
4 per unit	add 5
5 per unit	add 7
6 per unit	add 9

Table 11.41: Robotic Combat Ratio (Damage)

MAXIMUM DAMAGE	PERSONAS NEEDED
<10	times 1/2
11-20	add 1
21-30	add 3
31-40	add 5
>40	add 7

Add once per attack, if <10 add 1

Table 11.42: Robotic Combat Ratio (BP)

BONUS PROFICIENT	PERSONAS NEEDED
<25	1/4 times
25-50	1/2 times
51-100	no change
101-150	add 2
151-200	add 3
201-250	add 4
251-300	add 6
301-350	add 8
>350	add 10

Add once per attack, if <50 ignore

Table 11.43: Robotic Combat Ratio (Special Things)

ROBOT ABILITIES	PERSONAS NEEDED
Combat robot	times 2
Deadly mutations	listed with mutation
Disregard base race	add 5
Flying	add 4
Offensive mutations	listed with mutation
Over-ride interrupt	add 7
Ranged attacks	add 3 per attack
Android	add 3

(10) Referee Persona Name

Often the most important part of a referee persona is its name. The description of a humanoid may be glossed over, and that of an alien's forgotten completely, but the name will always be remembered. The players will recall an RP's name before they will remember her personality, dress or special abilities. There is no question that a referee persona's name is much more important to the campaign than that of an expedition persona's. Often a RP's name will have some significance, like a veterinarian named Ivy Blodgett, or a melancholic nothing named Sue Siedal.

Robots are more difficult to name because there is some unwritten rule that they must have letters, and numbers in their names, like: QT, oicur12, unit 42, or SN00-KM series. Remember the more insane the robot the more free willed it is, and the more likely that it will have named itself. Additional names that the referee may be required to produce for an RP robot are manufacturer's name, model line, and unit name.

Alien races are fun to name. The referee will often be naming an entire race, as well as the specific species member that she has created. A helpful hint in naming alien races is to avoid personification. No self respecting space-faring race would call itself the "Obese Ones," or the "Furry Ones." If such alien properties are important to an alien race (which they might well be), translations can mean anything the referee likes, and the "Vojing Dur" may translate into "Obese Ones," but in that alien's tongue (if they have tongues) "human" might translate into "scrawny geeks." Always keep in mind that these creatures are alien, and alien sounding words that reflect the alien are the most useful and fun.


A.B. '91

Chapter 12
Time and Movement

Not everything happens at once, and to keep matters that way, **EXP** uses the concept of **time**. Every action in the game occurs at a particular time, and all events happening at the same time happen at once. Moreover, time flows — that is, it runs in a smooth progression from any given time to any other, passing through every time in between, and it can't be stopped. The concept is tricky, but fairly intuitive for anyone brought up on the inside of a universe.

Slightly more subtle is the idea of **game time**. It might take a player five minutes to calculate all the Proficiency Table adjustments for a particularly complex manœuvre, but her persona, blithely detaching the boomerang from her left shoe as she dives through the fog into her waiting space vehicle, will finish the entire episode for better or worse in only a few seconds. On the other hand, a comment like, "I'll unlock the big door with the gargoyles on it," might imply several minutes of frenzied work for the persona, while, "Are you talking to me, batface?" would drawl at exactly the same speed both in the game and out of it.

Time for the personas in **EXP**, simply put, flows at a self-consistent rate which bears little or no resemblance to time in the real world. To help distinguish, **EXP** measures game time by the **unit**.

A unit lasts for two seconds of game time, or for one round of combat, regardless of how long in real time it takes to play out. Its passing indicates how far a persona can move at a stretch, how many to hit rolls she can make before her opponent strikes back, or how much time she has left to use her mutation. Naturally, two seconds isn't very long — but to pose a shorter duration would keep personas from finishing the simplest tasks in one go. Likewise, a longer interval would leave too much time unaccounted for: a unit is about the smallest measure of time in which personas can accomplish a reasonable amount of activity.

Unlike personas, however — especially combat-prone personas — civilizations rarely operate on a two-second scale. **EXP** thus has many longer divisions of game time by which numerous other important activities, from sleeping to mapping the fall of a galactic civilization, can be measured. These are listed in Table 12.1, *Time Components*, below, along with their equivalents in units and their real time analogues.

Movement

Just as time is scaled in **EXP**, so are speed and distance. The fundamental unit of distance is called the **hex**, and is equal to two metres. The name "hex" corresponds to one space on a sheet of hex paper, a commonly available graph paper printed with a honeycomb of hexagons, which becomes particularly useful during tactical combat. The two-metre scale length is constant to avoid confusion, regardless of the size of the hexagons themselves; likewise, the two-metre definition of a

Table 12.1: Time Components

NAME	DURATION	REAL TIME EQUIVALENT
Unit	1 unit	2 sec.
Melee	5 units	10 sec.
Turn	30 units	60 sec., 1 min.
Decaturn	300 units	600 sec., 10 min.
Hour	1800 units	3600 sec., 60 min., 1 hour
Day	43200 units	86400 sec., 1440 min., 24 hours, 1 day
Month	1296K units	2592K sec., 43200 min., 720 hours, 30 days, 1 month
Year	15552K units	31104K sec., 518400 min., 8640 hours, 360 days, 12 months, 1 year

hex is constant whether the players use hex paper or not.

Continuing the pattern of measuring distance in hexes and time in units, speed and movement are measured in the **hex per unit**, or **h/u** — which upon translation into mundane language equals two metres per two seconds, or 1 m/s. Multiplying a measurement in h/u by 3.6 gives the same value in kilometres per hour. Now, inquiring minds will already be asking why movement rates aren't simply given in metres per second, if the hex per unit measurement is identical — why **EXP** insists in using these bizarre units of its own creation. As explained above, however, seconds are simply too short to measure play effectively; likewise, to measure combat distances in metres would result in much higher numbers than necessary.

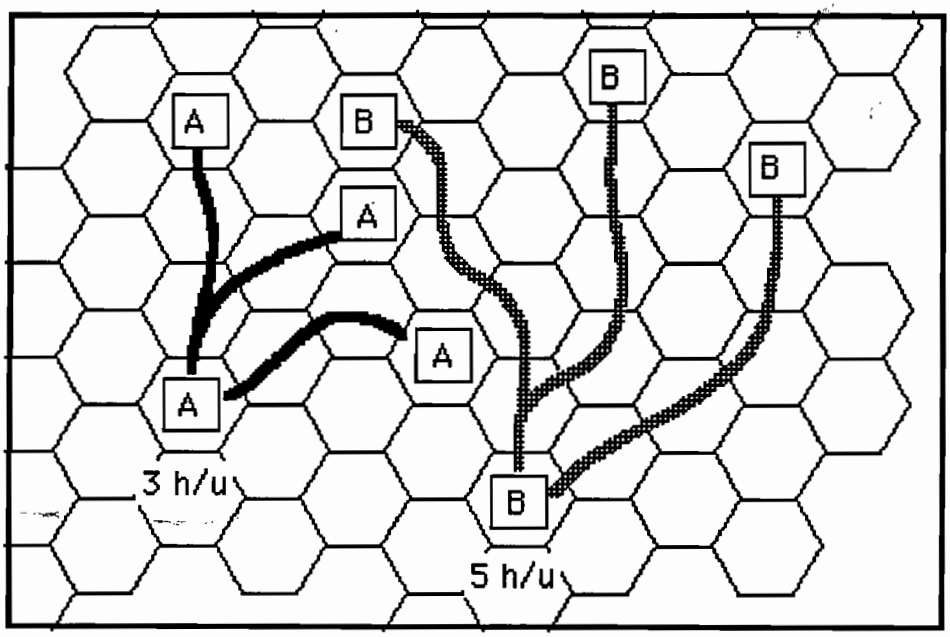
Each persona has a different **movement rate**, decided by her DEX and race during persona generation; this acts as a maximum speed for the persona under normal circumstances, although slowing down is always possible. (See Figure 12.1, *Sample Movement Rates on Hex Paper*, below.) The means of locomotion, be it flippers, tentacles, or rocket-powered servomechanisms, has nothing to do with the rate, except as environment dictates — a wheeled robot, for instance, would float helplessly in free-fall, while a giant catfish on land, even one with lungs, could only flop about pathetically until the tide came back in.

Circumstances such as these — or others, like overencumbrance, mental distraction, or general pigheadedness — may force personas to slow down or even stop for a while. These movement penalties are described below and in Chapters 18 and 19, Encumbrance and Special Terrain.

Composition of a Unit

An active persona can do surprisingly much in two seconds, and players will often take advantage of this fact by attempting actions far less straightforward than moving or attacking. Most such manœuvres in **EXP** are governed by various performance tables, charts drawn up based on particular attributes and skills — a topic which will be addressed more completely in Chapter 14, Performance Tables — but to give the referee a feel

Figure 12.1: Sample Movement Rates on Hex Paper



for what can (and especially what can't) take place in under a unit, Table 12.2, *Duration of Actions*, lists the durations of various common actions.

Particularly simple manœuvres need not replace 1movement as the sole activity in a unit: a moving persona (at least, if she has hands) can push open a door anytime with minimal delay. Table 12.3, *Fast Action Movement Penalties*, lists how much personas must slow down to perform such activities.

Basic Movement Penalties

No movement penalty is mandatory. If the game is more fun without the inconvenience of calculating penalties for encumbrance, restrictiveness, terrain, and position every time the players want to go anywhere, the referee should simply ignore them. On the other hand, in the real world encumbrance, restrictiveness, terrain, and position *do* affect speed, and their inclusion makes for a more rigourous game.

The simplest movement penalty, for changing direction, is illustrated in Figure 12.2, *Hex Per Unit Penalties for Direction Changes*, below; the next most direct, for armour restrictiveness, is detailed in Table 12.4, *Armour Restrictiveness Movement Penalties*, (Armour restrictiveness is defined in Chapter 29, Armour.)

Encumbrance, described more fully in Chapter 18, affects movement rate a good deal. Table 18.3 compiles these effects for the five degrees of encumbrance: Free, Unencumbered, Encumbered, Overencumbered and Lift.

Changing Speed

A persona's movement rate defines the fastest she can move while engaged in another activity, such as combat or conversation. If for some reason she wants to move more slowly, she has but to inform the referee. Movement penalties apply only to movement rate, however — a persona travelling 2 h/u slower than she has to may ignore all movement penalties under –2 to maintain a constant speed.

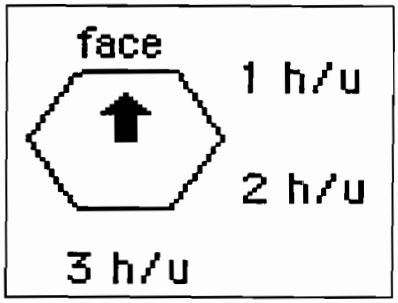
In certain situations, however, usually terror on her part, a persona might want to travel faster than her movement rate. This is a much more difficult proposition. Either her speed or her other activity has to suffer, and when speed becomes important enough, all the persona's attention focusses on running: no other actions can take place at the same time.

Speeding up also depends on encumbrance. Just as a persona carrying so much that she can barely move is incapable even of approaching her full movement rate, one dressed in a track suit and carrying only a headband can jog much faster than normal.

Robots and aliens can never exceed their movement rates, except through being hurled off a cliff by a raging pachyderm or other mitigating circumstance. Unlike scatterbrained anthropomorphs, they do not allow cerebral activity to interfere with their maximum speed in the first place, so their movement rates already correspond to the anthropomorphic bolt.

• Running: **Running** is a type of rapid motion which allows personas to exceed their movement rates by up to 50% — a persona with a movement rate of 4 h/u, for instance, could run at up to 6 h/u. A persona may only run when she is either "Unencumbered" or "Free" of encumbrance. Movement penalties apply only to a persona's maximum speed. If the above persona is running at 5 h/u and encounters a 2 h/u movement penalty due to a slight incline, she can still move at 4 h/u, because her maximum running speed is 6 h/u.

Figure 12.2:
Hex Per Unit Penalties for Direction Changes



•Bolting: A slightly more effective method of escape is **bolting**, by which personas can travel at up to double their movement rate. However, bolting takes up a great deal of energy and concentration. A persona may not be wearing any armour, nor carrying any equipment, while bolting — any at all. She cannot perform any other activity, including changing direction — to turn a corner, she must come out of her bolt, slow down to her normal movement rate minus any appropriate penalties, change direction, and start bolting again.

The restrictions on bolting make it almost useless to personas, unless by chance they habitually enter in sporting competitions. Referees, however, might find it helpful to allow a persona to dump all of her equipment and bolt to safety from an otherwise certain death, especially if no other technique seems likely to eliminate that troublesome Very Powerful Toy from the campaign.

Other Motion

Most bipedal forms find the upright posture least painful to move in; accordingly, most personas walk upright if at all. Yet at times, unless they suffer from hayfever, they will desire to wriggle invisibly through tall grass, or jump across a twenty-metre-deep pit filled with blossoming poppies. Such alternate forms of locomotion generally involve slowing down, unless by chance the persona's body is ideally suited to them in particular — as for instance an Aquarian while swimming, or a limbless alien while slithering. They also frequently involve combat adjustments, both for the clambering persona and for her attackers, and attribute rolls. Part III, Combat Rules, contains explanations and definitions for all combat terms; attribute rolls, in which a player must roll at or below an attribute, are detailed in Chapter 16, Special Rolls.

•Climbing: Vertical movement on contraptions such as slides, ropes, and ladders, or **climbing**, generally depends on the judgment or whim of the referee. Too many factors enter the equation — is the slide greased? does the persona know how to test pitons? is the rope slowly being severed by a diabolical candle flame? — to encapsulate the experience in a few short paragraphs. The most important detail to remember is that personas engaged in climbing make far more predictable targets than otherwise, giving attackers a bonus of +125 (in general) on their to hit rolls. Personas who attack while climbing receive a to hit penalty of –180.

Normal climbing, climbing without pitons or other mechanical aids, involves three steps each unit: finding a foothold, reaching it, and moving up. Respectively, these stages are accomplished with an AWE roll, a DEX roll, and 1d3 – 1 hexes of vertical movement. (Rolling 0 hexes means the persona was forced to move laterally that unit.) If the player fails either attribute roll, her persona has slipped, and spends that unit regaining a pawhold; if she fails both for two consecutive units, her persona has fallen. A persona involved in normal climbing is considered immobile for combat purposes, giving attackers a +666 to hit bonus; she herself may not attack.

Combat climbing is much like its normal counterpart, but involves the use of pitons. Personas may attack while combat climbing (with a –180 to hit penalty) if they succeed at a DEX roll and otherwise remain immobile that unit. Being aware of death flying all around them, they flatten themselves against the wall and reduce their attackers' to hit bonus to only +125.

Climbing by rope requires a DEX roll each unit. If the player is successful, her persona can move 1d3 hexes that unit, although not more than half her movement rate. Referees can give stronger personas a movement bonus. A persona may not climb and attack at the same time, although if she wishes she may hang on for a unit and attack with a –180 to hit. Anyone attacking a rope climber gets a +125 bonus on her to hit roll.

Climbing by ladder requires no attribute rolls. Each unit, a persona may move up to 1d6 hexes, not exceeding her movement rate. Again, climbing personas receive –180 to hit, and their attackers +125; ladder climbers, however, *can* move and attack simultaneously.

•Crawling: A persona can **crawl** — struggle along the ground on all fours — at 1/4 her movement

rate after adjustments. Although a persona cannot act while crawling, her position gives her 50% cover from all Type B and Type C attacks, and +125 bonus to her armour rating against them. Type A attacks, however, gain a +125 to hit because of the crawler's decreased manœuvrability.

•Crouching: A persona can **crouch** — scuttle along the ground with extremely bent knees — at ¾ her movement rate after adjustments. Crouching personas can act normally except while attacking: they cannot use Type A weapons, they receive a –200 to hit penalty on Type B weapons, and they receive a –75 to hit penalty on Type C weapons. Crouching offers 35% cover against Type B and Type C weapons, which converts to a +80 armour rating bonus.

•Diving: A **dive** is a headfirst horizontal torpedo jump which can propel the persona beyond her movement allowance. Upon finishing her movement for the unit, a persona can dive an additional 1 hex for every 6 points of PSTR she has, through windows, into doorways, across tables, off cliffs, etc. Diving renders a persona inactive for the next unit.

•Jumping: A **jump** is a brief, self-propelled aerial excursion governed mainly by gravity after the point of liftoff. Its main direction might be either horizontal or vertical or both; whichever way, a running start will increase its power.

A horizontal jump from a running start, whether across a crevasse, mine field, detection device, or roommate, spans 1 hex for ever 7 points of PSTR the persona has; from a standing start, it will propel her 1 hex for every 15 PSTR. Generally, a persona will come to a stop after jumping, but if she makes an Improbable (d100) DEX roll upon landing, she may continue at her full movement rate. A persona may jump only once per unit. Being horizontal, this type of jump will clear only the lowest of obstacles.

A vertical jump, as over a desk, a fence, a log, or a crocodile, will not exceed ¾ the persona's hite — any obstacle taller than that must be climbed over. To clear a barrier between ½ and ¾ her hite, a persona must make a Difficult (d20) DEX roll; to clear a lower one, her DEX roll must be Easy (d10). If she successfully clears a barrier, she may continue moving in the same unit.

•Righting: **Righting** oneself, or getting up after a fall, takes a DEX roll, of difficulty to be determined by the referee. If the player makes the roll, the persona may both move and act during the next unit; if not, she may only act, her move for the unit being taken up by standing. Either way, unless knocked down again, she may both move and act the unit after righting herself.

•Rolling: Personas can **roll** — lie on their sides and make like a wheel — at 1 h/u, regardless of terrain and previous speed. It is worth noting that some substances, like molasses and concrete, cannot be rolled through; attempts to do so will result in immobility. An encumbered persona can only roll by completing two Difficult (d20) PSTR rolls, and cannot act while rolling. An unencumbered persona, while unable to use a Type A or a Type B weapon, can fire a Type C weapon with a –210 to hit.

Terrain

The shape of the land also influences speed. A persona running downhill can move faster than one running uphill, or one wading through knee-high swampwater. Basic terrain — the sort most often experienced in day-to-day life — is covered in this section; for more exotic environmental effects on personas, see Chapter 19, Special Terrain.

•Doors: Personas travelling at high speeds can move through unlatched push doors with only a 2 h/u penalty — so, for instance, a persona moving at 5 h/u, passing through such a door, would move only 3 hexes that unit. Any latched or pull doors will stop the persona completely, and force her to make a DEX roll at a difficulty level determined by the referee. If the DEX roll is successful, she will arrive safely on the other side of the door in the same unit. This can be a very important result if the player has won initiative, and her persona is trying to escape an attack.

•Grass: The degree to which grass acts as an obstacle to movement depends both on the thickness of the grass and the size of the persona crossing it.

Table 12.5, *Grass Movement Penalties*, shows the various penalties accrued by Tiny, Small, Medium, Large, and Gigantic personas when travelling through different grass densities. Remember that all anthropomorphic personas are Medium-sized. "Normal" thickness for grass, too, means normal for the wilderness — it's much taller than normal thickness for lawns.

The table is also used for motion through shrubbery and sand, adding one or two levels to the thickness respectively. A "C" indicates that climbing rules apply: the terrain is so thick that simple horizontal motion is impossible.

•Hills: Personas moving uphill encounter a penalty equal to –5 h/u times the slope of the hill — that is, times the number of hexes upward they travel each unit, and divided by the number of hexes across they travel to rise that much. A hill on which five horizontal hexes imply one vertical hex of rise would give a penalty of –5 x (1 + 5) h/u, or –1 h/u. Fractions are rounded to the nearest h/u.

Personas travelling downhill get a movement bonus calculated the same way — if four horizontal hexes imply a two vertical hex drop, the bonus is –5 x (–2 + 4) h/u, or +3 h/u (rounded off). A persona's downhill travel rate may never exceed her bolting speed unless she is actually falling with no surface immediately beneath her; for every unit she spends moving at her bolting speed, she must make a difficult (d20) DEX roll or crash. Personas travelling faster than their movement rates may not engage in combat.

•Ice: All sizes and shapes of persona, assuming always that they are not so heavy as to *break* the ice, receive a –1 h/u penalty while travelling atop it.

•Mud: Personas travelling through mud should use Table 12.6, *Water Movement Penalties*, but add two levels — i.e., shallow mud acts as waist-deep water, and deep mud as very deep water.

•Sand: Similarly, personas travelling through sand should use Table 12.5, *Grass Movement Penalties* but add two levels — i.e., short sand acts as high grass, and high sand as a mess of grass. ("High" and "low" refer here to the amount of loosely packed surface sand the persona must wade through. A beach at low tide has low sand, whereas a wind-swept desert might have sand much higher.)

•Shrubs: Table 12.5, *Grass Movement Penalties*, also governs motion through low bushes, but bush height acts as grass one level higher — short shrubs as normal grass, e.g., and a mess of shrubs as a barrier.

•Snow: Personas on snow should use Table 12.6, *Water Movement Penalties*, adding one level — shallow snow acts as 50cm water, and 3.0m snow as very deep water. An "S" here indicates "Stuck."

•Water: Table 12.6, *Water Movement Penalties*, gives movement penalties for Tiny, Small, Medium, Large, and Gigantic personas in various depths of water. (Remember, as always, that all anthropomorph personas are Medium-sized.) This table is also used for motion through snow and mud, with one and two levels respectively added to the depth.

If an "S" appears, the persona must swim if she wants to get out or keep going. Swimming, in turn, is not something the personas are expected to know how to do. If she drops all of her equipment, a persona can flail 0-3 hexes per unit in the direction she desires, but will simultaneously be carried along by the current, possible in exactly the opposite direction. The referee may force the player at any time to make a MSTR roll or panic in the water; panicked swimmiers become drowners, and must make a CON roll each unit to keep from drowning, as well as an MSTR roll each unit until they regain control. Personas who can swim should refer to the general performance table.

Table 12.2: Duration of Actions

ACTION	DURATION
Apply a derm	0-2 units
Apply lotion	2-20 units
Apply suppository	10-100 units
Arm a bomb	1-4 units
Armour, put on	90 units per restrictiveness
Armour, take off	3-30 units
Change batteries	0-1 units per battery
Change monitor channel	1 unit
Count money	1 unit per 10 eps
Imbibe liquid	0-3 units
Injection	1-10 units
Key pad number	2 units
Search drawer	10-60 units
Start space vehicle	Many, many units
Start vehicle	1-4 units
Unlock door, window	0-3 units

Table 12.3: Fast Action Movement Penalty Table

ACTION	PENALTY
Attack target	None
Catch object	Cannot attack
Change weapons	Cannot attack
Chew gum	1 h/u
Discharge aerosol	None
Door, close	1 h/u
Door, open — pull	1 h/u
Door, open — push	None
Find change (for vidiphone)	2 h/u
Flip table, couch	2 h/u
Inhale bronchial mister	Cannot attack
Light switch	None
Push any button	None
Push the right button	Cannot attack
Reload	Cannot attack
Sing loudly	+1 h/u
Swallow pill	Cannot attack
Throw a grenade	None
Window, break	1 h/u
Window, open	2 h/u

Table 12.4: Armour Restrictiveness Mvmnt Penalties

RESTRICTIVENESS	PENALTY (h/u)
1-2	1
3-4	2
5	3
6	4

Table 12.5: Grass Movement Penalties

	PENALTY (h/u)				
THICKNESS	T	S	M	L	G
Low	1	0	0	0	0
Short	1	1	0	0	0
Normal	2	1	1	0	0
High	2	2	1	1	0
Tall	3	2	2	1	1
Mess	4	3	2	2	1
Barrier	C	C	C	C	C

'C' — must be climbed; the terrain is acting as a barrier

SAND — acts as grass, but add two levels
SHRUBS — act as grass, but add one level

Table 12.5: Water Movement Penalties

	PENALTY (h/u)				
DEPTH	T	S	M	L	G
Low (ankle)	3	2	1	0	0
Shallow	4	3	2	1	0
50 cm	S	4	3	2	1
Waist	S	S	4	3	2
175 cm	S	S	S	4	3
Deep	S	S	S	S	4
3.0 m	S	S	S	S	S
Very deep	S	S	S	S	S

'S' — swim, sink or stuck

MUD — acts as water, but add two levels
SNOW — acts as water, but add one level

II

II

Chapter 13
Health

Regardless of the cleverness of the referee's puzzles and characters, above and beyond the excitement of the chase and the exhilaration of the fight, the most important part of an RPG from the persona's standpoint is how much damage she takes, how long it will need to heal, and whether or not this coma she's in is fatal. Related topics, such as bodily wear and tear, robotic sanity, and other arguments against aging, also rank high on her list. Knowing how to deal with numbers like HPS and age, with DSS, REC, and Control Factor rolls, with damage, aging, and various types of death is vital for the referee and almost as important for the player.

Damage

Hit points, also known as **HPS**, represent the persona's current state of health — the more HPS she has, the harder she is to kill. During persona generation, every player rolls a maximum number of HPS, which her persona can never exceed. Personas are assumed to be at maximum HPS at the start of play. (After all, who in her right mind would strike out on an adventure with a gill infection?) HPS are a dynamic, not a declining attribute, however, and whatever hit points a persona loses she can eventually gain back again.

Robots and aliens are exceptions, of course. Robots never heal: they slowly get more and more decrepit, until finally they cease to function completely. Aliens die upon reaching 0 HPS, unable to recover from unconsciousness. But before either healing or death can occur, in any type of persona, hit points must be lost. Such **damage** can take many different forms.

The simplest damage mechanism is combat. When the persona is zapped by a plasma rifle, she will be hurt, and incur damage based on a die roll and the weapon used against her — between 4 and 48 HPS, in this instance. Damage information is listed with the description of each weapon. In general, after being hit, the persona will grimace, scream some sort of oath, and shoot back; if, however, she loses a large proportion of her HPS, she may go into shock. If she loses all of them, she falls into a coma, and may even die. These cases are treated under "The DSS Roll" and "Death" below.

Personas might also take damage from environmental effects — for instance, breathing poisonous fumes, tripping over a hedgehog, wandering into a lit furnace, or impacting a concrete bunker at terminal velocity. Fires, vacuums, hard surfaces, and similar harmful environments are described in Chapter 19, Special Terrain; dangerous substances like poisons and high-radiation ores require a saving throw, and are dealt with in Chapter 16, Special Rolls.

No matter how a persona loses HPS, however, the nature of her damage is the same. In an extremely detailed tactical system (see Chapter 27, Tactical Combat), she may have a broken limb or swollen eyelid for a time — but in general, she merely has fewer hit points to squander in her next encounter, and as long as her total is still positive, she's fit enough to attempt it.

- The DSS Roll: Even personas with positive hit point totals still have to be careful. If a persona loses more than half her current hit points all at once, she might fall unconscious from the severity of the blow. The **DSS** (for **Damage System Shock**) roll determines the chance of this occurring. It's a decidie roll, in which the player must roll less than her CON plus thrice her current HPS — "current" meaning what remains after the blow — or collapse, stunned, to the pavement. Only anthropomorphs are susceptible to shock: aliens and robots never need to make a DSS roll.
- The REC Roll: If a player fails her persona's DSS roll, she must make a successful **REC** (for **Recovery**) roll to wake her up again. To do so, she must roll less than her CON plus five times her HPS on decidice — somewhat easier than the DSS roll to succeed at. She cannot, however, attempt the roll every unit, unless her CON is extraordinarily

high. The time between REC rolls is known as the **recovery time**, and is determined by the persona's CON (see Table 3.1, *Constitution*). DSS and REC are two of **EXP**'s three special attribute rolls, and are described in greater detail in Chapter 16, Special Rolls.

Remember that a unit is a fairly short period of time. Even an unconscious persona with 1 HPS and 1 CON, giving her a recovery time of 20 units and the need to roll under 6 on decidice, has a 60% chance of awakening within 10 minutes, and an 84% chance of coming to within 20—not especially long periods, which the party might well spend exploring the area anyway. It's far easier simply to assume that all stunned personas recover immediately once combat has ended, and can join in once again on the game.

Robot Damage

Robots do not heal. When one of their peripherals is snapped off at the base, it stays snapped off; if their casing is dented or punctured, it stays dented or punctured. Furthermore, electrical attacks do double damage to robots, as do disintegrations and several other attacks — robots, in short, are far more vulnerable than any other type of persona, and so have correspondingly huge HPS totals.

HPS still represent a universal value. 10 HPS of damage to a Pure Strain Human and 10 HPS of damage to a robot represent the same amount of pain and disfigurement. But whereas a human, if her finger were injured, could regain its full use by waiting a few days, a robot with a broken waldo could never use it again.

Robots can, however, reroute their entire internal circuitry around a critically damaged component—so while a rodentia without a working heart would be certifiably dead, a robot in a similar predicament would merely malfunction for a while. In game terms, robots, upon hitting 0 HPS, do not die. Instead, they return to their maximum level of HPS, but only after permanently reducing some of their attributes, *including maximum HPS itself.* When any one of these attributes is reduced to zero, but only then, is a robot finally dead — by a fatal malfunction if the attribute is not maximum HPS, by sheer repeated pulverization if it is.

Not all attributes are reduced every time a robot hits 0 HPS; those which are are determined by Table 13.1, *Robotic System Malfunctions*. The amount by which each affected attribute is reduced is determined by Table 13.2, *Robotic Malfunction Severity*, by a separate roll for each attribute. Maximum HPS, however, does get reduced every time, and always by 10%—so a robot with 110 HPS, upon being reduced to 0, would begin again with 99 HPS and some other attribute reductions; upon being reduced to 0 a second time, it would now have 89 HPS and more reductions; after the third time, it would have 80 HPS and yet more reductions; then 72, 64, 57, and so on until being consigned to the slag heap. Always round down when calculating a new maximum HPS. If a robot takes more damage than it has hit points, any damage beyond what reduces it to zero is subtracted from the new HPS total — so if a robot with a HPS maximum of 20 has only 5 HPS left, and takes 17 HPS of damage, it will lose those 5 HPS, jump to a new maximum of 18 HPS, and subtract the remaining 12 HPS from that, ending up with 6 HPS and a malfunction once the attack is over.

Even when a specific part of the robot has been hit, the system which malfunctions is determined randomly. External and internal injuries do not necessarily correspond: a sharp blow to the robot's anterior infrared antenna could do nothing to the antenna itself but be enough to dislodge a rusty brain component inside. Fatal malfunctions almost always claim robots sooner than death by loss of hit points.

Die rolls proliferate in robotic combat to such an extent that destroying a robot might seem to reduce playability drastically. If the players and referee gain particular enjoyment out of killing robots, all this extra consultation of tables might not cause a problem, but in the much more likely circumstance that speed is preferred, the referee should prepare a **Robot Decay Table** in advance. To facilitate combat, a Robot Decay Table calculates ahead of time what peripherals and circuits would be damaged, and what effects this would have on

attributes, should the robot take a certain level of damage.

A sample *Robot Decay Table* is on page 182. On its top line are the robot's original attributes, including maximum HPS of 16. The first 15 HPS of damage this robot takes do nothing to its attributes; when it takes a 16th, its locomotion systems are damaged, lowering its DEX to 19, its PSTR to 11, and its maximum HPS to 14. When its total damage exceeds 30 HPS — 16 + 14 — it suffers damage to the brain, and a corresponding lowering of INT to 17 and maximum HPS to 12. Decay continues until the robot has taken 99 HPS of damage, at which point the robot is destroyed by a fatal malfunction of its AWE. All attribute damage has been rolled up in advance, to save time during play.

A complete Robot Decay Table renders maximum HPS calculations needless. If the robot of this example has taken 47 HPS of damage during combat, the referee need only consult its table to find its current attribute values, and discover that it can sustain 52 HPS of damage more before malfunctioning — whereas without a table, she would have to subtract 16, the robot's original HPS, from 47; calculate the new HPS maximum of 14; determine the damaged part and attributes; subtract 14 from the 31 remaining HPS of damage; calculate a second new HPS maximum of 12; determine another damaged part and more damaged attributes; subtract 12 from 17; calculate a third new HPS maximum of 10; determine yet another round of attribute damage; and finally subtract the last 5 HPS of damage from a 10 HPS maximum to get 5, the new HPS total. Clearly, a table represents the simpler procedure.

Alien Damage

Aliens, being biological creatures, take damage much the same way anthropomorphs do. However, after an evolution less suited to cultured beings than to prey, they never need a DSS roll: they cannot be knocked unconscious simply from damage. Even upon reaching 0 HPS, an alien simply dies, rather than entering into a coma as an anthropomorph would. This makes aliens often easier to kill than anthropomorphs — but such is the folly of playing an alien.

Healing

Healing is the recovery of lost hit points by natural or artificial means, up to the persona's maximum HPS level. While robots' wounds do not heal, those of both humans and aliens do, and with ample rest the body's natural healing processes can mend torn skin and muscle, strengthen broken bones, and stabilize damaged organs. If the persona has a negative hit point total, however, her body is too busy desperately maintaining the brain and other essential organs to waste energy on healing; she is in serious trauma, and without medical attention will soon die. Aliens with a negative HPS total are already dead.

To heal damage naturally from a positive HPS total — called **positive healing** — a persona must rest completely. This means no combat, no exertion, no late-night standing watch, no carousing, no alcohol, and no other funny business; the persona must remain undisturbed in camp, a hotel room, or (ideally) an infirmary. If she meets these rest requirements, she will find she has healed 1 HPS of damage upon waking after a good night's sleep.

In fact, a persona intent on recuperating will heal 1 HPS of damage on each of her first seven days of rest, and 2 HPS on each subsequent day. However, even one day's interruption from this regimen of laziness will start the cycle anew, with seven more days of 1 HPS per day before the faster rate begins. No persona can increase her HPS level to greater than her HPS maximum.

A persona with a HPS maximum of 26, whose current HPS are 11, might decide to take a fortnight off to recover from her wounds. For the first week of rest, she would regain 1 HPS each day, until she had 18 HPS; thereafter, if her healing continued uninterrupted, her HPS would increase by 2 each day, and by the end of four more days, she would have returned to full health. Had her rest been disturbed, she could have needed up to 15 days (not counting those which did the disturbing) to regain her HPS maximum.

Naturally, lying back and resting is not the only way to regain lost HPS. When personas can lose 15 to 20 HPS in a single attack, a minimum two-week recovery time kills playability. The most common quick fix for wounds is to find a veterinarian, whose class skills include healing procedures, and convince her to help. Nomads can also carry out rudimentary first aid. All such class skills are detailed in Chapter 5, Classes.

Some pharmaceuticals and other technological gizmos exist to cure damage, but these are almost always accompanied by dangerous side effects. Several mutations, also, can be used to heal personas — but the odds of encountering a being with such a mutation powerful enough to be of any use, compared to those of finding a practising vet, are low enough to make the search not that worthwhile.

Repairing lowered attribute scores always requires special medical attention. Rest is powerless to raise a damaged INT or PSTR; likewise, it can neither raise maximum HPS nor propel a persona's HPS total above her HPS max. Chapter 47, Medical Equipment, and Chapter 50, Pharmaceuticals, describe a number of artificial healing mechanisms and their effects.

Negative Maintaining

When an anthropomorph reaches a negative HPS total, she isn't necessarily dead. She is, however, dying, and losing 1 HPS per game minute until she does die. A body with negative HPS is comatose, struggling to slow a decline into oblivion. The persona is hurt beyond her body's healing limit; her natural healing processes have been overwhelmed by damage. Recuperating from such a state is known as **negative maintaining**.

Recuperating is possible: if the persona receives appropriate medical attention, she can be stabilized, halting her downward slide. Veterinarians are best at performing this stabilization, having a specific class skill for the procedure; in a pinch, biologists and nomads can also tend unconscious personas, although with much greater difficulty.

A successfully stabilized persona will cease to lose HPS at the lethal rate of 1 per minute, but each day she remains unconscious she must make a difficult (d20) CON roll or lose 1 HPS. Once stabilized, however, a persona can be healed as if her HPS total were positive. Her body still cannot heal itself through rest until she recovers consciousness with positive HPS, but pharmaceuticals and quick fixes will take effect on her. If stabilization fails, the vet (or other administor of aid) can try again immediately, but the 1 HPS per minute loss will continue until a successful stabilization has been completed or the persona dies.

Robotic Repair

Robots cannot heal, but they can be repaired by a qualified mechanic using her class skills. A robot will usually avoid repair because the mechanic is more likely to replace the faulty circuits which grant it free will than to remedy its lowered HPS max.

Death

Most personas die through HPS loss, from slipping too deeply into a coma and fading away before medical attention can bring them around again. Such a fate befalls an alien at 0 HPS, and a robot when its maximum HPS reach 0.

An anthropomorphic persona, however, dies when her HPS total drops below zero by half her HPS maximum — a situation known as **negative half yer HPS**, and leading to permanent, immutable, irremediable death. **EXP** contains no agency for expedient resurrection in a crisis. A persona whose maximum HPS were 54 would still be treatable, albeit critically injured and severely traumatized, even if she dipped as low as -26 HPS, but another point lost would end her life forever. And since a persona with negative HPS can do nothing other than lie about and bleed, she will very likely lose that final point.

The next most common mode of death — the most common for robots — is through attribute loss. With the exceptions of CHA, which can take

any value, and of MSTR in robots, which is always 0, a persona dies the instant any of her attributes drops below 1. A 0 attribute represents a faculty which has completely ceased to function — hence a persona with an AWE of 0 has suffered a fatal collapse of her sensory processing system, cutting her off from all outside stimulus; a persona with an INT of 0 has died from a shutdown of the brain. Detailed explanations of such deaths appear in Chapter 3, Attributes.

Aging

Eventually, if they escape destruction by any other means, biological personas will die of simple old age. How old they manage to get first will depend in part on their CON, in part on their race, and in part on their luck, but different races don't age at different speeds — a year is still a year, no matter what your persona looks like. She's just more likely to die young if she's a feline than a florian.

Whatever her race is, she will ultimately progress through five **age categories**: child, adolescent, adult, older, and aged, as described in Table 13.4, *Anthopomorph Ages*. As her age category changes, her attributes will fluctuate: a child, after all, is much physically weaker (although much cuter) than the teenager she will become. These effects of aging are presented in Table 13.5, *Age Effects on Attributes*, and are *not* cumulative. When an adolescent becomes an adult, her CHA increases by 6, not by 1.

The **start age** of a persona, the age at which she first hearkens to the call of adventure (and, not coincidentally, is first met by her player in Section I, Persona Generation) is determined in Chapter 4, Anthropomorphs or Chapter 6, Aliens. Before play begins, the player should adjust her persona's attributes as appropriate based on the age category of her start age.

The youngest age category is that of **child**. Children are characterized by a near total dependence on their elders, and generally undeveloped physical and mental faculties. An **adolescent** being is suffering through an age of transformation where she becomes sexually mature and begins to assert her independence and identity. When she becomes an **adult**, she has reached maturity in all aspects of her existence, and can fully function as an individual in society. The **older** category marks the beginning of her biological end, as her health and strength gradually begin to fail. To survive past older is to become **aged**: and these venerable personas have reached a stage of rapid physical and mental decay.

If a persona manages to survive beyond the aged category, she quickly begins to fall apart. Each year past the upper limit of aged, the player must make a CON attribute roll on 3d10 (see Chapter 16, Special Rolls). If she fails, her persona will lose 1 AWE, 1 CON, 1 DEX, 1 INT, 1 PSTR, and 5% from her HPS maximum. If the CON roll is successful, these six attributes remain the same, and her MSTR will increase by one if she makes an INT attribute roll on decidice. Whatever age category a persona is in, as soon as any of her attributes reaches zero she is dead.

Aliens go through the same five age categories as anthropomorphs do, and suffer the same effects — an older alien, whether its age be 8 or 2012, has a -2 DEX and a +2 MSTR. The age categories for an alien persona are determined with her start age in Chapter 6, Aliens. Robots, on the other hand, do not suffer from biological deterioration, as they have no biology to deteriorate. The nearest equivalent to aging on a robot is the accumulation of malfunctions it undergoes with the loss of HPS. Certainly all robots have an age, but that age bears no relation to their state of disrepair.

Under normal circumstances, a persona's age can be calculated by subtracting the year of her birth from the current year — the **chronological age**. But if a PSH spends a century in cryogenic suspension, or goes on a long and very fast space journey, her chronological age could easily jump from 35 to 135 without her aging a day; conversely, if she was prematurely aged by a psychic attack, she could be fully adult without having lived more than 5 years. The **biological age** of a persona, the age her body thinks it is, is the best measure of her lifespan; in the first instance above, it would remain at 35 as a hundred years passes, while in the

second, it would leap from 5 to 30 in an instant. Such anomalies are rare enough, however, that most personas will never find their chronological and biological ages differing by more than a few seconds — not enough to make an appreciable difference to their longevity.

Table 13.1: Robotic Systems Malfunctions

DIE ROLL	DAMAGED SYSTEM	ATTRIBUTE(S) REDUCED
01-15	Articulations	DEX, AWE
16-25	Brain	INT; add d2 to CF
26-40	Control unit	All attributes; add d2 – 1 to CF
41-55	Locomotion	DEX, PSTR
56-69	Peripheral	Lose an attack, defence, ability or sensor
46-75	Power plant	PSTR, CON; lose 1 month storage
76-99	Sensors	AWE, INT
00	Other/choose	

Table 13.2: Robotic Malfunction Severity

DIE ROLL (d6)	DAMAGE SEVERITY	ATTRIBUTE REDUCTION
1-5	Severe	1 point
6	Critical	2 points

Table 13.3: Sample Robot Decay Table for a Diagnostic Medical Bot

INITIAL ATTRIBUTES									
AWE	CHA	CON	DEX	INT	MSTR	PSTR	HPS		
9	11	8	21	18	0	12	16		
ATTRIBUTES DURING DECAY								**DAMAGED**	**TOTAL**
AWE	CHA	CON	DEX	INT	MSTR	PSTR	HPS	**PART**	**HPS LOST**
9	11	8	21	18	0	12	16	——	0-15
9	11	8	19	18	0	11	14	Locomotion	16-29
9	11	8	19	17	0	11	12	Brain	30-41
7	11	8	19	16	0	11	10	Sensors	42-51
6	10	7	18	15	0	9	9	Control unit	52-60
6	10	7	17	15	0	8	8	Locomotion	61-68
5	10	7	15	15	0	8	7	Articulation	69-75
4	10	7	15	13	0	8	6	Sensors	76-81
3	10	7	15	12	0	8	5	Sensors	82-87
3	10	7	14	12	0	7	4	Locomotion	88-91
1	10	7	14	11	0	7	3	Sensors	92-95
1	10	7	14	11	0	7	2	Peripherals	96-98
0	10	7	13	11	0	7	1	Articulation	99

Table 13.4: Anthropomorph Ages

PERSONA RACE	AGE CATEGORY Child	Adolescent	Adult	Older	Aged
Aquarian	1-4	5-54	55-104	105-115	116-120
Avarian	1-12	13-16	17-36	37-66	67-73
Canine	1-4	5-24	25-45	45-65	66-72
Equine	0-9	10-29	30-49	50-99	100-106
Feline	1-4	5-24	25-44	45-64	65-71
Florian	1-20	21-70	71-90	91-110	111-106
Humanoid	1-12	13-20	21-40	41-90	91-96
Insectoid	1-20	21-40	41-60	61-80	81-86
PSH	1-12	13-20	21-40	41-90	91-96
Reptilian	1-20	21-70	71-120	121-170	171-176
Rodentia	1-4	5-54	55-64	65-84	85-91
Ursidae	1-8	9-14	15-64	65-84	85-91

Table 13.5: Age Effects On Attributes

AGE CATEGORY	EFFECT ON ATTRIBUTE AWE	CHA	CON	DEX	INT	MSTR	PSTR
Child	-1	+4	-3	+2	-2	-4	-3
Adolescent	+1	-5	+2	-3	-1	-2	+2
Adult	0	+1	+1	+1	+1	+2	+1
Older	-1	0	-2	-2	+2	+2	-2
Aged	-2	0	-3	-4	+1	+1	-4.



II

Chapter 14
Performance Tables

Performance tables, or **PT's**, are used to determine the success or failure of any manœuvre a persona tries, from driving a friend's jeep to strapping a grommet-sized oscillating refractometer onto a Frederickson di-collating time remodulator. In a single die roll, the player can skip hours of painfully detailed explanations and proceed to the aftermath of her persona's attempt. After all, no player should be forced to specify the exact frequency at which her knite says, "Ommmmmmmm," in contemplation — and no ref can be expected to know whether Hobergruber's *Elements of Cabbage Biology* contains the particular anatomical information a biologist needs.

Mind you, PT's should never replace role playing or descriptive passages: a few quick, humourous descriptions by the ref or the player can make the difference between dull die rolling and colourful role playing. Good descriptions of a persona's actions should earn the player extra experience points (see Chapter 15, Experience), but should simply not have too great an effect on the outcome of the skill. No spie should fail at an interrogation simply because her player wasn't a good enough role player. The performance table gives the result of the attempt, and is unaffected by the theatrical stuffing in between.

A persona's chance of success at a skill is dependent upon her experience level (see Chapter 15, Experience) and the **degree of difficulty**, or **DD**, of the task. The player consults the appropriate table for the manœuvre and finds a number at the intersection of her persona's experience level and the manœuvre's DD. If she rolls higher than this number on decidice, her persona has succeeded. Rolls of 00 automatically succeed and rolls of 01 automatically fail, however, regardless of DD and experience level. (See **critical rolls**, in Chapter 16, Special Rolls.)

Class skills, tricks which all members of a class can perform, are all rolled on the performance table for the appropriate class. If a persona wants to attempt a class skill of another class than her own, she must roll on the class table for the other class, with a DD modified by Table 14.10, *Class Skills Cross Matrix* — for instance, if a vet wanted to perform a mercenary class skill, she would add 6 to the DD, while a mercenary wanting to perform a knite class skill must add 42.

Table 14.12, *Driving Performance Table*, is used for all manœuvres relating to driving (see Chapter 17, Driving), while Table 14.11, *General Performance Table*, is used for all other manœuvres — anything that cannot be done with a class skill or a to hit roll. The General Performance Table is also the standard class skills table for nothings, robots and aliens.

Assigning DD

The first step in applying PT's is determining the degree of difficulty of the desired manœuvre. The easiest actions have a DD of 1, with higher values corresponding to more difficult actions. There is essentially no upper limit to the DD of a manœuvre. The DD offers some consistency to the utilization of skills across all classes, for the higher the DD the tougher the manœuvre, the greater the chance of failure, and the greater the reward if success occurs.

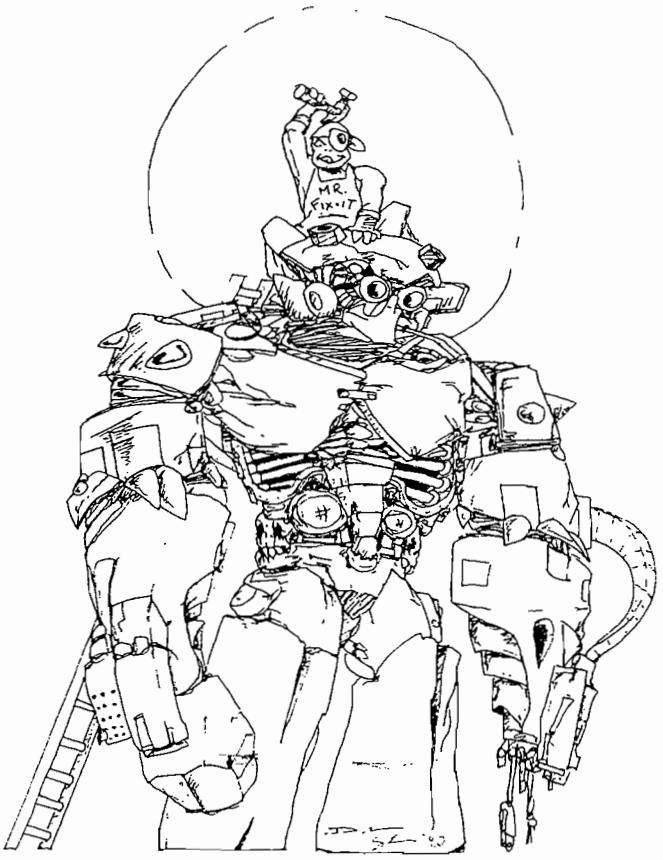
Learning how to assign DD's is a skill acquired by practice. As a rough guideline, every performance table includes a list of the DD's of various manœuvres. Often these DD's are random, reflecting the changing circumstances in which a persona might find herself. For instance, the nomadic skill of finding shelter has a DD of 1 to 4, while finding a safe passage has a DD from 1 to 12.

The DD is very flexible. It can be randomly determined by a die roll, adjusted by the skills of the persona attempting the manœuvre, or imposed by the referee as play dictates. For instance, a relatively unimportant safe passage could be rolled randomly on a d12, as whether it ended up as a

1 DD or a 12 DD manœuvre would not affect the game's outcome. However, if it were a safe passage through a dangerous area in the referee's milieu, she might assign a 10 DD to the PT roll. If she thought it important that the nomad fail, then she could just as easily assign a 42 DD to the manœuvre; or, conversely, there is no reason why a referee shouldn't end a challenging scenario with a simple PT roll.

Note that the DD is an absolute measure of a task's difficulty, and is unaffected by the persona's experience level. If an 8th level biologist finds alien identification easier than a 2nd level biologist does, it's because she's had more practice identifying them, not because aliens automatically become less cryptic over time.

PT Roll Adjustments



Often, exercising a skill will involve bonuses or penalties to the DD of the manœuvre or the PT roll itself. These adjustments might arise from attributes, qualities of the skill itself, the referee's whim, or the weird glowing force field around that mysterious artifact the persona found a couple of hours ago. (The way any given artifact affects PT rolls is described in Part 2, The Toys, with the artifact in question.)

Attribute bonuses allow the persona to add the value of a particular attribute to her PT roll, increasing her chance of success. For instance, a 6th level spie with a DEX of 14 attempting slight of hand would first determine her manœuvre's DD—say, 5 — and then consult Table 14.8, *Spie Performance Table*, to find that she needed a 45 on decidice to succeed. But spies are allowed to add their DEX to their PT roll when performing slight of hand, so even if the player rolled as low as 31, she would add 14 to get 45, and discover that she had succeeded.

DD bonuses, most often resulting from class skills, reduce the DD of individual procedures. A mechanic, for instance, might have a mending skill of 3, in which case a 4 DD repair would be reduced to only 1 DD, and a 17 DD procedure to 14 DD. In either case, her minimum roll for success would be much lower than otherwise. Other ways to reduce DD's include the use of tool kits, computers, manuals, enthusiastic descriptions, or bribes to the referee.

Even though the personas are operating at a bare functional capacity, they can still be penalized if things get worse. Penalties can increase the DD of any action, or decrease the player's PT roll, just as bonuses can do the opposite. The most common penalties associated with PT rolls arise from overencumbrance; they are detailed in Chapter 18, Encumbrance.

Success

Success occurs when the persona rolls less than the prescribed PT roll (after bonuses). It does not necessarily indicate perfect execution of the

attempted task; it merely means that the persona did not toil in vain. A successful roll for a biologist would only relinquish some information about the unknown alien; a mechanic's success might only keep her bicycle repaired for a short time.

Regardless of the player's roll, it is always best for the referee to keep given information useful but vague — e.g., the alien's hide might be tougher than plastix and weaker than plate mail, but its exact AR would remain a mystery; an artifact might be identified as a pump, and its on switch as the bright green button marked "ON," but whether it pumps water, sand, or blood would remain unknown.

Success also depends on what the player wanted her persona to do. If she said that she was going to fix the inatmo drive of her space vehicle, then a successful PT roll should indicate a repaired inatmo drive. If the referee doesn't think something is possible, she should reflect it by choosing a high DD for the manœuvre, not by changing her mind after the persona succeeds.

Failure

Failure occurs when the player rolls less than the prescribed PT roll (after bonuses). Failure usually results in more than a mere lack of success: spies get caught, veterinarians kill patients, mechanics break things, and nomads starve to death. Ultimately the result of a failure depends on the situation that the expedition is in, the lousiness of the die roll, and the mood of the referee. A roll like 01, for instance, might indicate effects exactly the reverse of those desired — a result which would, of course, always be deleterious.

Table 14.1: Research Durations

DD OF PROCEDURE	DURATION
1 to 3	d4 – 1 Units
4 to 8	d4 Minutes
9 to 12	d10 Minutes
13 to 16	d4 – 1 Hours
17 to 20	d10 Hours
21 to 41	d2 – 1 Days
42>	d2 – 1 Months

Duration

How long it takes to complete a task generally depends on a combination of common sense and degree of difficulty, although some skills have specifically assigned durations. Performing open heart surgery (a difficult task) would always take longer than ten minutes, for instance, while the equally difficult task of a double somersault leap on ice skates would be over for better or worse almost as soon as it began.

The suggested durations are generally minima — their DD values represent the persona's being rushed, and so the quality of her workmanship cannot be guaranteed. If the duration of the procedure is important, the persona must first sacrifice the time and only then try to make the PT roll. A persona working on a project that takes many months may or may not be able to go exploring during this time, and only when the duration is over will she find out if she has succeeded or not. For instance, a biologist trying to determine the armour rating of a particular alien (5 DD) would first roll 5d4 and total them. That sum is the number of minutes that she must spend leafing through her notes and contemplating before reaching a decision. If she is interrupted or stopped during this time, her roll may be penalized or forfeited.

If a persona wants to complete some procedure quicker than normal, she can certainly increase its difficulty to decrease its duration. The biologist above could certainly try to identify the alien's armour in under a minute, but she would suffer whatever DD penalty the referee felt was appropriate.

Many class skills take up no time at all, because they represent inherent abilities that must be performed swiftly — many knite, mercenary, and spie skills, for instance, are performed during combat and have no effect on the speed of action. Table 14.1, *Research Durations*, at left only applies as a rough guide for technical activities which require durations in order to appear more realistic.

Required Equipment

Why is it so difficult for personas to perform class skills? The reason is simple: they are operating with virtually their bare hands. The various class performance tables indicate the chance of success when operating with a bare minimum of equipment — that is, with what is listed on Table 14.2, *Minimum Equipment*. Some of the minimal equipment requirements are facetious, but others are very serious. A knite, for instance, must have at least an 18 MSTR to perform any of her psionic tasks. If a persona is caught without her minimum equipment, the referee may levy appropriate PT roll penalties... although how the personas manage to pull off their amazing stunts anyway is left to the ref's or player's description.





Extreme PT Rolls and DD's

Many PT rolls require values greater than 100, and some manœuvres will have DD's greater than 20. These are special instances that require some explanation.

A PT roll greater than 100 indicates that the skill cannot be successfully performed without PT roll bonuses. Unless the referee allows critical successes for the manœuvre (see Chapter 16, Special Rolls), even a natural roll of 100 will not necessarily be sufficient. Thus if a first level mechanic wants to repair a bicycle that has sustained major damage (6 DD), she must roll over 105. But mechanics receive an INT attribute bonus, and her INT is 16, so the player needs to roll only 89 or higher to repair the bicycle. If she were attempting a manœuvre

that required a PT roll of 120, she could not succeed at the task without the chance of a critical roll success.

Negative PT rolls, conversely, indicate procedures that are automatically successful for the persona. It is very easy to have a PT roll higher than a negative number, and the player will certainly succeed unless penalties apply or a critical failure occurs.

Occasionally the DD of an action will exceed the bounds of the performance tables. When DD is greater than 20, the skill is treated as a 20 DD manœuvre, but with a PT roll penalty. For every DD greater than 20 the referee adds 5 to the roll required at the 20 DD level — so if the roll needed for a 20 DD procedure were 167, the PT roll needed for a 25 DD procedure would be 167 + 25 = 192. A similar system is used for DDs less than 1 — i.e., 5 points are subtracted from the necessary PT roll for each DD below 1. (Mind you, it's highly unlikely that a player will ever need such bonuses for a DD that's already negative.)

Research Teams

The most powerful technique available to technically oriented expeditions, **research teams** allow groups of personas to pool their experience for a greater chance of success. Several mechanics might share their expertise to solve a scientific problem; a team of veterinarians could band together to save a life.

The maximum number of personas on a research team depends on experience level of the **team leader** — who in turn is the persona on the team with the highest experience level, or the most experience points in case of a tie. For every experience level the leader has, the research team can consist of one additional persona — including the leader herself. First level personas thus cannot lead research teams, as the team's maximum size would be one. If the team leader is fourth level, however, then the research team can consist of three personas plus the leader.

The experience level of a research team is the sum of the experience levels of its members, and every player gets a PT roll for success using the combined experience level. If any one of them makes a successful PT roll, then the entire team is successful.

Veterinarians regularly form research teams in the operating room. The team leader might be a 4th level vet, with two 3rd level vets and one 2nd level vet assisting; in this case, the team's aggregate experience level would be 12. Each of the four players would add the appropriate bonuses to her PT roll, and each of the four make a PT roll for success. Even if three players failed their rolls but the 2nd level vet made hers, the operation would be a success. This process can make even the most difficult of medical manœuvres possible: this particular research team could regularly pursue 12 DD procedures expecting success.

Teams can occasionally combine personas from different classes to complete tasks which require varied talents — applying medical attention to an animal might require a vet and a biologist, while designing a spie's tool would need a mechanic and a spie. Under what circumstances such a combination of classes can occur is left to the discretion of the ref: certain conditions, and often egos, are not condusive to forming research teams. Experience levels are summed as for any other research team, and all members still get a PT roll; the DD of the manœuvre is likely to be slightly higher than for a single persona, reflecting the need for accurate communication between team members.

The experience points gained for class skills are divided equally among the subordinate

Table 14.2: Minimum Equipment

PERSONA CLASS	MINIMUM EQUIPMENT
Biologist	Notebooks
Knite	MSTR of at least 18
Mechanic	Screwdriver, glue
Mercenary	Assorted weapons
Nomad	Nothing
Nothing	Consciousness
Spie	Dark sunglasses, trenchcoat
Vet	Needle, thread, knife and a smile

members, with the team leader taking one extra share — that is, in a four-persona team, the team leader would take two fifths of the experience point total, and the other three personas would take one fifth apiece. If a vet and a biologist team up to heal a rabbit, only the vet would receive experience points, as healing is not a biologist class skill.

Creating New Procedures

The PT system easily lends itself to the creation of new class skills — in fact, the listed procedures are no more than guidelines for procedures that can be developed. This can be fun and dangerous. The ref should not admit skills that grossly imbalance the powers of the persona, nor should she allow one class to infringe on the abilities of another. Such conflicts arise most easily when the players are crafting merc/spie skills, biologist/nomad skills, and vet/biologist skills.

Role Playing

PT's should never replace any opportunity for role playing. **EXP** is a role playing game, and misuse of the PT system could quickly turn it into an elaborate dice game. To avoid this, no PT roll should be made without a brief (or elaborate) description by the player or ref. The biologist that says, "I'm going to leaf through my notes here, and try to identify this bizarre creature," and then rolls the decidice, is making good gaming, and should be due for a PT roll bonus — as should those personas who cry, "I summon all the forces of evil beneath me, as I try to apply pressure to this weakling altruist," or "Taking my favorite tools from my mechanical kit, I proceed to repair this damaged bicycle," or "I ... calmly ... stalk ... silently ... past ... the ... sleeping ... sentry," etc., etc.... PT's can offer an excellent playing aid for high-technology gaming. If not abused, misused, or confused, they will increase the speed and fun of role playing in **EXP**.

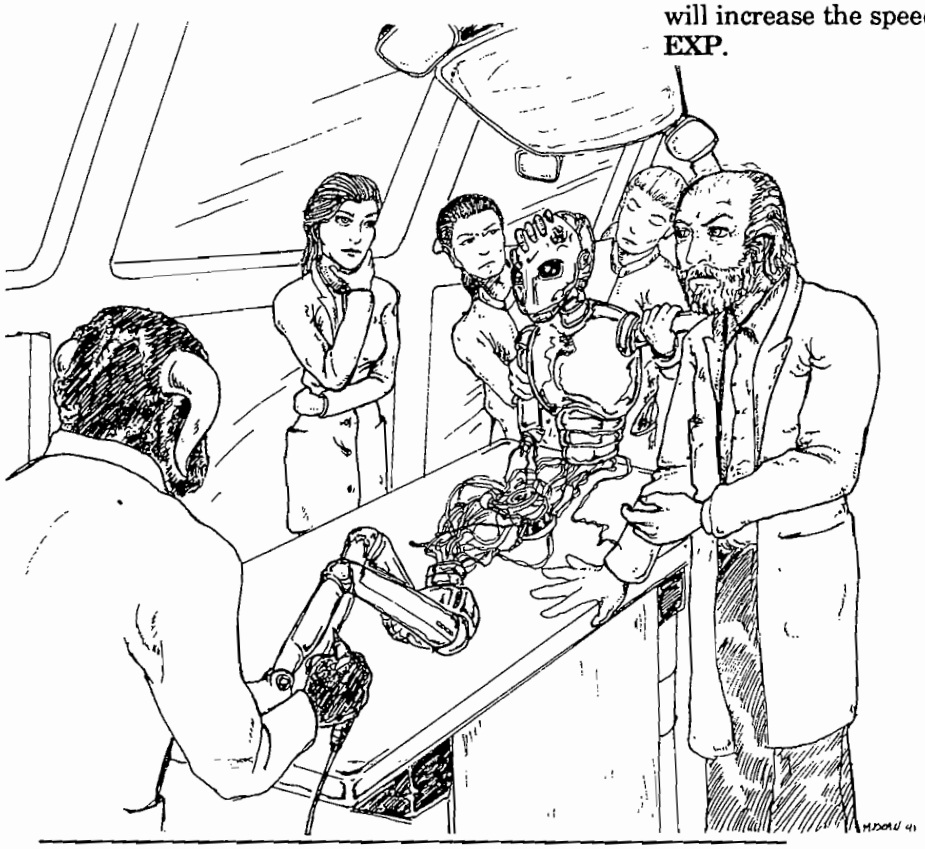


Table 14.3: Biologist Performance Table

LEVEL	DEGREE OF DIFFICULTY (DD)																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	90	91	92	93	94	95	96	97	98	99	105	110	115	120	125	130	135	140	145	150
2	85	87	89	91	93	94	95	96	97	98	100	105	110	115	120	125	130	135	140	145
3	80	82	84	86	88	90	91	92	93	94	95	100	105	110	115	120	125	130	135	140
4	75	77	79	81	83	85	86	87	88	89	90	95	100	105	110	115	120	125	130	135
5	70	75	80	81	82	83	84	85	86	87	87	92	97	102	107	112	117	122	127	132
6	65	70	75	76	77	78	79	80	81	82	84	89	94	99	104	109	114	119	124	129
7	60	65	70	73	75	76	77	78	79	80	81	86	91	96	101	106	111	116	121	126
8	55	60	65	70	72	73	74	75	76	77	78	83	88	93	98	103	108	113	118	123
9	50	55	60	65	67	70	71	72	73	74	75	80	85	90	95	100	105	110	115	120
10	45	50	55	60	65	67	68	69	70	71	72	77	82	87	92	97	102	107	112	117
11	40	45	50	55	60	63	65	66	67	68	69	74	79	84	89	94	99	104	109	114
12	35	40	45	50	55	60	62	63	64	65	66	71	76	81	86	91	96	101	106	111
13	30	35	40	45	50	55	57	60	61	62	63	68	73	78	83	88	93	98	103	108
14	25	30	35	40	45	50	55	56	57	58	60	65	70	75	80	85	90	95	100	105
15	20	25	30	35	40	45	50	52	54	56	57	62	67	72	77	82	87	92	97	102

Bonuses and Penalties

General Area of Concentration –2DD
Specific Area of Concentration –2DD
If research library is up to date +AWE on roll

Examples

Special Information	
Feeding Habits	alien DD + d4 DD
Mental Mutations	alien DD + 2d8 DD
Physical Mutations	alien DD + d12 DD
Estimate AR	d6 DD
Estimate Movement	1 DD
Estimate Hit Points	alien DD + d4 DD
Estimate Damage	d8 DD
Estimate INT	d4 DD

Alien Identification	
Common	3 DD
Uncommon	6 DD
Rare	9 DD
Very Rare	12 DD
Anthropomorph	d12 DD

Frequency is determined by the referee.

Special Activities	
Cloning	35 DD
Designing genes	42 DD

II

Table 14.4: Knite Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	30	32	34	36	38	40	42	44	46	48	50	55	60	65	75	85	90	95	100	105
2	27	29	31	33	35	37	39	41	43	45	47	52	57	62	67	72	77	82	87	92
3	24	26	28	30	32	34	36	38	40	42	44	49	54	59	64	69	74	79	84	89
4	21	23	25	27	29	31	33	35	37	39	41	46	51	56	61	66	71	76	81	86
5	18	20	22	24	26	28	30	32	34	36	38	43	48	53	58	63	68	73	78	83
6	15	17	19	21	23	25	27	29	31	33	35	40	45	50	55	60	65	70	75	80
7	12	14	16	18	20	22	24	26	28	30	32	37	42	47	52	57	62	67	72	77
8	9	11	13	15	17	19	21	23	25	27	29	34	39	44	49	54	59	64	69	74
9	6	8	10	12	14	16	18	20	22	24	26	31	36	41	46	51	56	61	66	71
10	3	5	7	9	11	13	15	17	19	21	23	28	33	38	43	48	53	58	63	68
11	0	2	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	55	60	65
12	-3	-1	1	3	5	7	9	11	13	15	17	22	27	32	37	42	47	52	57	62
13	-6	-4	-2	0	2	4	6	8	10	12	14	19	24	29	34	39	44	49	54	59
14	-9	-7	-5	-3	-1	1	3	5	7	9	11	16	21	26	31	36	41	46	51	56
15	-12	-10	-8	-6	-4	-2	0	2	4	6	8	13	18	23	28	33	38	43	48	53

II

Bonuses and Penalties

Knites receive no PT bonuses.
Add 15 DD if abilities are being used via any electronic media.

Examples

Abilities	
Mimic	d4 DD
False Rest	d4 DD
Induce Silence	d4 DD
(higher DD with louder sounds)	

Defense Shields	
Vs. Energy	3 DD
Vs. Laser	2 DD
Vs. Solid	7 DD
Psionic Defense	4 DD

Pre-Empting	
Speech	d10 DD
Thought	d20 DD
Pressure	MSTR / 2 DD
Telekinesis	d6 DD

All pre-empting victims receive a saving throw.

Detections	
Danger	4 + d6 DD
Traps	6 + d6 DD
Intent	8 + d6 DD
Invisible Junque	10 + d6 DD
Lies	11 + d6 DD
Life	12 + d6 DD
Date	14 + d6 DD

Lite Sabre Abilities	
Deflect Attack	To hit roll / 50 DD
Amputation	AR / 50 DD
(depending on lite sabre specifications)	
Multiple Attacks	d12 DD
(maximum 1 at levels 2-3, 2 at levels 4-5, and 3 at levels 6 and up)	

Table 14.5: Mechanic Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175
2	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170
3	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165
4	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
5	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
6	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
7	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145
8	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
9	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
10	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
11	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125
12	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120
13	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
14	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
15	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105

Bonuses and Penalties

Add INT to roll on all skills.
Subtract 2 DD per applicable skill level.

Examples

Artifact Identification

Tech Level	DD
1-5	6 + d4 DD
6-8	4 + d4 DD
9-12	2 + d4 DD
13-19	Tech level – d6 DD
20-25	Tech level – d4 DD

Referee may adjust tech level for special equipment.

Repairs

Extent of Damage	DD
Trivial	d3 DD
Minor	d6 DD
Major	6 + d6 DD
Critical	10 + d8 DD

May also add tech level, depending on circumstance.

Special Abilities

Mnemonic Trapping	d8 DD
Brainstorming	d20 DD
Mental Patenting	3 x DD of procedure

Weapons

Base weapon type	DD
Type A or B	2
Type C	4
Type D, E, or F	6
Type Special	8
Energy Weapons	10
Attach Peripherals	d4 DD
Emergency Unjam	4 – d4 DD
Equipment Maintenance	d6 DD
Make Ammunition	d10 DD
Modify	d12 DD
Upgrade Ammunition	d8 DD

May also add tech level as appropriate.

Robots and computers

Determine Weakness	5 + d6 DD
Estimate AR	d6 DD
Estimate CF	CF / 10 DD
Gain Access	d20 DD
Identify Type	d12 DD
Override CF	bot INT DD

Research and Development

Miniaturization	8 + d12 DD
Multi-Equipment	10 + d10 DD
Biological Implantation	25 + d20 DD
New Equipment	15 + d20 DD

II

Table 14.6: Mercenary Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	26	28	30	32	34	36	38	40	42	44	46	48	50	55	60	65	75	85	90	95
2	23	25	27	29	31	33	35	37	39	41	43	45	47	52	57	62	67	72	77	82
3	20	22	24	26	28	30	32	34	36	38	40	42	44	49	54	59	64	69	74	79
4	17	19	21	23	25	27	29	31	33	35	37	39	41	46	51	56	61	66	71	76
5	14	16	18	20	22	24	26	28	30	32	34	36	38	43	48	53	58	63	68	73
6	11	13	15	17	19	21	23	25	27	29	31	33	35	40	45	50	55	60	65	70
7	8	10	12	14	16	18	20	22	24	26	28	30	32	37	42	47	52	57	62	67
8	5	7	9	11	13	15	17	19	21	23	25	27	29	34	39	44	49	54	59	64
9	2	4	6	8	10	12	14	16	18	20	22	24	26	31	36	41	46	51	56	61
10	–1	1	3	5	7	9	11	13	15	17	19	21	23	28	33	38	43	48	53	58
11	–4	–2	0	2	4	6	8	10	12	14	16	18	20	25	30	35	40	45	50	55
12	–7	–5	–3	–1	1	3	5	7	9	11	13	15	17	22	27	32	37	42	47	52
13	–10	–8	–6	–4	–2	0	2	4	6	8	10	12	14	19	24	29	34	39	44	49
14	–13	–11	–9	–7	–5	–3	–1	1	3	5	7	9	11	16	21	26	31	36	41	46
15	–16	–14	–12	–10	–8	–6	–4	–2	0	2	4	6	8	13	18	23	28	33	38	43

Bonuses and Penalties

Applicable bonuses are listed with each skill.

Examples

Snap Reloads

Sword	0 DD
Pistol	2 DD
Rifle	4 DD
Bows	6 DD
Energy Weapons	8 DD

Ambidextrous Combat

Bolt Action Rifles, Two	18 DD
Pistol, Long Type A	6 DD
Pistol, Rifle	6 DD
Pistol, Short Type A	4 DD
Pistols, Two	4 DD
Rifle, Any Type A	8 DD
Rifle, Any Type B	10 DD
Semi-Auto Rifles, Two	8 DD
Short Type A, Two	2 DD
Short, Long Type A	4 DD
Type B, Bows, Two	24 DD
Type B, Throwing, Two	12 DD

All ambidextrous combat skills receive a 1 DD bonus per point of DEX.

Grenades

Safe Throw, Self	5 DD
Safe Throw, Others	4 DD per persona
Extra Grenades	8 DD per grenade

All grenade skills receive a 1 DD bonus per point of grenade skill.

Combat Movement

Covered Movement	4 + d8 DD
Flanking	6 + d8 DD
Cover from Shelling, Self	8 + d8 DD
No Flanking	6 + d8 DD
Attack While Rolling	d12 DD

Special Abilities

Determine Weakness	5 + d12 DD
Act During Ambush	7 + d12 DD
Stay Conscious	9 + d12 DD
Snap Unjam	d12 DD

Table 14.7: Nomad Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	30	34	38	42	46	50	54	58	62	66	70	75	80	85	90	95	100	105	110	115
2	25	29	33	37	41	45	49	53	57	61	65	70	75	80	85	90	95	100	105	110
3	20	24	28	32	36	40	44	48	52	56	60	65	70	75	80	85	90	95	100	105
4	15	19	23	27	31	35	39	43	47	51	55	60	65	70	75	80	85	90	95	100
5	10	14	18	22	26	30	34	38	42	46	50	55	60	65	70	75	80	85	90	95
6	5	9	13	17	21	25	29	33	37	41	45	50	55	60	65	70	75	80	85	90
7	2	6	10	14	18	22	26	30	34	38	42	45	50	55	60	65	70	75	80	85
8	–1	3	7	11	15	19	23	27	31	35	39	40	45	50	55	60	65	70	75	80
9	–4	0	4	8	12	16	20	24	28	32	34	35	40	45	50	55	60	65	70	75
10	–7	–3	1	5	9	13	17	21	25	27	29	30	35	40	45	50	55	60	65	70
11	–10	–6	–2	2	6	10	14	18	20	22	24	25	30	35	40	45	50	55	60	65
12	–13	–9	–5	–1	3	7	11	13	15	17	19	20	25	30	35	40	45	50	55	60
13	–16	–12	–8	–4	0	4	8	11	12	13	14	15	20	25	30	35	40	45	50	55
14	–19	–15	–11	–7	–3	1	5	6	7	8	9	10	15	20	25	30	35	40	45	50
15	–22	–18	–14	–10	–6	–2	0	1	2	3	4	5	10	15	20	25	30	35	40	45

Bonuses and Penalties

Subtract 1 DD in a familiar biome.
Add 1 DD per extra persona included in skill.

Examples

Design Clothing d6 DD
(+ 2 DD per other persona)
Build Fire 1 DD
Cure Poison Poison Intensity DD
Safe Passage d12 DD
Safe Campsite d8 DD
Shelter d4 DD
Tracking INT DD
Reverse Tracking INT + d4 DD

Husbandry
Taming Pet's INT DD
Tricks Ref's discretion

Food
Cook 1 DD
Gather 3 + d6 DD
Prepare 4 + d6 DD
Preserve 6 + d6 DD

Water
Dowsing 8 + d4 DD
Gathering 3 + d4 DD
Purifying 5 + d4 DD

II

Table 14.8: Spie Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145
2	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
3	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
4	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
5	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125
6	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120
7	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
8	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105
10	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
11	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
12	7	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
13	6	7	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
14	5	6	7	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
15	4	5	6	7	8	9	10	15	20	25	30	35	40	45	50	55	60	65	70	75

II

Bonuses and Penalties

All bonuses appear in square brackets below.

Examples

Assassinate	Victim's level + victim's AWE / 5 + d4 DD
Stun, Ambush	Victim's level + d4 DD [PSTR]
Stun, Combat	2 x victim's level + 2d4 DD [PSTR]
Armour with Martial Arts	AR / 100 + restrictiveness DD

Weapons with Martial Arts

Type A	3 DD
Type B	10 DD
Type C	5 DD
Special	8 DD

Tricks

Concealment	d6 DD
Inspections	AWE / 3 DD
Cryptography	8 + d8 DD
Disguise	d8 DD
Escape	d6 DD
Traps	5 + d6 DD

Thieving Abilities

Slight of Hand

Pocket	3 + d4 DD [DEX]
Table	2 + d4 DD [DEX]
Demonstrations	1 + d4 DD [DEX]

All slight of hand skills receive a 1 DD penalty per level of the observer.

Bypass Security

Latches	d4 DD [DEX]
Electronic Systems	d12 DD [INT]
Locks	d8 DD [AWE]

All security skills receive a 1 DD bonus per point of traps and/or locks skill.

Case

Security	2 + d6 DD [INT + AWE]
Room	3 + d6 DD [INT + AWE]
Building	4 + d6 DD [INT + AWE]

Camouflage

Move silently	3 + d6 DD [DEX]
Hide in shadows	4 + d6 DD

Forgery

Written	4 + d12 DD
Counterfeiting	8 + d12 DD

Bribery	3 + d4 DD [CHA]
Lying	d10 DD [MSTR]

Table 14.9: Veterinarian Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175
2	76	81	86	91	96	101	106	111	116	121	126	131	136	141	146	151	156	161	166	171
3	72	77	82	87	92	97	102	107	112	117	122	127	132	137	142	147	152	157	162	167
4	68	73	78	83	88	93	98	103	108	113	118	123	128	133	138	143	148	153	158	163
5	64	69	74	79	84	89	94	99	104	109	114	119	124	129	134	139	144	149	154	159
6	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
7	56	61	66	71	76	81	86	91	96	101	106	111	116	121	126	131	136	141	146	151
8	52	57	62	67	72	77	82	87	92	97	102	107	112	117	122	127	132	137	142	147
9	48	53	58	63	68	73	78	83	88	93	98	103	108	113	118	123	128	133	138	143
10	44	49	54	59	64	69	74	79	84	89	94	99	104	109	114	119	124	129	134	139
11	42	47	52	57	62	67	72	77	82	87	92	97	102	107	112	117	122	127	132	137
12	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
13	38	43	48	53	58	63	68	73	78	83	88	93	98	103	108	113	118	123	128	133
14	36	41	46	51	56	61	66	71	76	81	86	91	96	101	106	111	116	121	126	131
15	34	39	44	49	54	59	64	69	74	79	84	89	94	99	104	109	114	119	124	129

Bonuses and Penalties

Add CHA to roll when operating on conscious patients.
Add 2 DD when operating on unfamiliar races.

Examples

Quick Fixes

Percent of HPS max	DD
5%	1 DD
10%	2 DD
15%	4 DD
20%	8 DD

Treat Burns

1st Degree	1 + d6 DD
2nd Degree	3 + d6 DD
3rd Degree	5 + d6 DD
Radiation	7 + d6 DD

Treating Unconscious

Artificial Respiration	2 DD
Revive Stunned Persona (positive HPS)	d8 DD
Stabilize Comatose Persona (negative HPS)	20–patient's CON DD

Special Treatments

Calm Persona	1 DD
Cure Poison Eeffects	Intensity DD
Cure Radiation Effects	d6 + Intensity DD
Negate Frenzy	d6 DD
Negate Poison Effects	Intensity / 2 DD
Negate Psionic Effects	20 + d10 DD
Re-Attach Members	13 + d8 DD
Restore Eyesight	15 + d10 DD
Restore Hearing	10 + d10 DD

Special Procedures

Autopsy	d10 DD
Death Pinch	Patient's CON + d8 DD
Detect Poison Effects	2 + d4
Detect Psionic Effects	3 + d4
Develop Drugs	13 + d20
Identify Poison Type	8 DD
Open Stasis Bag	d4 DD
Paralyzing Pinch	Patient's CON / 2 DD
Subliminal Suggestion	Patient's MSTR / 2 DD

Very Special Procedures

Increase Attributes	50 + d20 DD
Reduce Aging Effects	40 + d20 DD

II

Table 14.10: Class Skills Cross Matrix

CLASS OF PERSONA	CLASS OF SKILL ATTEMPTED							
	Biologist	Knite	Mechanic	Mercenary	Nomad	Nothing	Spie	Veterinarian
Biologist	—	42	5	6	3	2	5	3
Knite	5	—	5	2	4	2	4	5
Mechanic	3	42	—	5	3	2	5	3
Mercenary	6	42	6	—	4	2	3	6
Nomad	3	42	3	4	—	2	4	3
Nothing	6	42	5	5	4	—	6	5
Spie	6	42	6	3	4	2	—	4
Veterinarian	3	42	4	6	3	2	5	—

II

Table 14.11: General Performance Table

LEVEL	DEGREE OF DIFFICULTY																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175
2	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170
3	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165
4	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
5	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
6	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
7	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145
8	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
9	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
10	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
11	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125
12	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120
13	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115
14	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
15	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105

Examples

Apply contact lenses	1 DD
Bake a cake	d30 DD
Climb a rope	d4 DD
Eat fast	d3 DD
Fall asleep	d8 DD
Find reference	d8 DD
Gymnastics	d6 DD
Juggle	2 DD per item
Learn sign language	d12 DD
Make a quick fix	See the examples to Table 14.9, *Veterinarian Performance Table*, on page ‰‰‰.
Open bottle	d2 DD
Pick a lock	See the examples to Table 14.8, *Spie Performance Table*, on page ‰‰‰.
Read	d10 DD
Read telephone book	d2 DD
Tell a joke	1 DD per 5 personas
Wake up on time	d4 DD

Table 14.12: Driving Performance Table

HANDLING LEVEL	DEGREE OF DIFFICULTY 1	2	3	4	5	6	7	8	9	10
1	15	30	45	60	75	90	105	120	135	150
2	6	22	37	52	69	84	99	115	130	145
3	-3	14	29	44	63	80	93	110	125	140
4	-12	06	21	36	57	77	87	105	120	135
5	-21	-2	13	28	51	69	81	100	115	130
6	-30	-10	5	20	45	60	75	95	110	125
7	-39	-18	-3	12	39	54	69	90	105	120
8	-48	-26	-11	4	33	48	63	85	100	115
9	-57	-34	-19	-4	27	42	57	80	95	110
10	-66	-42	-27	-12	21	36	49	75	90	105
11	-75	-50	-35	-20	15	30	43	70	85	100
12	-84	-58	-42	-28	9	24	37	65	80	95
13	-93	-66	-50	-36	3	18	31	60	75	90
14	-102	-74	-58	-44	-3	12	25	55	70	85
15	-111	-82	-66	-52	-9	6	19	50	65	80

Procedures

Example	DD
Turns:	
Straight ahead	0
Drift	1
facet pt (30°)	2
facet (60°)	4
2 facet pts (90°)	6
2 facets (120°)	8
3 facet (150°)	10
3 facets (180°)	12
Manoeuvres:	
Reverse	+3
Jump	+7
Driver not in driver's seat	+1
Intoxicated	+3
Speeding:	
per 10 h/u	+1
> DEX h/u	
Parking:	
Drive in	1
Parallel	2
Landing	3

Meteorological	
Rain	
1.Light	1
2. Normal	2
3. Heavy	3
4. Monsoon	4
Snow (sandstorm, +1)	
1. Light	1
2. Normal	2
3. Heavy	3
4. Blizzard	4
Wind	
1. Light	1
2. Normal	2
3. Heavy	3
4. Gale	4
Hail	
1. Normal	1
2. Heavy	3

Road Surface	DD	
1. Superb	-1	Well lit, marked and controlled.
2. Good	0	Lit, and marked.
3. Average	1	Marked.
4. Poor	2	Few signs.
5. Awful	3	No signs, no lines
6. Off Road	4	

Fog, Smoke, Gas	DD
1. Trace	1
2. Thin	2
3. Normal	3
4. Dense	4
5. Thick	5
6. Opaque	6

Darkness	DD
1. Twilight	1
2. Moonlit	2
3. Starlit	3
4. Void	4

II

II

Chapter 15
Experience

The personas in **EXP** become steadily more experienced with time, just as we do in our lives. But while a real person gradually lives through more and more significant events, each affecting all her future reactions, to record the complete personal psychological history of a persona would be impossible. Instead, personas slowly amass **experience points**, or **Exps**, and the number of Exps a persona has determines the state of her abilities.

Virtually everything a persona does earns her Exps: if she identifies an artifact she gets experience points, if she completes a class procedure she gets experience points, if she wins a fight she gets experience points, if her player comes up with some good role playing during the campaign she gets experience points.... The only stipulation is that Exps are only awarded for success. There is no reason why failure should be any less educational, but this is a game, and a standard requirement of all games is that success be rewarded. Thus doing things correctly—whether through a lucky die roll or a player's smarts—is how personas can improve themselves in **EXP**.

Player vs. Persona Experience

As a player does more and more gaming, her personal skill level at role playing will improve. No longer the incompetent neophyte that she once was, an experienced player won't even consider actions that might have sorely tempted her personas gone by—her current persona will exhibit an increased level of consciousness in even the simplest of her actions. There is nothing wrong with this sixth sense that personas run by experienced players seem to have. There is nothing that a referee can or should do to make a player forget her hard-won skills. But the player must be careful lest her persona seem to possess information she could not possibly know.

A brand new persona should not display in-depth knowledge of a ruin mapped in detail by the player's three previous personas. However, it would be perfectly acceptable if the persona, on a hunch, acted in a very cautious manner while scrounging through those same ruins. The problem is one of differentiating knowledge from intuition: a persona cannot know everything her player does in precisely the same terms as the player does ... but deductions from minimal evidence lie at the heart of role playing.

Experience Points

As the run progresses, the ref totals the personas' experience points, but she only gives them out once all gaming has ended. Over the course of an adventure, the persona might earn 100 Exps for using her class skills, 200 Exps for identifying a toy, 75 Exps for combat, and 1000 Exps for good role playing, but she would receive all of them at once, after returning home for a vacation.

Each person's Exps total is converted to an **experience level** through the appropriate *Experience Levels* table for her class (see Chapter 8, Classes). A spie who has collected 6243 Exps is at the third level, and a veterinarian with 18 402 Exps is fourth level. The experience level represents how well the persona performs in combat, in class skills, and in life in general; PT and to hit rolls both depend on the experience level of the persona.

1 Exps has the same value regardless of how it was earned or who did the earning. A mercenary who received 50 Exps for combat would have gained just as much life experience as a biologist who earned 50 Exps in field work, or a nomad who won the same amount for good role playing. However, a given *amount* of combat will be a far more valuable teaching aid to a mercenary than to any other class of persona, and so all classes besides mercenaries earn proportionately fewer Exps for the same amount of fighting.

Moreover, different classes progress in their class skills at different rates. A biologist going

from 4th to 5th level needs to earn 10 000 Exps, while a knite facing the same boundary must earn 24 000 Exps. A knite simply has many more skills to practise and contemplate than a biologist does, and so she must take longer to bring all of them up to a fifth-level proficiency. The number of Exps needed between levels also increases as the levels get higher — so the knite who needs 24 000 Exps to get to the fifth level needed only 3000 Exps to progress from 1st to 2nd. This reflects the greater effort required for already highly skilled individuals to improve their craft.

Special Cases

II

•Nothings: With no class skills, nothings have no way to rise in experience by exercising them. They do, however, treasure money, and so receive 1 Exps for every 10 eps of treasure they earn. (**Eps**, or **electrum pieces**, are described in greater detail in Chapter 23, Money.) Earned treasure must be stolen, found, sought, or gathered with at least some risk to the persona: it cannot be given, granted, won (as in a lottery) or inherited. Thus a nothing would receive 100 Exps if she cashed in an antique chair worth 1000 eps, but only if the chair was taken from the lair of a vanquished denizen. If she cashed it in for less than its worth, she would simply receive fewer Exps. She would get nothing for the chair itself. If other personas funnel money to a nothing, or improperly divide their spoils in the nothing's favour, or turn a blind eye to the nothing's blatant embezzlement, the treasure is considered given, and the nothing receives no Exps for it.

•Robots: Robots are not mechanical servants in the functioning sense of the words. As described in Chapter 5, Robots, they are insane machines whose internal damage seems to have given them a mind of their own. Robots can collect experience only by destroying their internal programming — that is, by misusing their equipment and by sustaining further damage. They receive nothing from *winning* combat, or from identifying artifacts.

For every point of damage a robot takes, it receives 20 Exps. This method of accumulating experience, however, slowly destroys the bot, and so the player cannot depend on it as her sole source of experience points. Instead, she must be resourceful in trying to earn role playing experience, using her robot's peripherals for functions they were never designed for. If a robot were to paint its opponents mauve in combat, blinding them, or break into a safe by drilling a hole with dental equipment, it would gain Exps aplenty.

•Aliens: Aliens present another problem altogether. Depending on their home planet, they can range from unintelligent planetary denizens to important dignitaries of intergalactic empires. Players running non-sapient aliens will find their greatest source of Exps to be playing their personas properly, with combat as a secondary source, for an unintelligent alien has no class skills, cannot identify artifacts, and doesn't know what money is in order to hoard it. Intelligent aliens, meanwhile, may collect Exps from as many sources as anthropomorphs do, including the collection of treasure if they belong to no persona class.

Experience for Class Skills

The most straightforward, and honest, way to earn Exps is to practise one's class skills. Whenever a player makes a successful PT roll, or her persona achieves a goal directly related to her class, Exps are awarded. Thus biologists get Exps for identifying aliens, nomads get Exps for finding shelter, and nothings get Exps for collecting cash.

The amount of experience awarded depends on the degree of difficulty of the PT roll required. Some classes require higher PT rolls than others to complete tasks, and so they receive correspondingly more Exps for a successful roll — so a biologist would get 270 Exps for successfully completing a 3 DD procedure, while a knite would only earn 60 Exps for the same degree of difficulty. The respective Exps values of successful manœuvres for each class are given in Table 15.1, *Experience for Class Skills*.

If a persona is exercising a particular skill to lower the DD of a manœuvre, she still receives Exps as if she had rolled at the full DD. A skill at rock climbing is equivalent to a higher experience level

for endeavours involving the climbing of rocks: it only makes the player's roll easier, and does not affect the difficulty of the procedure.

Any referees or players who feel that granting experience for rolling dice is not in the spirit of proper gaming should remember that PT rolls are affected by descriptive and enthusiastic role playing. The chance of success at any given manœuvre, and hence the chance of getting EXPS, *does* depend on the level of role playing the player exhibits. Class skills EXPS aren't just the result of lucky rolls.

The EXPS for class skills system shouldn't be abused by the players or the ref. Unless a persona is utterly insane, she has no reason to keep performing simple tasks over and over for no reason but to collect EXPS when she succeeds at them. To prevent players from thus gathering experience as fast as they can roll dice, the ref might make the campaign more interesting and keep the players busy enough that they have neither the time nor the inclination for such frenzies, or penalize them for poor role playing in EXPS equal to those they have just earned, or possibly introduce a referee persona from the local asylum to relieve the persona of the stress of her adventuring days.

The referee, however, should not limit the EXPS awarded because she feels they were too easily earned. If a task is too easy, she should raise its DD, not limit the EXPS it entails. She should never expect her players to make a hard PT roll and then be content with the EXPS of a lower DD.

Refs might also try to lower the EXPS awarded to high-level players because their PT rolls are easier. This is unfair not only because the difficulty of the tasks hasn't changed, but also because high-level players *need* more EXPS to progress in levels. The more easily obtained experience points must be obtained much more often to be useful to the personas.

Experience for Practice

When personas are experiencing a long layover of some sort — a snowed-in winter, a prolonged space voyage, or whatever else — they might wish to practise, or study, in an attempt to improve their skills. During practice (non-gaming) time, the ref can assume that the persona was making use of whatever facilities were available, and that the persona was careful enough not to die while rehearsing a particularly complex manœuvre. (Then again, depending on the circumstances, accidents do happen....)

Whether or not to grant EXPS for practice is a distinct dilemma for the referee. Practice constitutes getting something for nothing — a heinous sin in role playing games — but to ignore its effects completely is unrealistic — if anything a worse crime. Exactly what the referee arranges is up to her, but one useful method is to award the practising persona a lump sum of experience equal to the DD of the manœuvre, times the standard modifier for her class, times the number of weeks she spends in practice. The persona would then roll on the General Performance Table, with a DD determined by the referee, to see if her practice was successful.

For instance, a biologist given free rein in a zoo for two months would have plenty of opportunities for learning, while a mercenary counting money in a warehouse would not. Thus, if both were trying to study their class skills on the side, the biologist would have a relatively easy PT roll to earn her EXPS, while the mercenary would have a fairly difficult one. (After all, the biologist can easily check to see whether she has learned correctly, while the mercenary cannot. And practising something incorrectly is as bad as not doing it at all.)

If an EXPS award doesn't seem to suit the circumstances, the referee could issue specific skills to the personas instead. A mercenary who promises to practise swinging her long sword around might earn a skill level in that weapon, while a mechanic who spends her entire space voyage in the drives section could easily earn herself exatmo drives 1. The mechanic would then enjoy a bonus for the rest of her life when applying her newfound knowledge of exatmo drives, making it easier to get EXPS later, but would earn no EXPS for the practice itself.

Experience for Artifact Identification

Artifact Identification, or **AID**, is described in detail in Chapter 20, Artifact Identification. Suffice

it for now to say that when an artifact is found, the personas will generally have no idea what it does. When a persona figures out its function, she has identified it, and receives Exps accordingly.

The best way to identify an unknown piece of equipment is to role play the object in every capacity the players can think of until something works — for instance, upon finding a slippery white cylinder with no visible markings, they might plug it into their space vehicle drives, wave it at their enemies, examine it under a microscope, spin it at high speed, and attempt to eat it with curry, all to no avail, before realizing it to be a bar of soap. They can also earn experience for guessing its use from its environment and description.

The only problem with these two methods of AID is that the object's identity might already be known to the player, in which case a skillful bit of role playing can then earn the player some undeserved Exps. (Mind you, if she pulls it off, she might deserve some Exps for the acting itself.) If the device under scrutiny has previously been identified by some other member of the expedition, no Exps can be awarded for either of the two role playing AID methods.

There are, however, two other methods of identifying artifacts: a mechanic can use her class skill of identifying artifacts, and any persona can roll on the AID Table in Chapter 20. As these two methods do not involve the player's knowledge in any way, the persona can always receive Exps for successfully using one of them. (Naturally, if the *persona* already knows what an artifact is, she can never receive Exps for its identification under any circumstances. No persona should sit down at the breakfast table, announce, "Ah! Scrambled ham!" and expect to get any Exps for it.)

Most toys can be used the moment they have been identified. If a referee feels that an item is particularly complicated, she can make the player identify it a second time before operating it — in which case the player should receive another set of Exps for the object.

The basic experience awarded for the identification of a toy is listed with each artifact in Part Two, The Toys. If a persona identifies an object by role playing, she receives double the indicated Exps; if the object is related to her class, she receives 25% more Exps again. (In general, the description of an object will mention the most closely related class. Weapons and armour are class-specific to both mercenaries and spies; drugs and medical equipment are class-specific to veterinarians. Nomads have no class-related equipment.) Objects from higher tech level are correspondingly more compex, and so harder to identify; their basic Exps must be adjusted.

The referee should never reveal when a persona has succeeded in identifying an artifact by announcing that she has earned however-many Exps. If the value she cites is high, the players will instantly realize that this isn't just any seatbelt, it's a very-high-tech-level seatbelt with special powers; if she makes a regular practice of telling players about Exps as they earn them, the player who just identified the bar of soap as an industrial lubricant will know she's wrong because she hasn't been given any Exps yet. Instead, the referee should simply mark down who's earned what, and tell the players their totals at adventure's end.

Experience for Combat

The best way to gain combat experience is to fight. Personas gain Exps for **vanquishing** any opponents they might come across — with vanquishing being defined as knocking unconscious, paralyzing, stunning, killing, or otherwise rendering inoperative and non-threatening. Some subtleties of this definition may not be entirely obvious: creatures with mental powers cannot be vanquished simply by being paralyzed, since their mental attacks can continue. Creatures that naturally regenerate are not considered killed until they have been thoroughly destroyed.

Neither does simply engaging in lethal combat guarantee the earning of Exps. To begin with, the opponent must have posed a threat to some member of the expedition: slaughtering all the kittens in the local pet store might count as a class skill for an antiknite, but will give no one any combat Exps. Furthermore, the opponent must have posed an

unreasonable obstruction to the goals of the expedition. A bailiff who threatens to throw a persona into jail certainly meets the first criterion, and is certainly posing an obstruction to the expedition goals — but the obstruction might be quite a reasonable one, and moreover, bailiffs tend to be satisfied with bail and a promise not to misbehave.

Ultimately, the decision of whether to award EXPS for a given round of combat rests with the referee. But if she believes the combat did meet the criteria, and if the personas win, then the EXPS total for all vanquished opponents is divided equally among all expedition members, player and referee, who took part. (Taking part is a rather broad term which includes taking damage from, attempting to hit, succeeding at hitting, being chased by, attempting to chase, and/or aiding anyone on either side of the fracas.)



For mercenaries and aliens, this fraction is the number of EXPS received. Non-combat persona classes, however, suffer a further reduction, as they cannot glean as much useful knowledge from the combat situation. A veterinarian, for instance, whose life's work involves healing, will not learn very much from killing something. What percentage of combat EXPS a persona actually earns is given by Table 15.2: *Combat Experience* — so a mechanic whose share of combat experience was 400 EXPS would earn only 20% of it, or 80 EXPS.

The EXPS value of a vanquished opponent is equal to 100 plus its initial HPS, times its combat ratio. Note that the opponent's initial HPS might be far lower than its maximum HPS — the party only earns experience for what it actually accomplishes, not what someone else started. So an alien with 40 HPS and a CR of 14 would be worth 1960 EXPS, as 100 + 40 = 140, and 140 x 14 = 1960. Likewise, a robot with 350 HPS and a CR of 29 would be worth 13 050 HPS — 100 + 350 = 450, and 450 x 29 = 13 050. (In this case, 350 HPS is the actual amount of damage the personas had to do to destroy the robot. Its maximum HPS might never have been higher than 47.) The EXPS value of an episode of combat is the sum of the EXPS values of each vanquished opponent.

Under certain circumstances, this total is further adjusted, for higher or for lower. Table 15.3, *Combat EXPS Adjustments*, enumerates these situations. The adjustments are cumulative: if three personas died in a 5-unit combat scenario, the combat EXPS total would first have 30% added to it, and then be cut to 60% of its new total — that is, to 78% of the original.

The referee reserves the right to reduce the number of EXPS awarded for combat whenever she sees fit: it is up to her to strike the very difficult balance between what this equation indicates and what the personas deserve. An opponent's combat ratio supposedly indicates the number of personas it needs arrayed against it to make for a fair fight, but as personas find powerful artifacts and generally increase in ability, the CR begins to look artificially high. The referee is the final arbiter as

to how much experience arises from a given combat situation.

Combat EXPS, like AID EXPS, should not be mentioned until after the adventure. Otherwise, the players might demand to know why they haven't received any EXPS for the evil hideous narwhal-thing they just dismembered, and the referee could ruin her entire scenario by admitting that it wasn't actually attacking them.

Experience for Role Playing

Role playing is the single most entertaining aspect of **EXP**. It creates the mood of the game, instills that thread of reality (or surreality), and provides an essential source of comic relief. For these and many other reasons, players should always be awarded experience points for high quality role playing, a coercion which can make good role players out of even the dullest dice-rollers.

In order to assign EXPS for role playing properly, the ref must be keely attuned to the players' actions. If at any time the player seems to be stepping beyond the bounds of necessity to use language appropriate to the situation at hand, the ref should note that EXPS are deserved.

"I hastily rummage through the filing cabinet with my little clawing paws, always pricking my ears, and sniffing the air for the first signs of a sentry" — this player is emphasizing the physiological abilities of her persona, while simultaneously giving a vivid description of her situation. She would probably receive a fair EXPS bonus.

"I execute a thunderous, trumpeting charge with my imposing bulk." This player, who also demonstrates her alien's width by placing her arms in a yoke-like position and lurching back and forth, would also come due for a sizable reward.

"I head to the bank and take out a five thousand eps loan." This player has left no opportunity for role playing at all — she treats the loan as a foregone conclusion, and she has omitted the entire journey to the bank. While she should not be penalized for this, she would certainly not receive any EXPS, and the referee would do well to affect a bank manager's stance and demand just why she thinks she has any right to this fine establishment's money.

Enthusiastic descriptions are not always clear ones, however, and if the ref doesn't have a clue what one of her players is talking about, she should not hesitate to ask. If the player's description is so general that it causes confusion for the ref — and players should remember that refs are easily confused — the ref might invoke a minor EXPS penalty. For example, "I roll to hit" is a statement that if taken literally could be disastrous for the persona. Better comments would be, "I try to shoot it with my trusty laser pistol," or, "I'm punching at this sucker as hard as possible." Not only are these more colourful, and worth EXPS, but they also help the referee by giving more information about the nature of the attack.

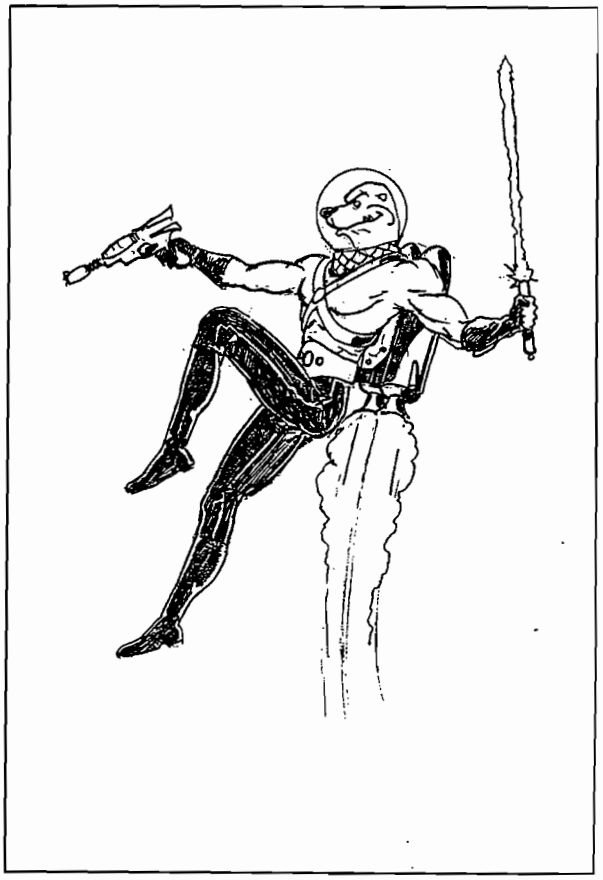


Table 15.1: Experience for Class Skills

PERSONA CLASS	PT EXPS
Biologist	90 per DD
Knite	20 per DD
Mechanic	80 per DD
Mercenary	10 per DD
Nomad	35 per DD
Nothing	1 per 10 eps
Spie	50 per DD
Veterinarian	70 per DD
Robot	20 per HPS of damage
Alien	See text

Table 15.2: Combat Experience

PERSONA CLASS	PERCENTAGE OF COMBAT EXPS EARNED
Biologist	20%
Knite	75%
Mechanic	20%
Mercenary	100%
Nomad	65%
Nothing	10%
Spie	75%
Veterinarian	10%
Robot	0%
Alien	100%, or by class

There is no objective system for allotting role playing experience points. To avoid unfairness as much as possible, Table 15.5, *Experience for Role Playing*, below gives EXPS values for some typical role playing actions in ranges that are easily rolled. For example, acting in a manner appropriate to one's class is worth between 50 and 300 EXPS, or 5d6 times 10. The referee can then either roll the awards at random or assign them by her own whim.

Table 15.3: Combat EXPS Adjustments

COMBAT DESCRIPTION	EXPS ADJUSTMENT
Opponent killed persona(s)	Add 10% per persona
Opponent injured persona(s)	No adjustment
Combat lasted <1 unit	Use 20% of total
Combat lasted 1-3 units	Use 40% of total
Combat lasted 4-6 units	Use 60% of total
Combat lasted 7-9 units	Use 80% of total
Combat lasted ≥10 units	No adjustment

Table 15.4: Experience for Role Playing

ROLE-PLAYING ACTION	EXPS VALUE
Using one's attributes (forcing doors, being aware, etc.)	1-20
Playing one's race (recalling shape, abilities, restrictions, etc.)	1-50
Using a mutation	1-100
Using non-combat equipment	1-100
Reflecting class ideals	50-300
Feeding the ref	1-10
Being nice to the ref (admitting mistakes, offering to re-roll, etc.)	2-20
Quick thinking (right or wrong)	25
Spectacular displays of genius	100-600
Good descriptions of actions	10-100
Creating new descriptive noises	1-10
Abusing the ref	1-10 (subtract experience)
Borrowing dice	1-6 (subtract experience)
Creating rhythmical noises	1-20 (subtract experience)
Confusing the ref on purpose	1-100 (subtract experience)
Throwing heavy objects at ref	Forfeit all experience
Nuclear attack	Forfeit experience; play for real

What Experience Can Do For *You*

There remains one special matter to discuss concerning experience. If you recall from Chapter 9, Combat Tables, one of the factors that adjusts a persona's ability to hit her target is her experience. The statistics on her Combat Table will change as she advances EXPS levels. Ultimately, the persona's fighting experience will have a more significant role in determining her success rate than her raw ability or special combat skills.

It might have seemed more appropriate to place the rules for improving BP and BNP with experience in the *Combat Tables* chapter or Chapter 8 on *Classes*. However, **EXP** is organized to present the rules in some kind of logical progression that reflects the order in which the reader is likely to first encounter them. **Section One** is devoted to initial persona generation. Chapter 8 attempts to compile *all* of the useful information on each of the classes; but since the player has not yet come across either rules for experience or the concept of Combat Tables, listing experience level to-hit bonuses there would have been confusing. Similarily, Chapter 9's discussion of Combat Tables could have included this information readily, but it would have been largely meaningless without any knowledge of how EXPS are awarded for combat experience.

Assuming that you've got a persona, and she's survived her first level, you'll eventually need to update her Combat Table to reflect her battle-hardened condition. Every time a persona advances a level, the player should consult Table 15.5, *Level To-Hit Bonus*. Listed therein are number values for each weapon type (A, B or C), for each persona class.

The **level to-hit bonus** is added to the person's BP every new level. There is no level bonus at first level, and the amount that is added to the bonus proficient decreases each level. The level bonus is subject to the law of diminishing returns: more work produces less improvement. this essentially means that one must do more and more to get less and less.

The difficulty in attaining combat skills increases under two separate criteria: experience levels become more difficult to acquire as they get higher, and then the persona keeps getting less in return. This makes the increase in combat skill assymptotic.

There are several reasons why **EXP** does this. One reason for decreasing the level bonus is to *deliberately* limit the level to which the persona's BP can increase, ensuring that high level personas remain manageable in combat. Another pseudo-reason is that in the real world, it becomes increasingly difficult to improve any skill, whether it be combat or technical. Eventually there remains no more room for general improvement in combat.

Personas have no Level Bonuses at first level. As soon a a persona has been awarded enough EXPS to push her up to second level, she consults Table 15.5 and finds the level to-hit **base values** for each weapon type, depending on her class. Those base values hold true for that particular class, regardless of experience level. The actual number that is added to the persona's Bonus Proficient is the base value from Table 15.5, *divided by the persona's new level*. For example, a second level Vet would add 11 to her BP for Weapon Type A (Base value divided by experience level: 21 / 2). The level bonuses are listed both on Table 15.5 and Tables 15.6 **a** through **c**, *Incremental Level Bonuses*.

The *Increment Level Bonuses* tables are included for easier implimentation of the level bonus. Each level indicates what the persona should add to her present bonus proficient. The *Increment* tables indicate the total value to add to each level, and they are already divided by the person's EXPS level. A mercenary would add 41 to her type A bonus proficient at second level. At 3rd level she would add 27, at 4th level she would add another 20. So between 1st and 4th level, the mercenary would have added 88 to her BP for type A attacks simply from experience. these BP increases could easily be calculated by dividing the base value bonus for mercenaries by the merc's level.

The *Increment* tables are particularly useful for referees that are generating referee personas. It allows them to create combat tables for high level personas without carrying out endless divisions.

Table 15.5: Level To-Hit Bonuses

PERSONA CLASS	WEAPON TYPES TYPE A	TYPE B	TYPE C
Biologist	18	15	60
Knite	90	75	114
Mechanic	45	45	75
Mercenary	81	90	102
Nomad	72	96	78
Nothing	51	57	63
Spie	60	60	60
Vet	21	21	33
Alien	PSTR	INT	DEX
Robot	PSTR	INT	DEX

Add (level bonus/EXPS level) to the bonus proficient

Table 15.6a: Type A Incremental Level Bonuses

PERSONA CLASS	EXPERIENCE LEVEL 1	2	3	4	5	6	7	8	9	10	11	12	13
Biologist	0	9	6	5	4	3	3	2	2	2	2	2	1
Knite	0	45	30	23	18	15	13	11	10	9	8	8	7
Mechanic	0	23	15	11	9	8	6	6	5	5	4	4	3
Mercenary	0	41	27	20	16	14	12	10	9	8	7	7	6
Nomad	0	36	24	18	14	12	10	9	8	7	7	6	6
Nothing	0	26	17	13	10	9	7	6	6	5	4	4	4
Spie	0	30	20	15	12	10	9	8	7	6	5	5	4
Vet	0	11	7	5	4	3	3	3	2	2	2	2	2
Alien	0					depends on PSTR							
Robot	0					depends on PSTR							

Add the value indicated at each level to BP, BNP, and MR

Table 15.6b: Type B Incremental Level Bonus

PERSONA CLASS	EXPERIENCE LEVEL 1	2	3	4	5	6	7	8	9	10	11	12	13
Biologist	0	8	5	4	3	2	2	2	2	2	1	1	1
Knite	0	38	25	19	15	13	11	9	8	8	7	6	6
Mechanic	0	23	15	12	9	8	6	6	5	5	4	4	3
Mercenary	0	45	30	23	18	15	13	11	10	9	8	8	7
Nomad	0	48	32	24	19	16	14	12	11	10	9	8	7
Nothing	0	29	19	14	11	10	8	7	6	6	5	5	4
Spie	0	30	20	15	12	10	9	8	7	6	5	5	4
Vet	0	11	7	5	4	3	3	3	2	2	2	2	2
Alien	0					depends on INT							
Robot	0					depends on INT							

Add the value indicated at each level to BP, BNP, and MR

Table 15.6c: Type C Incremental Level Bonuses

PERSONA CLASS	EXPERIENCE LEVEL 1	2	3	4	5	6	7	8	9	10	11	12	13
Biologist	0	30	20	15	12	10	9	8	7	6	5	5	4
Knite	0	57	38	29	23	19	16	14	13	11	10	10	8
Mechanic	0	38	25	19	15	13	11	9	8	8	7	6	6
Mercenary	0	51	34	26	20	17	15	13	11	10	9	9	8
Nomad	0	39	26	20	16	13	11	10	9	8	7	7	6
Nothing	0	32	21	16	13	11	6	8	7	6	6	5	5
Spie	0	30	20	15	12	10	9	8	7	6	5	5	4
Vet	0	17	11	8	7	6	5	4	4	3	3	3	3
Alien	0					depends on DEX							
Robot	0					depends on DEX							

Add the value indicated at each level to BP, BNP, and MR

Chapter 16
Special Rolls

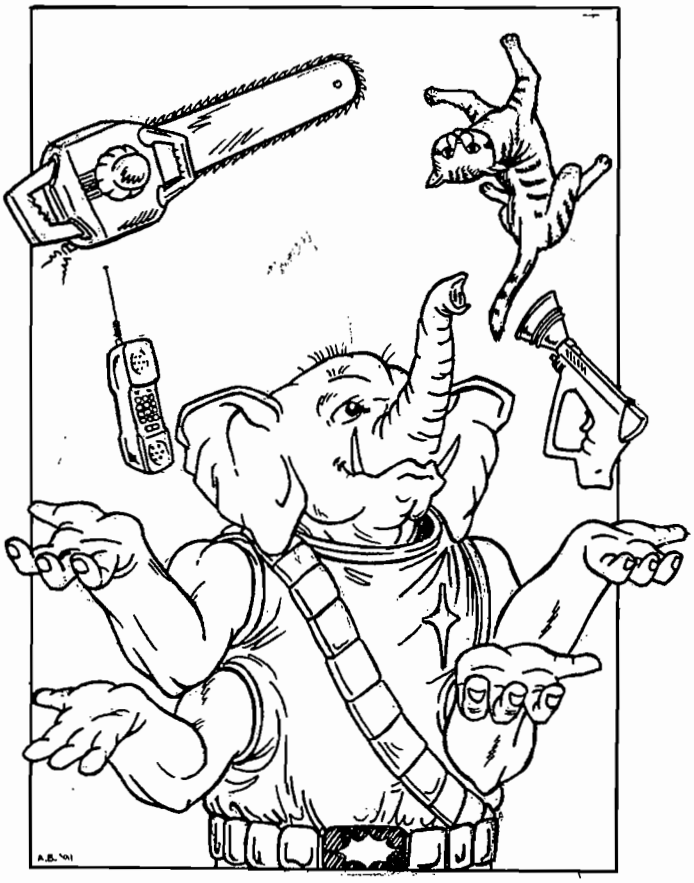
Between to hit rolls during combat and performance tables outside of it, personas can accomplish just about anything in **EXP**. There are situations, however, when none of a persona's hard-earned skill can have any effect on the outcome — surviving a poison or a blood transfusion, coping with a high-gravity environment, or remembering what size sprocket broke on her kitchen sink. There are also times when even to hit and PT rolls cannot account for the vagaries of luck — for anyone, no matter how skillful, can blow a manœuvre completely; and even if a persona has never held a bow before, she just might hit the rabid squirrel scrambling up the trunk of an oak tree eighty metres away. To deal with these and other contingencies, **EXP** has three special types of die roll — **attribute rolls, saving throws,** and **sphincter dice** — and two special cases of PT and to hit rolls, known as **critical** rolls.

Attribute Rolls

Most unusual situations will directly challenge one of a persona's attributes — catching a valuable egg, for instance, relates to DEX, while noticing that odd echo every time the leaf merchant opens her mouth pertains to AWE. No simulation game can possibly have specific rules for all such eventualities, though — and if it did, finding any one of those rules on demand would take hours — so **EXP** uses a system of attribute rolls for the referee to improvise on demand.

The procedure is quite simple. The referee decides which attribute is most relevant to the situation, and the player tries to roll equal to or less than her persona's attribute value. If she succeeds, her persona has also succeeded; personas with high attributes are thus somewhat better off than those with low ones. Table 16.1, *Relevant Attributes*, gives some sample circumstances which would require attribute rolls, and the most reasonable attribute for each case. Sometimes, the referee may require more than one attribute roll for a complicated action — to catch a very heavy valuable egg, for instance, might need rolls for both DEX and PSTR.

Not all tasks have the same level of difficulty, however; correspondingly, not all attribute rolls are on the same set of dice. After all, a player will roll under her persona's INT far more easily using a d10 than using a d1000. When assigning an attribute roll, the referee must decide not only which attribute the persona must roll under, but also on which dice she must do it. Table 16.2, *Attribute Roll Difficulties*, lists some standard dice and their levels of difficulty. (Names like "Easy"



and "Improbable" should indicate how vague these levels are. They are not performance table DD's, and hardly describe dinstinct categories of difficulty. The referee can and should fiddle with them at will — it will only change the odds; personas never earn EXPs for making an attribute roll.) Specific attribute rolls are usually referred to by their difficulty and the name of their relevant attribute: an attribute roll against MSTR on d50 would be called a "tough MSTR roll."

Like PT and to hit rolls, attribute rolls can easily have bonuses or penalties associated with them — although penalties are rare. If a persona's DEX is 12, and her attribute roll has a bonus of 3, she must roll under 15 on whichever die she's using; if it has a penalty of 8, she must roll under 4. The most common bonus is the experience level of the persona.

Some situations, like scaling a cliff face or aging beyond one's natural lifespan, have a particular attribute roll associated with them; except for these few cases, attribute rolls should only be used in genuinely unusual circumstances. No persona should have to roll a die just to open a door successfully, but if she is panicking, heavily encumbered, and being shot at by a lumpy fish, it might be important if she checks for a fumble. Similarly, attribute rolls should never infringe on class skills: no persona, whatever her luck, should be able to survive indefinitely without food if she isn't a nomad.

Combining Forces

Just as personas can form **research teams** to attempt delicate and complex class procedures, they can join together to perform an attribute-related manœuvre — three ursidae combining PSTR to manipulate a battering ram, for example, or five basketball players' DEX trying to block a layup. On such an occasion, the players should average their personas' relevant attributes, and add one to the result for each persona more than one in the group. Each player then gets one attribute roll, and if any of them succeeds, the entire group is successful.



In the case of the ursidae above, if their PSTR scores are 10, 8, and 15, their average PSTR is 11. Since there are three of them, they add two to this average to get 13, and each proceeds to try to roll 13 or lower. (Clearly, the first two ursidae are only slowing the third one down: she'd be better off just using her shoulder three times.) The five basketball players, however, if each has a DEX of 13, also have an average DEX of 13; adding four because there are five of them, they find that each will try to roll under 17 to block the shot.

The DSS Roll

The DSS roll, or **Damage System Shock** roll is a special attribute roll which all anthropomorphic personas must make whenever they lose more

than half their current HPs at once. Even if a persona has only 2 HPs left and loses one of them, she must make a DSS roll; a persona with 3 HPs, however, could lose one with (relative) impunity. The unfortunate persona must calculate three times her new HPs total, and add her CON to the product; she must then roll equal to or less than this number on decidice or fall unconscious. Thus, for instance, a persona with 18 HPs left after the blow, and a CON of 9, would need to roll under (3 x 18) + 9 = 63 on decidice to avoid being stunned.

Only anthropomorphic personas need worry about the DSS roll; robots and aliens never fall unconscious. If a persona loses all her HPs in one attack, she also does not need to worry about a DSS roll, as she has already fallen into a much deeper coma.

The REC Roll

The REC (or **Recovery**) roll, is the antidote to the DSS. A stunned persona must repeat it until she finally succeeds, at which point her weakened body reawakens. Although both are on decidice, the REC roll is somewhat easier than the DSS roll; instead of needing less than thrice her HPs plus her CON, a persona may roll as high as five times her HPs plus her CON. (So, for instance, the persona above, having failed her DSS roll, would need to roll under (5 x 18) + 9 = 99 on decidice. She will probably do this on her first try.)

Table 3.1, *Constitution & Recovery*, gives a persona's recovery time, the length of time she must languish between attempts at the REC roll. A persona with a CON of 22 would be able to try the roll every 4 units until she succeeded, while one whose CON is only 4 must wait 16 units between each attempt. Almost never will a persona need more than five minutes of game time to recover; most will be back on their feet within one.

The CF Roll

The nearest robotic analogue to the DSS roll, the CF roll, or **Control Factor** roll, is an attribute roll against the robot's control factor. Whenever the robot performs a task for which it was originally designed — a janitorial bot cleaning up, a combat bot killing an opponent — it must roll below its CF or be taken over by its internal programming. CF rolls are usually difficult (d20), and never easier; under extreme conditions — if the janitorial bot were ordered to clean up a room by a charismatic mechanic of its base race — the robot would probably need a tough (d50) roll instead, or worse.

The Control Factor of a robot (described more fully in Chapter 5, Robots) is equal to its INT plus its experience level, and represents how well it has learned to bypass its programming. To fail a CF roll is to give in to that programming, a phenomenon known as loss of control. A robot in this state is a helpless automaton, probably run by the referee, attempting to perform exactly its programmed function without deviation until it regains control of itself. If the failure occurs during combat, it will last a random number of units determined by the same die the robot lost control with — so failing a tough (d50) CF roll would result in d50 units of boring, non-sentient behaviour. Outside of combat, the failure will last a random number of minutes on the same die: failing an improbable (d100) roll might lead to over an hour and a half of tedium.

Attribute Challenge Rolls

An **attribute challenge roll** pits two or more personas against each other in a contest directly related to their attributes. They might do battle with PSTR by arm wrestling, or with DEX by skipping rope; they might compare MSTR in a staring contest or AWE by hunting for mites in each other's fur. Each player involved rolls a d20 and adds the result to her persona's relevant attribute. Whichever player's total is highest wins the contest. Ties are just that: the personas can continue the struggle or declare themselves evenly matched

and go for a beer.

If eight macho personas decide to have a duel by bowling, they each must roll a d20 and add the result to their DEX. Supposing that the totals are 8, 14, 15, 15, 21, 24, 24, and 24, the first five personas have lost, and will presumably be executed at dawn; the last three each rolled a strike, and must move on to the second frame if the duel is to have a lone winner. If they bowl again, and their new totals are 19, 28, and 22, the second persona has won.

Saving Throws

Saving throws, or **saves**, are the way in which the body's internal struggles are portrayed in game terms. They govern automatic physical and mental processes over which the persona has no conscious control, or even necessarily knowledge. In practice, they almost always defend against poison or psionic attack; the few exceptions behave in exactly the same manner as poison.

When a persona is poisoned, her immune system immediately starts manufacturing antibodies to leach the offending substance from her bloodstream. If the poison is in her digestive tract, her body also triggers vomiting or diarrhœia to remove it, and in general this is the only time she will even be aware anything is amiss. Typical poisons include nerve toxins, radioactive substances, venoms, and drugs, any of which might act through inhalation, digestion, or simply contact with the persona's skin, fur, or scales. Only the persona's CON puts up any defense.

Psionic attack, a foreign intrusion into the persona's mind, results in a spectacular display of protective measures the likes of which cannot even be measured by modern instruments. All psionic shielding occurs at the subconscious level; unless the persona is actively searching for mental interlopers, she will not even know she is under siege until too late. Only her MSTR can help.

Acting against her is the **intensity** of the attack, a measurement of just how powerful it is. Intensities range from 1 to 25, with 1 being mostly harmless and 25 usually fatal. In the case of a poison attack, the intensity varies with the type of poison employed. (See Chapter 50, Pharmaceuticals, for descriptions of a wide variety of poisons.) The intensity of a mental attack is equal to the MSTR of the attacker.

To effect a save, the player must take the intensity of the attack, add 12, and subtract the value of her persona's appropriate attribute from the total. Then, wielding a d20, she must roll equal to or higher than this number to fend off the intrusion. A persona with a CON of 14, having swallowed a poison of intensity 18, must roll at least 18 + 12 – 14, or 16, on a d20; against a poison of intensity 24, she would need a 22, and be unable to succeed under any circumstances. If, on the other hand, the poison were only of intensity 2, she would need a 2 + 12 – 16, or –2; this time, she would be unable to fail. The referee should make her perform the roll even in these cases, however, since she certainly doesn't know the result is fixed. (The 12 is just a constant to show that the universe is a deadlier place than average in which to live.)

If the persona fails her save against a poison attack, the poison does her d4 HPS of damage for every point of its intensity. For ease of play, it then leaves her system, and she eventually recovers if she's still alive. (In real life, some more insidious poisons can remain in the body for decades, gradually debilitating it until they are removed by operation. If the referee really wants to bog down her campaign with the hassle of calculating strontium ratios in the bone tissue, she can, but it's far simpler to assume that all poisons act once, act quickly, and leave within a couple of days.)

Mental attacks can range from the various mutations of Chapter 58, Mental Mutations, to brainwashing, with correspondingly disparate effects. Unlike poisons, however, no mental attack has even partial success if the persona makes her save.

Saving Throw Bonuses

All insectoids get a +1 bonus against psionic attacks for every 4 points of MSTR they have, rounded off—thus a bumblebee with an MSTR of 17 would get a

+4 bonus.

All ursidae get a +1 bonus against poison for every 3 points of CON they have, rounded off — so a grizzly with an 8 CON would get a +3 bonus — and a constant +2 bonus against cold-based attacks like cryokinesis or a cryofrag grenade.

If the referee sees fit, the afflicted persona might get a bonus for her experience level. Such a bonus is equal to +1 for every two levels of experience, rounded down — a first level persona would get no bonus — and cannot exceed +6 no matter how high the level.

Sphincter Dice

Often a player will want to know some absoulutely unpredictable, impossible to prepare, yet entirely relevant piece of data — did she leave the car door unlocked? Did the ammunition pack fall to the left or to the right? Has the cheese gone moldy? Does the store have any tents in stock? No efficiently prepared campaign could possibly include the answers to such questions, so sphincter dice are used to see whether such milieu minutiae are in the persona's favour or not.

Sphincter dice are rolled on decidice by both the referee and the player simultaneously. If the player rolls 10 or less, her request is automatically denied; if she rolls 90 or more, it is automatically granted. If she rolls between 11 and 89, her request is granted if and only if her roll is equal to or greater than the referee's. If the referee rolls higher than the player, the situation is resolved to the persona's greatest inconvenience.

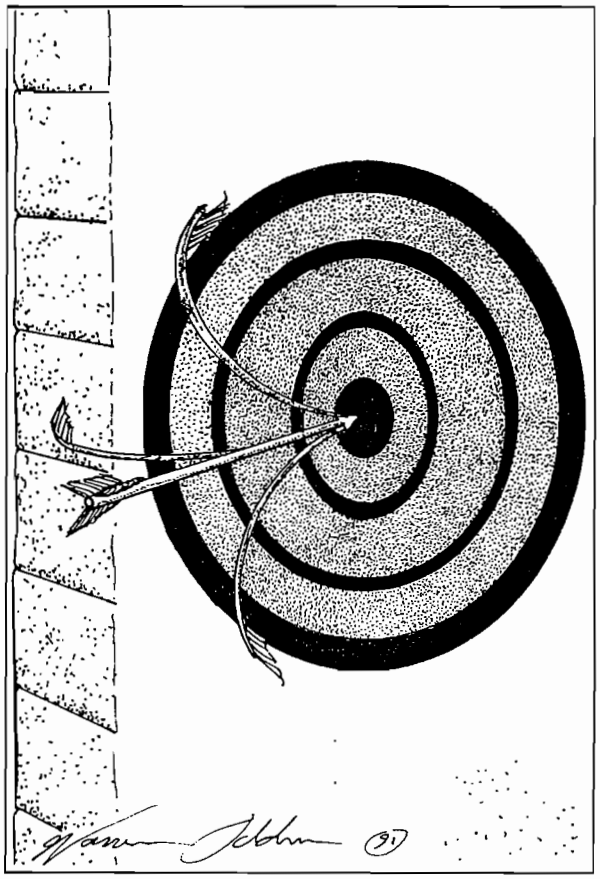
The referee should only use sphincter dice for true inconsequentialities — facts that will shape the path of the campaign but not the outcome. Certainly, she should never consult them when personas' lives are on the line.

A good example is of a persona searching a hardware store for a size L8 wing nut. Wing nuts are kept behind the counter, so she asks the storekeeper if any are in stock. "Hell," replies the referee, "I don't know. Let's check the sphincter dice." The player and the referee both roll, but the player's roll is a 94, so the part is automatically available. She purchases it and leaves.

A little later, she accidentally steps underneath a powerful electromagnet. The referee isn't sure if the wing nut will be attracted to the magnet or not, so she calls for the sphincter dice once more. This time, the player rolls a 75, but the referee rolls an 84; the electromagnet immediately tries to wrest the wing nut from the persona's grip. The rest of the encounter would be determined by attribute rolls, mutations, or even combat.

Critical Rolls

Critical rolls are extreme rolls of the dice — 001 or 000 on kilodice, 1 or 20 on a d20, 00 or 01 on decidice. As any amateur statistician will point out, such extreme rolls are no more likely than any other roll, an impressive 998 is no more significant



than an obscure 452 ... but somehow an air of urgency always accompanies them. Players inevitably react hysterically to a roll of 000, because there is something so dramatically fateful about it.

In gaming terms, critical rolls represent incredibly flukey endeavours that could be either detrimental or beneficial to the persona attempting them. They add spice to the game, because they always bring that slight chance of the unexpected — the wimpy little alien stuck in the crevasse might yet beat the arrogant invader in powered armour, if she makes a critical to hit roll; the landlubber mechanic may never have seen a starship drive before, but could still manage to patch it together from guesswork if she makes a critical PT roll. EXP is science fantasy, and part of fantasy is the unexpected.

Nevertheless, a well-developed scenario should never be terminated early by a critical roll —they exist to enliven, not to destroy, the campaign. Like all rules, they should serve the players, not the other way around; any time a critical roll interferes, the referee should simply manipulate the outcome until everything fits once more.

All critical rolls must be natural. If a player rolls 794 to hit, then no matter what bonuses she has, her roll is not a critical one. .Conversely, if she rolls a natural 01 on a performance table, all the bonuses in the universe won't keep her from suffering a critical failure.

Performance Table Rolls: PT rolls are made on decidice; the goal is to roll high. A natural 00 will thus bring automatic success in whatever procedure was being attempted, however difficult, and a natural 01 automatic failure. Some procedures should never have a chance of success — gall bladder surgery with a meathook will always result in tragedy — but there's little point in even rolling for these. Use your common sense.

Occasionally, a critical PT roll success will seem to indicate an exorbitant number of Exps for the persona. Exps, however, are handed out for class skills because of the knowledge gained through practice. A vet who has managed to accomplish something far beyond her skill by sheer luck has gained nothing from the experience but a healthy llama; the referee should reduce her Exps award accordingly.

Attribute Rolls: Critical attribute rolls are redundant. Since the object of an attribute roll is to roll low, a critical success is a roll of 1 — but since all living personas have positive attributes, only dead personas would ever fail on a roll of 1. And dead personas don't make attribute rolls. Conversely, a critical failure is a maximal roll on whichever die is being used — 10 on d10, 20 on d20, etc. — but such a maximal roll must fail anyway: if it didn't, the persona had no chance of failing, and the referee shouldn't have called for an attribute roll in the first place.

To Hit Rolls: To hit rolls are made on kilodice, and like PT rolls, the goal is to roll high. Any roll naturally greater than or equal to 990 is thus called a critical hit, and will inflict from 1–4 (d4) times the rolled damage, a factor known as the damage multiplier. A natural roll of 000, considered to mean 1000, provides an instant kill. When calculating the damage from a critical hit, a player first rolls the damage as normal, then multiplies by the damage multiplier, and only then adds her Pstr damage adjustment.

All of this only applies to cases where 990, or 000, would have hit anyway. If a critical hit is the only way for the persona to hit her target — perhaps because her weapon is out of range, perhaps because she has never fought before, perhaps because her opponent's armour is too thick — a critical hit simply means a hit, with damage meted out as normal. Similarly, critical hits by the referee are always just hits, with no instant kills and no damage multiplier, for personas are attacked so much more often than their opponents are that any other ruling would kill them all off very quickly.

A critical miss with a type A or B weapon is any to hit roll less than or equal to 010; any player who makes such a roll has dropped, mis-thrown, mis-strung, or otherwise mis-handled her weapon. If the player rolls below 050 with a type C weapon, the referee should roll to see if it malfunctions. A roll of 001 with a type A weapon indicates that the persona has accidentally damaged herself and broken the weapon. Any type B weapon attacking

with a 001 to hit also automatically breaks, but without damage to the persona; type C weapons subject to a 001 critical miss automatically malfunction. The amount of damage suffered by a malfunctioning weapon can be determined in Chapter 21, Equipment Damage.

Other Rolls: There are no critical rolls in DSS rolls, REC rolls, CF rolls, saving throws, attribute challenge rolls, or sphincter dice. The first four cases all govern involuntary reactions, in which the body (or mind) is already doing the best it can; the concepts of critical success and failure are meaningless for white blood cells. Critical attribute challenge rolls, like critical attribute rolls, are a redundant concept — if only one persona has a critical success, she's won anyway; if two do, they're still tied. Sphincter dice, meanwhile, already have critical rolls built in: if the player rolls over 90, events proceed in her favour, and if she rolls under 10, they don't.

Table 16.1: Relevant Attributes

ATTRIBUTE	CHALLENGE
AWE	Hear noises, notice smells, find hidden objects, feel around in the dark.
CHA	Making a sale, morale effects, recovering from a "faux pas," quick charms.
CON	Keeping sober, avoiding motion sickness, throwing off a cold, running a road race.
DEX	Sprinting race, catching things, climbing, other dexterity games.
INT	Remembering obscure facts, solving puzzles, passing exams.
MSTR	Games of luck, resisting torture, resisting temptation.
PSTR	Forcing open a door, arm–wrestling, lfiting weights, crushing beer cans, tearing telephone books.

Table 16.2: Attribute Roll Difficulties

DEGREE OF DIFFICULTY	DIE TYPE
Easy	d10
Difficult	d20
Hard	d30 (d6/2 and a d10)
Tough	d50
Improbable	d100 (deci-dice)
Bizarre	d1000 (kilo-dice)

II

II

Chapter 17
Driving

Driving involves the manual control of any motor powered vehicle. The exact meaning of *manual control* and *motor-powered* is left to the discretion of the referee, and in **EXP** there are many variations to be had. The driving system is designed specifically for those vehicles that are created in chapter 54, Vehicles. The vehicles created there are primarily land or atmosphere dependent. This section does not cover water vehicles, submarine vehicles or spaceships. If a vehicle is created which does not seem to fit the description of anything that can be used on any system, the ref must design her own system, adapt an existing one, or discard the vehicle.

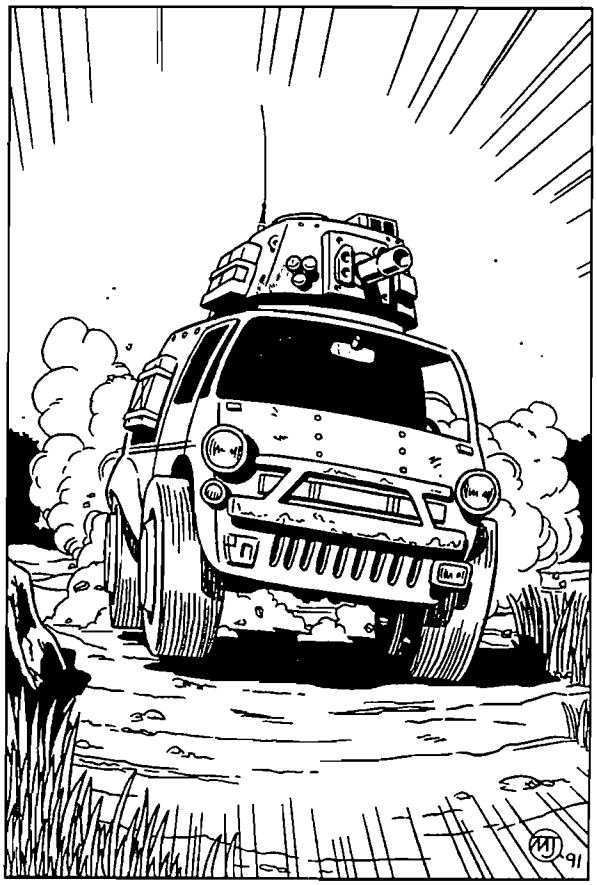
The basic assumption made about driving is that it is safe, provided that drivers obey all traffic regulations, and employ reasonable amounts of common sense. Such common sense involves not over-driving (speeding, cornering), choosing a qualified driver, and properly maintaining the vehicle. By nature, personas are daring, unskilled and mechanically ignorant. Who can expect an expedition of murderous mercenaries, technically inept biologists and terrified nothings to do anything less than throw caution to the wind, and particularly disregard common sense?

Whenever drivers attempt to be daring, adventurous or foolhardy (the prime characteristics of all personas) while in "control" of a vehicle they have created a dangerous situation. When the driver has attempted some dangerous maneuver, the referee must consult the *Driving Performance Table* (DPT), Table 17.1. This table is similar to other **performance tables**, but its DD is based on the difficulty of the maneuvers, and the skill level depends on the handling level of the vehicle.

Exactly when the ref should make the driver check the PT is her decision. Some occasions when a driving PT check is warranted are: during any dangerous maneuver; whenever the driver has been hit (taken damage); sudden change in road conditions (oil slick, change in grade); whenever the vehicle has been damaged; if the driver is distracted (arguing with other players, telling a joke, or not paying attention); or whenever the ref gets irritated.

Success on the DPT indicates that nothing has happened, and driving continues undisturbed. A driver is more likely to have success on the DPT if she has skill in driving, and is driving a vehicle with a good (the higher the better) **handling level.**

Failure on the DPT indicates the potential for loss of control of the vehicle. Players that fail their DPT rolls get an additional chance at a DEX attribute roll, or they lose control of the vehicle.



Losing control of a vehicle may result in an **accident.** An accident can only occur if the driver's loss of control causes the vehicle to crash into some obstacle, or careen off the road. The chance of losing vehicle control is increased by bad road conditions, bad weather, an improperly maintained vehicle, bad (as in low) handling level, high vehicle speeds, and/or poor physical condition of the driver.

The deadliness of a crash depends on the speed of the vehicle. The higher the speed, the more dangerous the accident. Damage is divided into two categories: damage to the vehicle, and damage to the passengers. Vehicle damage is recorded by the state of a particular part of the vehicle; passenger damage is recorded in hit points. Special vehicle construction can reduce vehicle damage, and safety equipment (restraining belts, air bags) can reduce passenger damage.

Driving Performance Table Checklist
1) Decide if DPT roll is **valid.**
2) Determine **DD** of maneuver and roll on the DPT.
3) If **failed** DPT then make a DEX roll.
4) If failed DEX roll then determine **loss of control.**
5) Determine if loss of control results in an **accident.**

Everything considered, driving is safe; it's crashing that's dangerous. The driving system should be used with much caution. If strange things begin to happen (E.g., the personas become petrified of vehicles), it may indicate a need to alter the way the ref runs the vehicle system.

Driving Performance Table (DPT)

The DPT is actually a little more involved than a simple PT roll. First, because it is administered differently, and second because failure usually indicates danger to the expedition. Deciding when a DPT roll should be made is entirely the referee's decision, although players may occasionally suggest it. Once it has been decided that a DPT check must be made then the player whose persona is driving the vehicle must make a PT roll on the DPT.

The DPT Table is left open, like all other performance tables, for bizarre manoeuvres which no sane ref can be prepared for. Included with the performance table is a list of expected manoeuvres and their adjustments. There are more adjustments than manoeuvres. The adjustments affect the DD of specific maneuvers, and they are listed with a + or - sign. The + adjustments make the maneuver more difficult by increasing the DD, and the - adjustments make it easier decreasing the DD. For example, *driving in reverse* is not a 3DD manoeuvre, but any maneuver attempted while driving in reverse is *increased* by 3DD (this includes driving straight). If there are any questions about performance tables in general, refer to chapter 14, Performance Tables.

Speeding: Speed effects are dependent on the player's DEX. A high DEX reflects good eye-hand coordination, agility, and reaction time, all of which aids in avoiding accidents. The maximum speed that a persona can handle is 1 h/u per point of DEX. Thus a player with a DEX of 10, could travel at 10 h/u (36 km/h) without having a speed penalty. For every 10 h/u (36 km/h) over this driver's maximum speed, any maneuver is increased by 1DD. If the persona with a 10 DEX were cruising down a highway at 40 h/u (144 km/h) she would have +3DD on any maneuver attempted. The expedition will quickly realize that speeding can prove very hazardous.

Adjusted DEX Roll

Failing on the performance table does not mean players should crumple up their persona record sheets. The driver still has a chance to recover from her driving error through sheer dexterity. This is done by granting the player a DEX roll in a desperate attempt to avoid loss of control. Most often a difficult (must roll under DEX on a d20) DEX roll must be made. Once again, the faster a persona drives, the more dangerous the maneuver. The DEX roll reprieve should be carefully modified for various PT rolls. It would be nothing less than obscene for a driver that failed a DD13 maneuver, to be able to recover from the act of stupidity by a simple roll of a d20. Table 17.2, *DD Attribute Roll* increments the required DEX roll by the degree of difficulty of the maneuver being attempted.

Let's consider a driver with an 11 DEX operating a vehicle with a handling level of 5. She is attempting to turn left at an intersection when one of her passengers spills a **PGGB** in her lap. This constitutes a check on the Driving PT, whereas normally, this simple driving maneuver (i.e., rounding a corner) would not be checked. A 90' turn is a DD6 maneuver. She is obeying her speed limit, and no other penalties (road conditions, etc.) apply. She must roll over 66 to corner without further incident. Unfortunately, she rolls 42, and fails. Before losing control of her vehicle, she gets a difficult DEX roll (d20) because it is a 6DD action. She rolls a 4 on the d20, and maintains control of her vehicle because she has rolled less than her DEX.

Loss of Control

Loss of control of a vehicle results when the driver has both failed her DPT roll, and failed her DEX roll. Losing control of a vehicle will result in both **deceleration** and **deviation.**

Deceleration: The vehicle will decelerate by 0%-50% (d6-1) from its previous speed. This deceleration can be quite hazardous to the passengers if they are not properly restrained. A 0% deceleration indicates no loss of vehicle speed. A 50% deceleration indicates that the vehicle will be travelling at half its original speed at the end of the deviation. The decelerated speed is the one that determines the damage if an accident should result. The deviation will last for 0-3 units. For anyone who has skidded in a car, or lost control of an airplane, this is not an extraordinarily long period of time.

Deviation: Finally, the direction of the loss of control is determined by the roll of percentile dice. Three of these four parameters (*deceleration, duration and direction*) are listed in the table below. The last one, *deviation*, is left to the discretion of the referee. The ref must decide whether the vehicle deviates left, right, or in some cases up or down; this is usually done randomly.

Example of Loss of Control: In a previous paragraph of this chapter there was a poor driver who had a PGGB spilled in her lap while attempting to make a left hand turn, at 11 h/u. If she had failed her DEX roll then she would have lost control of her vehicle.

First it is determined how long the vehicle is out of her control (d4-1). The d4 roll was 2 indicating that she will be out of control for 1 unit, which means this unit and the next. Secondly she would determine how much she decelerated. A 1 was rolled on the d6 which indicates 0% deceleration. Thirdly her deviation roll was 36 indicating that she travels straight ahead.

So in her first unit of loss of control her vehicle will travel straight ahead at 11 h/u. This could mean that she just missed the left hand turn, hit an oncoming vehicle turning left, or careened off an embankment. In her second unit of loss of control her vehicle would decelerate a given amount and her direction of loss of control would be re-rolled.

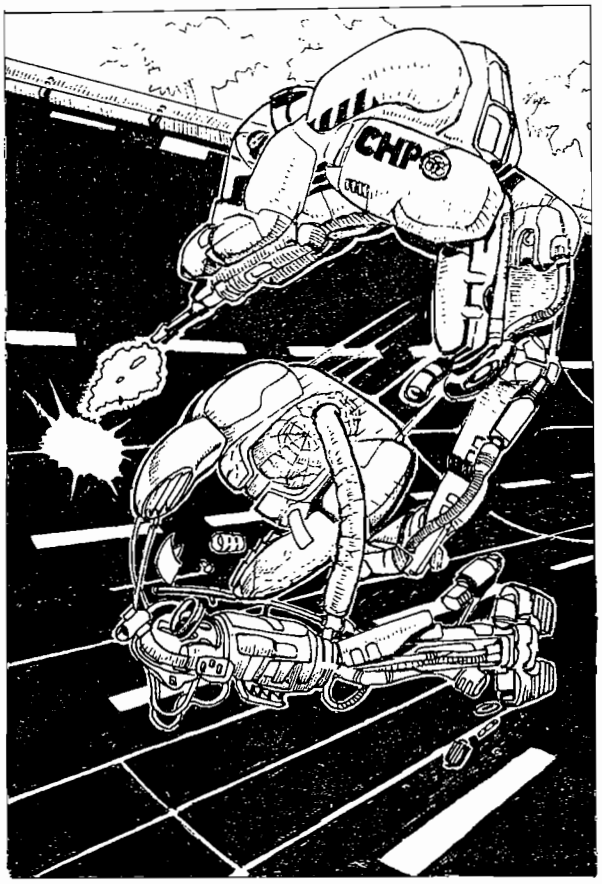
Loss of Control Checklist (See Table 17.3)

1) Determine duration of loss of control, rolling only once.
2) Determine vehicle's deceleration, each unit of control loss.
3) Determine direction of loss of control, each unit of control loss.

Accidents

Loss of control does not indicate a collision is certain, but it is the only opportunity where it can happen. Whether or not an accident occurs is a judgement call, and some guidelines are given here to try and help the referee and players determine when an accident has occurred.

If any obstacle crosses the path of an out of control vehicle, then the vehicle has had a collision with that obstacle. If loss of control results in a drop of more than half a hex (land based vehicle only) an accident has resulted, if the vehicle crosses the path of a simultaneously moving vehicle then the two have collided. Either of these scenarios, or any other similar one, indicates damage to the vehicle and its passengers. When there is a collision both the vehicle and the passengers are damaged according to Table 17.4, *Accident Damage.*



II

Collision Speed: The speed at which the vehicle collides determines the severity of the accident. The decelerated speed of the vehicle is what is used in the the event of a collision. A deceleration of 50% could mean damage to unrestrained passengers. For instance a vehicle that slows down to 50 h/u from 100 h/u means that inertia will carry personas into the bulkhead of the vehicle at 50 h/u. Smart explorers wear their seat belts!!

The speed that the vehicle decelerates to is the speed that is used on the *Accident Damage* table. The **after-collision speed** depends entirely on what the vehicle crashed into. Vehicles involved in a head on collision would be reduced to zero speed, while vehicles that scrape up against a embankment may not be slowed at all.

Relative Wate: If the ref does *not* take relative wates and speeds into account, the following scenarios are possible: moped rams 80 ton military tank at high speed, tank crew killed; jet plane crashes into parked convertible, convertible driver escapes injury due to low speed of convertible. There are some Newtonian solutions to these potential gaming inaccuracies. Remember to sum the velocities of any two moving vehicles crashing into any of the three front hexes (head on). Relative speeds may also be reduced if the colliding vehicles make contact on any of the back three facets (rear ender). Relative wate works much the same in vehicular accidents as it does in chapter 31, Robotic Combat.

Accident Damage

Damage to passengers is very straight forward; everyone in the vehicle takes the amount of dice damage indicated by the vehicle's collision speed. The amount of damage indicated can be found on the *Accident Damage* table. One roll may indicate damage for the group, or damage may be re-rolled for each passenger. If a vehicle were travelling at 50 h/u, the driver lost control and decelerated to 35 h/u, but still got into an accident, every passenger would take 6d10 Hps in damage. If the passengers are in a vehicle that has been hit with a vehicle travelling at high speed then they will take damage as if they were in that vehicle. Pedestrians hit by vehicles will take damage as if they were in an accident with the vehicle, thus a vehicle travelling 35 h/u would do 6d10 to a pedestrian.

If the referee feels that it is necessary, the passengers may take damage relative to the wates of the vehicles involved. Passengers in a heavier vehicle may take less damage than passengers in a lighter vehicle. The **wates** of the two vehicles are **divided**, and the resultant **ratio** is *multiplied by the damage*. Referees will mostly use this system to reduce the damage to personas that are in heavier vehicles. The damage adjustment cannot exceed 4 times, nor be less than 1/4 times.

Vehicle Damage

Damage to the vehicle is determined by the rolls on Table 17.4, *Accident Damage*; Table 17.5, *Location of Vehicle Damage*; and Table 17.6, *Extent of Damage*. The decelerated speed of the vehicle is what is used to determine how much damage the vehicle has sustained. A vehicle travelling 44 h/u would have 4 rolls on the Location of Vehicle Damage Table, but a vehicle travelling 14 h/u would only have 1 roll.

Location of Vehicle Damage: A roll on the *Location of Vehicle Damage* table must include an **Extent of Damage** roll. The location of damage determines which vehicle function is affected by the accident. The extent of damage roll indicates the new level of efficiency of the damaged part. If a vehicle's speed interface were to sustain major damage, it would function at 60% its previous efficiency. So if the damaged vehicle had a maximum speed of 30 h/u originally, this would be reduced to 18 h/u. Note that vehicle damage is cumulative, and further damage to the speed interface would affect the current 18 h/u max speed.

The *Location of Vehicle Damage* table is also used if the vehicle is hit with a weapon attack. This is discussed in greater detail in chapter 39, Other Vehicle Combat.

Extent of Damage: One would expect that the speed at which a vehicle is involved in an accident would affect the extent of damage it receives. This can be done by adding the following equation to the extent of damage die roll.

Extent-of-Damage Adjuster:
0.5 times speed (h/u) - 10

This equation ensures that vehicles travelling very slowly tend to be damaged less than vehicles travelling fast. A vehicle travelling at 8 h/u is involved in a collision; the extent of damage roll should be reduced by 6 (.5 times 8 minus 10), and the vehicle cannot have any item destroyed, because the Extent of Damage roll cannot exceed 94.

Consider a vehicle travelling at 40 h/u. The extent of damage roll is increased by 10 (.5 times 40 minus 10). Thus this vehicle will sustain at least minor damage because its lowest possible roll on the *Extent of Damage* table is 11.

Table 17.6 is also used if the vehicle is damaged by a weapon attack. In this instance the Hps of damage inflicted is added to the extent of damage die roll. This is discussed in greater detail in chapter 39, Other Vehicle Combat.

Further Complications

There are further complications that the ref may be interested in. The chance of a passenger being trapped in the wreckage of a vehicle is equal to the amount of damage that the passenger takes. The chance of a fire is left to be decided by the sadistic ref, but a good system is: there's a 10% chance of fire if the fuel system is critically damaged or destroyed.

If the situation is very critical, and the players desire that everything be quantified, the ref may have to disregard her colorful ad lib description and use Table 17.7, *Accident Description*. The results from the table do not affect damage to the vehicles in any way. However, other consequences may arise from the described chain of events.

Table 17.1: Driving Performance Table

HANDLING LEVEL	DEGREE OF DIFFICULTY 1	2	3	4	5	6	7	8	9	10
1	15	30	45	60	75	90	105	120	135	150
2	6	22	37	52	69	84	99	115	130	145
3	-3	14	29	44	63	80	93	110	125	140
4	-12	06	21	36	57	77	87	105	120	135
5	-21	-2	13	28	51	69	81	100	115	130
6	-30	-10	5	20	45	60	75	95	110	125
7	-39	-18	-3	12	39	54	69	90	105	120
8	-48	-26	-11	4	33	48	63	85	100	115
9	-57	-34	-19	-4	27	42	57	80	95	110
10	-66	-42	-27	-12	21	36	49	75	90	105
11	-75	-50	-35	-20	15	30	43	70	85	100
12	-84	-58	-42	-28	9	24	37	65	80	95
13	-93	-66	-50	-36	3	18	31	60	75	90
14	-102	-74	-58	-44	-3	12	25	55	70	85
15	-111	-82	-66	-52	-9	6	19	50	65	80

II

Procedures

Example	DD
Turns:	
Straight ahead	0
Drift	1
facet pt (30°)	2
facet (60°)	4
2 facet pts (90°)	6
2 facets (120°)	8
3 facet (150°)	10
3 facets (180°)	12
Manoeuvres:	
Reverse	+3
Jump	+7
Driver not in driver's seat	+1
Intoxicated	+3
Speeding:	
per 10 h/u > DEX h/u	+1
Parking:	
Drive in	1
Parallel	2
Landing	3

Meteorological	
Rain	
1.Light	1
2. Normal	2
3. Heavy	3
4. Monsoon	4
Snow (sandstorm, +1)	
1. Light	1
2. Normal	2
3. Heavy	3
4. Blizzard	4
Wind	
1. Light	1
2. Normal	2
3. Heavy	3
4. Gale	4
Hail	
1. Normal	1
2. Heavy	3

Road Surface	DD	
1. Superb	-1	Well lit, marked and controlled.
2. Good	0	Lit, and marked.
3. Average	1	Marked.
4. Poor	2	Few signs.
5. Awful	3	No signs, no lines
6. Off Road	4	

Fog, Smoke, Gas	DD
1. Trace	1
2. Thin	2
3. Normal	3
4. Dense	4
5. Thick	5
6. Opaque	6

Darkness	DD
1. Twilight	1
2. Moonlit	2
3. Starlit	3
4. Void	4

Table 17.2: DD Attribute Roll

DD of the Manoeuvre	Attribute Roll	Dice Used
01-03	easy	d10
04-06	difficult	d20
07-09	tough	d50*
10-13	improbable	d100*
>13	bizarre	kilo-die*

*May add handling level to DEX.

Table 17.3: Control Loss

1) DURATION OF CONTROL LOSS
0 units - 3 units (d4-1) units

2) DECELERATION OF CONTROL LOSS
0% - 50% (d6-1) times 10%

3) DIRECTION OF CONTROL LOSS

DIE ROLL	VEHICLE'S DIRECTION
01-50	straight ahead
51-80	drift
81-87	one facet point
88-94	one facet
95-97	2 facet points
98-99	2 facets
00	other

Table 17.7: Accident Description

Vehicle Speed(h/u)	Percent Chance(%)	Number of Roll(s)Flips(s)
<15	1	1
16-30	10	1-2
31-50	20	1-3
51-75	30	1-4
76-125	40	1-6
126-175	50	1-8
176-250	60	1-10
>250	1	1

Table 17.4: Accident Damage

Speed of Vehicle h/u	km/h	Vehicle Damage	Passenger Damage
01-05	18	0	d8
06-10	36	0	d10
11-15	54	1	2d10
16-20	72	1	3d10
21-25	90	2	4d10
26-30	108	3	5d10
31-40	144	3	6d10
41-50	180	4	7d10
51-60	216	5	8d12
61-70	252	6	9d12
71-100	360	7	10d12
101-150	590	8	11d12
151-200	720	9	12d20
201-250	900	10	13d20
251-300	1080	11	14d20
301-355	1280	12	15d20
>355	>1280	13	15d20

Table 17.5: Location of Vehicle Damage

DIE ROLL	DAMAGE LOCATION	EFFECT OF DAMAGE
01-12	Locomotion	Speed, handling level.
13-24	Cargo	Space reduced.
25-36	Engine	Acceleration, speed.
37-48	Fuel	Range, Complications.
49-60	Speed system	Speed.
61-72	Acceleration	Acceleration.
73-84	Steering system	Handling level.
85-96	Accessory	Random.
97-00	Other	Hee, ho-ho, snicker.

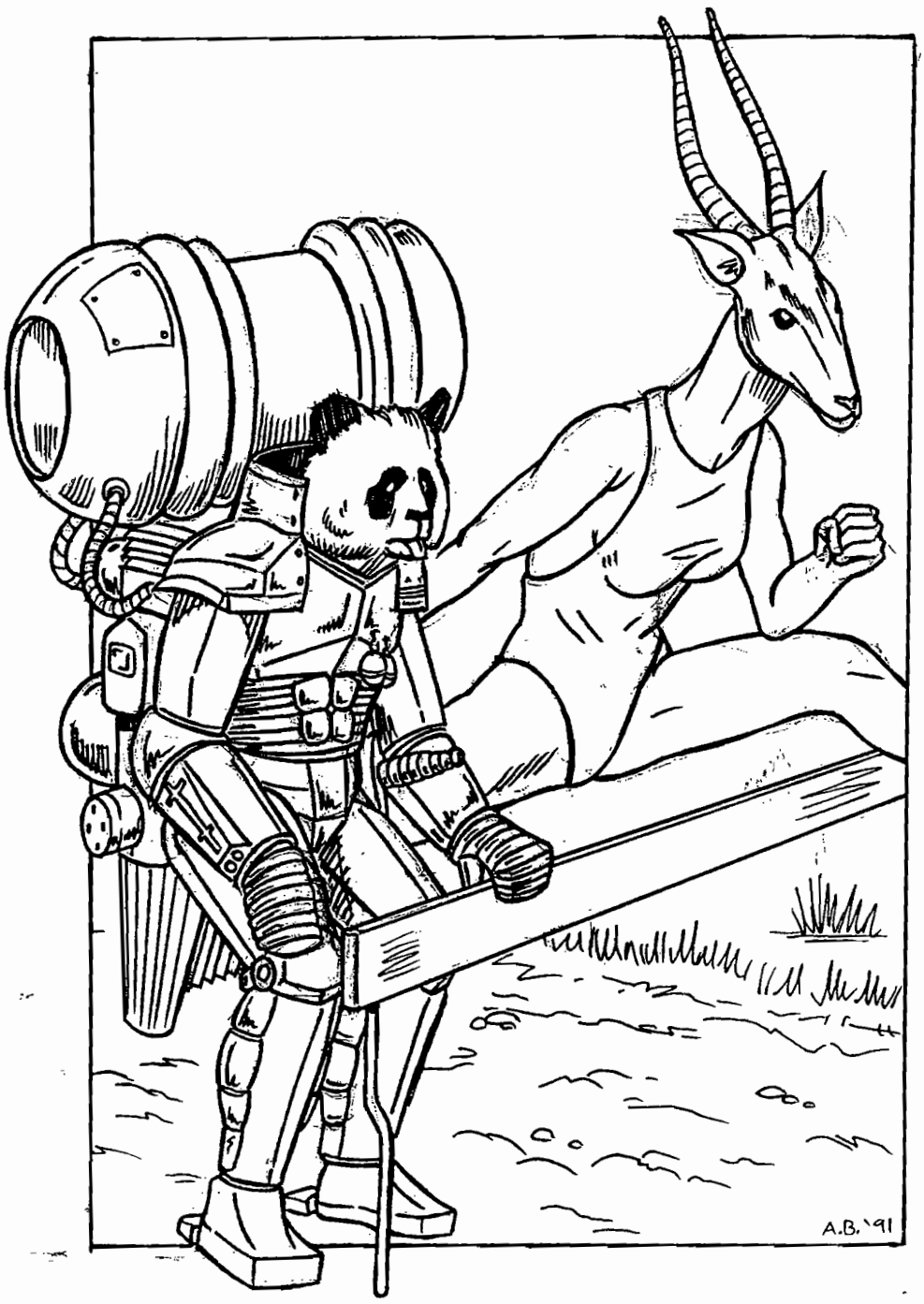
Roll once per "Vehicle Damage" indicated on *Accident Damage* table.

Table 17.6: Extent of Damage

Die Roll	Description of Damage	Percent of Previous
01-10	Trivial	100
11-60	Minor	90
61-90	Major	60
91-99	Critical	30
00	Destroyed	0

Add HPS damage to roll; .5 of speed -10

II


A.B. '91

Chapter 18
Encumbrance

Encumbrance is simply the burden of equipment that the persona has elected to carry. Everything that the persona supports is included in encumbrance. This includes: clothing, armour (unless worn), ammunition, weapons, food, and any other utensil with a **wate**. Many objects have a negligible wate, but enough negligible objects could have a significant wate. The ref must ensure that such an occurrence is not overlooked. Another complexity of encumbrance is the volume to wate paradox—which is more difficult to carry, 2 kgs of oxygen, or 2 kgs of lead? Such problems are omitted in this chapter, and the reader should begin to realize that encumbrance is more of a qualitative, rather than a quantitative, measurement.

If the encumbrance system isn't empirical, then why have it at all? The main reason for the encumbrance system is the need to attempt realism. Role-playing games rarely ignore basic physiological facts (in this case fatigue due to increased load); however RPGs shouldn't be bogged down by physics or biology either. What the encumbrance system does represent is a happy medium between realism, and fun gaming. A persona shuffling through the underbrush with 3 tonnes of equipment (on her back) would not only be unrealistic, but impossible for the referee to manage. Equally, players shouldn't be burdened with an exacting milligram calculation of their equipment list. If encumbrance is being used frequently enough, the encumbrance system should become a cursory action, and not the burdensome chore it seems.

Rules in **EXP** are to be applied judiciously by the referee, and encumbrance rules are no different from any other rules in this game. If they are becoming a burden then don't use them. Only use what aspects of encumbrance you feel are necessary.

Levels of Encumbrance

Encumbrance is based on the wate allowance of the persona, and wate allowance (WA) is determined by the persona's PSTR. How a load effects a persona may be described by five possible conditions of encumbrance: **free, unencumbered, encumbered, overencumbered,** and **lift**. Each one represents progressively more wate, and detriment to the efficiency of the persona.

Free: This is a self explanatory heading. This is when the persona is free of all encumbering factors. The persona cannot be carrying anything,



and even restrictive civilian clothing may jeoparize a persona's free standing.

Unencumbered: This category of encumbrance indicates that the persona has some equipment, maybe a suit of armour, but not enough equipment to restrict movement. A persona is unencumbered if she is carrying less than *1/4 her wate allowance* in equipment. A persona with an 11 PSTR would have a WA of 16 kgs. She could carry up to 4 kgs, and still be unencumbered.

Encumbered: An encumbered persona is the normal state for most personas to be in. Encumbered personas are carrying anywhere from 1/4 to 1.5 times their WA. So the persona with a WA of 16 kgs could carry up to 24 kgs, and only be encumbered. This is the normal range of wate bearing for the persona, any greater wate will have a detrimental effect on the persona.

Overencumbered: An overencumbered persona is carrying more than 1 1/2 times her WA. To be exact, she would be carrying between 1 1/2 to 2 1/2 times her WA. The persona with the 11 PSTR would be carrying between 24 and 40 kgs of equipment.

Lift only: When a persona encounters a load greater than 2 1/2 times her wate allowance she cannot move with this wate. A persona can only 'lift' something that is more than 21/2 times her WA. Before the object, or collection of objects, can be budged, she must make a successful PSTR attribute roll. The difficulty of the attribute roll is determined by the referee (the heavier the load, the more difficult the attribute roll). Whenever a persona is lifting, she can engage in no other actions.

Determining Wate Allowance

The wate allowance of the persona is determined directly by her PSTR. Each PSTR value has an individual WA which can be obtained from the *PSTR Wate Allowance* table in chapter 3, or from Table 18.1, *PSTR Encumbrance* in this chapter. The encumbrance table differs from the wate allowance table in that it lists the wate ranges in terms of the above conditions. Table 18.1 gives the persona's wate allowance, in kilograms, in the 3 partitions (14 < 1 1/2 < 2 1/2) which determine her encumbrance. If the referee is using encumbrance to any degree, the players will find these 3 values more useful than the wate allowance itself.

Anthropomorphs, aliens, and the weaker robots can use the *PSTR Encumbrance* table directly; however, *most* robots will not be able to do so. Robotic wate allowance is determined by the bot's PSTR, like all other races, except that the resulting WA is multiplied by the bot's PSTR Level. A bot with a PSTR of 17, and a PSTR Level of III would have a WA of 75 kgs. An anthropomorph with a PSTR of 17 would have a WA of 25 kgs.

This robotic shortcoming of Table 18.1 is overcome by simply multiplying the 3 wate range partitions by the PSTR Level. For the bot we just described 1/4 WA would equal 18.9 kgs (3 x 6.3), 1 1/2 WA would equal 112.5 kgs (3 x 37.5), and 2 1/2 WA would equal 187.5 kgs (3 x 62.5).

Encumbrance Effects

The encumbrance partitions are neat and interesting, but *how* they affect the performance of a persona is what really matters. The remaining paragraphs describe how being encumbered, overencumbered, etc., effects the persona's overall efficiency. All of the tables are optional, but reading through them should give the impression that the more you carry *the worse off you are*.

Encumbrance and PTs: Carrying too much equipment unquestionably has a detrimental effect on the persona's ability to perform class skills (See chapter 14 for more information). Table 18.2, *Encumbrance Effects on PT Rolls* is included here. This table contributes a penalty to be added to the DD of the procedure. A 6DD procedure performed while encumbered would become a 9DD procedure, according to Table 18.2. If the persona wishes to *dump* her equipment, and *then* perform the procedure she will not suffer the PT roll penalty. Exceptions to this "dumping" rule would be: during *combat* or where the encumbrance effects are due to *increased gravity*.

Table 18.1: Pstr Encumbrance (values are in kgs)

PERSONA PSTR	RANGE OF ENCUMBRANCE FOR WATE CARRIED Unencumbered		Encumbered	Overencumbered	Lift-only
1	<1.1	to	6.8	to	11.3<
2	<1.4	to	8.4	to	14.0<
3	<1.7	to	10.2	to	17.0<
4	<1.8	to	10.5	to	17.5<
5	<2.0	to	12.0	to	20.0<
6	<2.5	to	15.0	to	25.0<
7	<3.0	to	18.0	to	30.0<
8	<3.3	to	19.5	to	32.5<
9	<3.5	to	21.0	to	35.0<
10	<3.8	to	22.5	to	37.5<
11	<4.0	to	24.0	to	40.0<
12	<4.3	to	24.5	to	42.5<
13	<4.5	to	27.0	to	45.0<
14	<4.8	to	28.5	to	47.5<
15	<5.0	to	30.0	to	50.0<
16	<5.5	to	33.0	to	55.0<
17	<6.3	to	37.5	to	62.5<
18	<7.0	to	42.0	to	70.0<
19	<7.8	to	46.5	to	77.5<
20	<8.5	to	51.0	to	85.0<
21	<9.8	to	58.5	to	97.5<
22	<11.3	to	67.5	to	112.5<
23	<13.0	to	78.0	to	130.0<
24	<15.0	to	90.0	to	150.0<
25	<17.3	to	103.5	to	172.5<
26	<19.8	to	118.5	to	197.5<
27	<22.5	to	135.0	to	225.0<
28	<25.5	to	153.0	to	255.0<
29	<28.7	to	172.5	to	287.5<

Encumbrance and Movement: Encumbrance has its greatest effect on **movement**. The greater the load on the persona, the more difficult it is to move. Table 18.3, *Encumbrance and Movement* demonstrates such effects. Remember that only anthropomorphs can bolt or sprint. For more info about movement refer to chapter 12.

Encumbrance and Intiative: No matter how good a persona's DEX, if she's loaded down with equipment, her response time will be hampered. The **initiative** adjustments shown on Table 18.4, *Encumbrance Initiative Effects*, adjust the persona's response time by her level of encumbrance. An overencumbered persona that rolled 18 on her initiative roll would have it reduced to 15. For a detailed explanation of initiative see chapter 33.

Encumbrance and Other Things

Ambush: An overencumbered persona's response to ambush is slower, due to the equipment that is hampering her reactions. Overencumbered personas act 1 unit slower than all other ambushed personas. This means that, unless the persona detected the ambush, she will be subject to an additional unit of attack before the regular ambush cycle begins. Personas encumbered to the point of lift cannot react to an ambush at all. The procedures of ambush are explained in chapter 34.

Driving: Personas should not drive a vehicle unless they are 'free' or unencumbered. If the persona insists on driving while encumbered or overencumbered she will suffer the same penalties on the Driving PT as if she were rolling procedures on any other PT table. For details on driving see chapter 17.

Attribute rolls: Rarely will attribute rolls be affected by encumbrance. If the referee has judged that equipment loads jeopardize attribute rolls the difficulty of the roll should be made higher. Attribute rolls for DEX, PSTR, and occasionally CON will certainly be affected by encumbrance levels because they represent physical actions like getting up, balancing, jumping, etc. Whereas the other attributes AWE, CHA, INT and MSTR are primarily non-physical actions, and are less affected by body strain. See chapter 16 for more information about attribute rolls.

Table 18.2: Encumbrance Effects on PT Rolls

ENCUMBRANCE LEVEL	DD ADJUSTMENT
Free	0
Unencumbered	+1
Encumbered	+3
Overencumbered	+5
Lift	Lift only

Table 18.3: Encumbrance and Movement

ENCUMBRANCE LEVEL	MOVEMENT ADJUSTMENT
Free	May bolt; 2 x movement rate
Unencumbered	May sprint;+50% on movement rate
Encumbered	May only move at normal
Overencumbered	May only move at 1/2 normal
Lift	May not move, lift only

Table 18.4: Encumbrance Initiative Effects

ENCUMBRANCE LEVEL	INIT ROLL ADJUSTMENT
Free	0
Unencumbered	-1
Encumbered	-2
Overencumbered	-3
Lift	-4

Chapter 19
Special Terrain

Special terrain is weird terrain that the expedition won't encounter too often. Most campaigns will take place in worlds with normal atmospheres, and normal gravity where the players, and the referee, are not always having to imagine how it would be in that type of environment.

The terrain effects discussed in this chapter are ones that affect the entire environment of the expedition. Different gravities, including the absence of gravity, are discussed in this chapter. How these different gravities affect role-playing systems like combat, movement and wate are discussed, as well as the basic biological effects of gravity altered terrain. The biological effects of high, low and zero gravity are included so that the referee can extrapolate for those situations that are not covered in this chapter. The effects of dense and light atmospheres, and liquid environments are discussed also. Terrains that the referee must construct on her own, preferably from other **EXP** systems, are poisonous ones, or ones with constant meteorological effects like wind, rain or snow.

Gravity Effects

Very briefly, **gravity** is the attraction between two masses. In **EXP** they are called wates. The attraction gets stronger as the wates get greater, closer together, or both. Gravity is so important that no mechanical or biological process can be carried out without taking it into account.

Walking, flying, falling, are all procedures affected equally by gravity. A walking human expects her leg to have a certain wate stuck firmly to the planet's surface. She also expects the foot she lifts into the air to come crashing back down to earth so that the process can be repeated again. Flying animals, and most other flying machines, are dependant on the atmosphere firmly held by the earth's gravity. For anyone who has fallen, the attraction of the earth's wate has been made painfully obvious.

Gravity is an ever pervasive element, and its total effects in a role-playing game cannot be covered in much, if any, detail. What the gravity altering referee must remember is that every aspect of this game has been based on a *1 g world.* If you were to change the gravity of a scenario, every wate would be changed, every weapon range would be altered, every fuel consumption would be changed, every persona's movement rate would be altered, and long term biological and mechanical effects would have to be taken into account.

Such obstacles should not deter any referee with a calculator and an imaginative mind. Alternate gravities can be riotous fun, and the following paragraphs are devoted to them. Little time will be spent explaining how various gravities can arise. What will be covered are the effects with high gravity (greater than 1 g), low gravity (less than 1 g), and no gravity (less than .1 g).

Falling

Even in the midst of all of **EXP**'s technological chaos, with vast destructive power being hurled about indiscriminately, there are still good old-fashioned ways for a determined persona to get herself killed. Among the more traditional perils of adventuring is the favoured "step on the rotten plank bridge three hundred feet above the jagged rocks and crashing waves." The consequences of such a mishap and subsequent failed DEX roll is hardly in doubt in any case.

For somewhat more manageable heights on a 1-g world, say two hexes, there might be some question about how well the typical persona would fare. If your persona *chooses* to leap four metres to the ground, is wearing ankle support and manages to avoid landing on her head, she stands an excellent chance of suffering no damage whatsoever. If, however, that same persona finds herself shoved out of a four metre-tall tree, has no clue what she's

going to land on, and succeeds in hitting every branch on the way with one of two shoulders, she may expect to wake up several hours later, if ever.

To reflect this gross disparity of circumstances, the rules for (1g) falling damage must take into account the vagaries of making an attribute roll for a **voluntary** jump. Table 19.1, *Jumping Terrain Difficulty*, indicates a degree of difficulty for a jmping DEX roll depending on the height and landing surface. Merc Aidies, with a DEX of 14, leaps from a third story balcony onto a fig stand below. (It's an apartment building so we assume 3 metres per floor: Merc is dropping 2-3 hexes onto a suface that's plenty pliant, but not particularly smooth or flat) Merc Aidies needs to roll 14 or under on (d100). She rolls a 29 and slips upon landing among the figs.

Damage by falling, as any skydiver will blackly attest to, results from the sudden (read: instantaneous) deceleration of the subject. In **EXP** terms, this means that damage from hitting a hard surface at high speed comes in neat little packages of **(d6-1) for every hex fallen**. Those of you readers well-versed in basic physics may be sputtering at this stage, since falling objects accelerate and thus should suffer varying damage rates depending on *time*. However, for the purposes of simulating intermittent bone-crunching, and dice rolls being the crude statistical entities that they are, *what's the point?*

If, as referee, you insist on taking into account things like **terminal velocity**, then you may choose to stop adding on additional (d6-1)s after say, 20-25 hexes. If the falling persona can survive 25d6 - 25, more power to her.

Subtracting one point from the damage roll serves to simulate the effects of short drops, where it is entirely possible that by landing spread-eagled on the ground, your persona will completely avoid injury. Merc Aidies lands flat on her back, squashing several kgs of figs. Since she fell 3 hexes, she takes 3d6 - 3. By a complete fluke, she rolls two 1s and a 3, which gives a grand total of 2 points. She shakes off the effects and sprints away down the street.

Needless to say, falling uncontrollably onto a soft surface is preferable to falling uncontrollably onto a hard surface. However, the distinction between the two becomes blured for high enough falls. Hence, falling ten feet into water beats falling ten feet onto asphalt...but from a mile up? To reflect this, the referee will want to mitigate the damage of hitting a pile of mattresses by some fixed value that will be very meaningful for a few dice of damage, and utterly irrelevant for a dozen.

High Gravity

How can personas find themselves in a situation of high gravity? The most common sources of high gravity (HIG) are either the high surface gravity of an object with a great wate, or the acceleration of a vehicle (primarily a spaceship) over a long period of time. Some of the more bizarre high gravity situations can arise from gravitational anomalies produced by **gravruptor grenades** or **gravity spills**. An increase in gravity will generally make things worse off for the personas. Their movement rates will be reduced, their equipment will have a higher wate, and they will take more damage from falling, and type A attacks.

Wate and High Gravity: In higher gravity the persona's wate will increase regardless of diet. A persona with a wate of 75 kg in 1 gravity (g), would have a wate of 82.5 kg in 1.1 g. This means that the persona is carrying around an extra 7.5 kg of wate intrinsically. The effect is worse for very large objects, a vehicle with a wate of 2000 kg in 1 g, would have a wate of 2500 in 1.25 g. This is the same as the engine having to deal with a 500 kg non-voluminous payload. The ref must remember that this effects all equipment: pistols, armour, detectors, bandages, clothing, etc.

Movement and High Gravity: The wate added to the persona by the increased gravity is the greatest threat to her movement rate. The intrinsic increase in her wate due to a gravity increase is included as encumbrance (chapter 18), and her freedom of movement depends on her PSTR and wate. This system allows small personas with high PSTRs to function more easily than weak over-wate

personas when in HIG. This system is easily managed for long term steady state gravity situations, but can become cumbersome with quickly changing gravities.

If a 65 kg persona, with a 12 PSTR, were to move in 1.5 g, she would face the following problems. Her body wate would increase by 32.5 kg, but her musculo-skeletal system is still only designed to carry 65 kg. Her added wate is the same as a 32.5 kg load, although evenly distributed. After checking the *Encumbrance* table for a 12 PSTR, it is found that a 32.5 kg load would put her into the over encumbered category. Being over encumbered forces her to move at 1/2 her normal movement rate, and to suffer other encumbrance penalties also.

The ref should note that this movement penalty is in effect even while wearing or carrying nothing at all. Any equipment that the persona tries to carry would have its Wate increased by 50%. So even the lightest of objects may render her unable to move. The persona's own body would become too heavy to move if she were in 1.7 g, because even then her own extra body wate would exceed her maximum wate allowance (45.5 kg > 42.5 kg). At this point she cannot possibly move anything other than her limbs.

The biological limits of reasonably high gravities are decided by means of body wate vs. encumbrance. The absolute biological limits of extremely high gravities are covered later.

Combat and High Gravity: Combat is very likely in a high gravity situation, because wherever there are personas there is likely to be combat. The effects of additional wate to weapons, shortened trajectories, and varied deflections can greatly hamper a persona's ability to hit a target. There are five categories of **gravity to-hit penalties**, and they are based on the encumbrance level of the attacking persona. The penalty includes the new wate of the weapon being used, the different speed of attacks, and the complications of body wate discussed earlier. These penalties are given on Table 19.2, *Hi Gravity To Hit Penalty*.

Let us consider our hapless traveler with a wate of 65 kg, and a 12 PSTR. On a 1.5 g planet she would have to attack with the **over encumbered** gravity penalty of -300. If the additional wate of the weapon were to push her into the **lift only** category, she may be able to pull the trigger, but not carry the weapon.

Excluded weapons: Not all weapons are affected by these penalties. Only gravity and trajectory dependant weapons are affected. This automatically includes all type A and B weapons and most type C weapons. Weapons excluded from gravity penalties are lazer, sonic, ray, radiation, and stun weapons. These weapons are only excluded from the to hit penalties when the the persona is in the free, unencumbered, or encumbered categories. If the persona is more than encumbered due to her body wate, she has been overwhelmed by the gravity and the penalties still apply.

Weapon Ranges: Weapon range reductions apply in much the same manner as the to hit penalties. All type B, and most type C weapons are affected by range reductions. The range of the weapon is divided by the increased gravity, and the rate of decay of the weapon is multiplied by the gravity. For example, a small crossbow has a range of 25 hexes with a penalty of -125 per hex beyond 25 hexes. On a 2 g world the same weapon would have a range of 13 hexes, and a penalty of -250 per hex beyond 13 hexes.

Attack Damage: The last major effect that gravity has on combat is in the area of damage. The damage of type A weapons is increased with increased gravity. A type A weapon (thrusting and striking weapons) in a 1.2 g world would inflict 20% more damage. This is primarily due to the increased wate of the weapon. The additional damage inflicted because of gravity cannot exceed double damage. Type B and C weapons are *not* included in this damage bonus because their damage is derived primarily from the velocity of the projectile.

Grenade Effects: The area of effect of grenades is reduced by HIG to the same degree as the range of a projectile weapon. A grenade which uses shrapnel has its radius of effect divided by the

gravity. For example, a chemical explosive grenade (#2 Grenades/aerosols in the Tech list) exploded on a 1.5 g world would have its radius of effect reduced from 6 hexes to 4 hexes (6/1.5)

High Gravity Effects on Special Damages: Since higher gravity causes everything to accelerate more, objects are moving faster when they hit the ground than they would be in normal gravity. This phenomena increases the damage of falling or dropped objects. Damage from falling is increased identically to that of the damage of type A weapons. Falling objects will also inflict greater damage, by the same percentage as the increased gravity. Neither of these damages can be more than doubled due to gravity effects.

II

Performance Tables and High Gravity: The effects of high gravity on the performance of class skills is left up to the referee. What must be remembered is that tools have a greater wate, creatures move differently, wounded bleed faster, etc. The referee may wish to apply a flat DD penalty, but she must remember that the performance tables for class skills largely represent mental processes which are not affected by gravity. PT penalties should only apply once the gravity has become physically intolerable. See chapter 18, Encumbrance, for more information about wate allowance and performance tables.

Biological Effects of High Gravity: Using the **encumbrance gravity system** clearly demonstrates how fast high gravity can disable a persona. Gravity can become so high that the wate of a mammal's chest cavity will expulse the air from her lungs, and she will suffocate. Blood, sap, or whatever fluid moves through the creature's body, will be affected by very high gravities. Considering all such fluids to be similar in density and consistency the effects of very high gravity can be applied equally to all races.

At 3-4 g no movement should be possible. At 5-7 g the accuracy of simple finger movements should have a penalty of at least -800. At 8-10 g, recovery rolls would be required frequently just to remain conscious (completely immobile, but conscious). Any gravity greater than 10 g will be lethal to the persona. Gravities higher than 10 g



can be survived as long as the exposure is less than a unit. For every unit of exposure to gravity above 10, the persona will take one d6 per g. So a persona trapped in a 12 g gravity well will take 12d6 in damage.

Long Term Biological Effects: Very high gravities (greater than 2 g) cannot be suffered for very long periods of time. In fact personas can adapt to reasonably high gravities if they are exposed to them for very long periods of time. A persona's PSTR can increase until her new wate (at the higher gravity) can be handled in the encumbered category. If a persona is in the free, unencumbered, or encumbered, categories due to gravity encumbrance, there is no training effect, and no gained PSTR due to gravity.

A 65 kg persona with a 12 PSTR is on a 1.5 g

planet would be over encumbered with the increase of her own body wate. Her PSTR would increase until she was in the encumbered category when supporting her own wate. This improvement will progress at the rate of 1 new point of PSTR for every 12 months of uninterrupted high gravity. This persona could increase her PSTR from 12 to 16 with a 4 year stay on a 1.5 g world. The ref must note that the persona's PSTR increase stops when the load of the persona's increased body wate puts her in the encumbered category. The stay must be continuous, and any prolonged (2 weeks) vacation from HIG will sacrifice PSTR gain for that 12 month period.

The PSTR bonus can only be awarded if the persona finds herself in the over-encumbered category. If the persona has a gravity encumbrance penalty of 'lift only' her system has been overwhelmed, and no PSTR increase can be earned. If personas are using space travel, or other means, to unrealistically increase their PSTR several penalties may be evoked by the referee: make the higher gravities difficult to obtain, or find; create an unforeseen side effect when returning to lower gravities; or simply put an attribute maximum on the amount of HIG training possible.

The ref can shorten the time needed for PSTR increases with special high gravity training clinics. There are no other attribute bonuses to be obtained by exposure to high gravity. If personas overeat in order to gain wate for an improved HIG training effect, they should suffer the extreme consequences of their bad nutritional habits (atherosclerosis, cancer, allergies, etc.).

Mechanical Effects of High Gravity: The mechanical limits of inorganic objects in high gravities are much less restrictive than biological limits. This is generally the case because alloys and textiles used in equipment are much stronger than biological fleshes. The mechanical limits of equipment where fluids are of primary importance are severely limited by high gravity.

The most important effect of high gravity on a mechanical system is its added wate. This added wate will increase wear and tear, reduce the effectiveness of lubricants, and severely increase fuel consumption. Electrical equipment is unaffected by increased gravity, but some batteries (such as gravitational batteries) are affected, and that may cause a piece of equipment to break down.

The total effect of high gravity on equipment is very much left to the imaginative logic of the referee. A check to see if all of the equipment's components can survive the new gravity is to roll a kilodie against the gravity. For a 2 g world there is a 2 in 1000 chance of spontaneous mechanical failure. If a device does fail in high gravity, it must take a damage roll from the Extent of Damage Table in chapter 21, Equipment damage.

Low Gravity

Low gravity is any gravity less than 1 g, but at least significant enough to be considered present. An indicator of whether or not low gravity is actually zero gravity is whether a persona is in danger of achieving escape velocity through her own movements. An expedition may find low gravity (LOG) surroundings on small planets, or asteroids. There are even some devices which develop anomalous low gravity zones. Low gravity is generally beneficial to the persona because it reduces the strains of wate allowance, which allows for easier movement with larger amounts of equipment.

Wate and Low Gravity: Low gravity offers the best wate reduction plan possible. Because wate is dependant on gravity all items within a low gravity field have less wate than normal. A persona with a wate of 80 kg would have a wate of 40 kg in 0.5 g. This means that the persona is carrying 40 kg less than she normally carries. The low gravity has the effect of making the persona appear even stronger because all equipment wates are reduced by 1/2 also. Vehicles would also miraculously have power for an additional amount of cargo. A vehicle with a wate of 2000 kg would immediately have the capacity for another 1000 kg of cargo on a .5 g planet.

Movement and Low Gravity: Low gravity doesn't immediately yield faster movement rates

for the personas, but it does allow them to move the same speed they normally do with greater amounts of equipment. The wate that an 80 kg persona would lose in 0.5 g is added to her wate allowance. If the persona had a 12 PSTR her new WA would be 57 kg. Not only is her wate allowance greater, but the wate of the equipment she carries would be reduced by 1/2 in a 0.5 g field. This will have such a drastic effect on the psyches of equipment crazy personas that the ref may have to consider the sheer volume of the items that they'll try to carry.

The persona who's wate is 80 kg and PSTR is 12 would move no faster on a .5 g world than she could on a 1 g world. The difference is in the encumbrance effect on movement. This persona could act unencumbered while carrying 14.25 kg of equipment. Personas can sprint in low gravity as if it were normal movement. If the persona's equipment wate is greater than her new wate allowance can bear, normal encumbrance penalties will apply.

Combat and Low Gravity: When the personas become light bodied in low gravity, they may also become light headed, which may lead to combat. The changes in trajectories, wate of weapons, and body balance all have an effect on LOG combat. Any changes to the parameters of one's combat skills is not good. Type B attacks may fly further, but they don't follow the same trajectory. Type A weapons are easier to wield, but they don't have the same wate as before.

To hit adjustment: When such differences are taken into account, there is an overall detriment to the to hit roll in low gravity combat. The effect isn't as dramatic as that of high gravity, but there are penalties all the same. The bonus proficient of the persona is reduced in proportion to the low gravity. For example, in 0.5 g the persona could use half her BP, and on a 0.25 g planet she could only use 1/4 her BP because the gravity is even less familiar. If our persona had a BP of 142 she could only add 71 to her to hit roll when in 0.5 g. Type A and type B weapons are affected by this BP reduction, whereas type C weapons are not. Note that BNP is effected the same as BP.

Ranged attacks: The distance of attacks, as far as their **maximum** range is concerned, does increase, but their **effective** range does not. Just because the projectile won't fall to the planet's surface any faster, doesn't make the weapon any more accurate. The same ranges are used as in chapter 28, Weapons, to determine the accuracy of the attack, but the projectile may travel much farther than normal.

When the maximum possible range of a projectile in low gravity is required, apply the gravity to the ranges and decays listed in chapter 28. The extended range of the weapon equals the 1g range divided by the new gravity. The rate of decay for the weapon is reduced by the same percentge as the gravity, since the projectile falls at a reduced rate. A small crossbow used in normal gravity has a range of 25 hexes, and a penalty of minus 125 to hit per hex beyond 25. In 0.5 g the weapon would have a range of 50 hexes, and a rate of decay of -63 to hit per hex after that. This means that the bolt will travel 66 hexes, but it would be completely inaccurate beyond 33 hexes. Not all weapons are affected by low gravity range increases, for instance, lazer, sonic, ray, radiation, and stun weapons have no projectile to be affected by gravity.

Weapon Damage: The damage of an attack is unaffected by gravity. Type B, and type C, weapons are unaffected by gravity because their damages are dependant on horizontal velocity, and not downward gravity forces. Type A weapons are unimpaired as well. The gravity aided momentum of the weapon may be reduced, but the force of the attack should be sufficient to overcome this.

Grenade Attacks: Shrapnel area of effect weapons are unaffected by low gravity. The shrapnel of the attack will definitely travel further, but the density of the shrapnel will be reduced at this greater distance, so the damaging area of effect is no different. For example, if the radius of effect of a grenade is 6 hexes, and it were used on a .5 g world the shrapnel would travel twice as far, but the damage area would still be 6 hexes.

Special Damages: Since everything accelerates less in a low gravity, objects will be moving slower when they hit the ground. This

causes the damage of falling, or dropped objects to be less. The effects of low gravity on combat seem to be detrimental, but there are some advantages for the personas if they should happen to fall, or have things dropped on them. Damage for falls, and falling objects is generated normally, but it is then multiplied by the gravity present (less than 1 in low gravity). So a fall on a .5 g planet would inflict 1/2 damage, and falling objects on a .25 g asteroid would inflict 1/4 damage.

Performance Tables in Low Gravity: Low gravity has no effect on the performance of class skills. Rolls on the performance table may be subject to a short term DD penalty while the personas adjust to the unfamiliarity of the new gravity. In the long run, due to reduced encumbrance, the personas may find that low gravity has a beneficial effect on their performance tables.

Biological Effects of Low Gravity: Low gravity has no short term detrimental biological effects. Personas are unaffected by decreasing gravities, and even zero gravity does not harm a persona, unlike high gravities, where increases can crush a persona. The only short term effect of low gravity may be nausea caused by loss of equilibrium in the inner ear. The disabling effect is more common as the gravity becomes less and less. Each member of an expedition must be checked to see if low gravity sickness affects them.

Low Gravity Sickness: There is a percentage chance equal to the gravity in a location that the persona will *not* be afflicted by **low gravity sickness**. Thus there is a 50% chance of being disoriented in a 0.5 gravity field, and a 75% chance of being disoriented in a 0.25 gravity field. If the persona is susceptible she must save versus intensity d20 poison, or become incapacitated with nausea. If she saves, the disorientation will have no effect. For more information about saves see chapter 16.

Personas afflicted by LOG sickness are suffering from disorientation of the vestibular canals found in the inner ear. This causes light headedness, dizziness, and nausea, as the system tries to maintain balance for a 1 g world. The effects of the sickness will afflict the persona for 2 to 24 (2d12) hours, after which the persona will spontaneously recover.

Long Term Effects of Low Gravity: The long term effects of low gravity can be quite hazardous to the persona. The lessened gravity will atrophy un-used muscles, reducing PSTR, and dilute blood composition reducing CON. The personas should not be terrified of low gravity attribute effects, because they happen over a long period of time and personas quickly recover once back into normal gravity.

A persona can lose one point of PSTR for every two months of continuous stay in a low gravity environment. There is a percentage chance equal to the gravity that the persona will be *unaffected* by the loss of PSTR for the two month period. For example, before a persona could be affected by a PSTR loss on a 0.9 g planet, a decidie roll would have to be higher than 90. The persona cannot lose more than 1/4 her PSTR attribute to lower gravity. PSTR can be regained at the rate of 1 point per month once in normal gravity. Veterinarians can combat the loss of PSTR by developing special isometric training programs. The vet must make successive 5DD PT rolls for this training to be effective.

Lack of gravity affects the production of red blood cells in the bone marrow, leading to a reduction in constitution. The loss of CON is unstoppable, and potentially lethal. A persona should roll vs gravity on decidie once a month of game time to determine if there is a loss of CON. If the persona rolls above the current gravity percentage, she will lose one point of CON that month. No more than three points of CON can be lost to low gravity. However, even this loss could kill personas that have very low constitutions, by reducing the attribute to below one. The lost CON can be regained at a rate of 1 point for every 24 hours at full gravity.

Mechanical Effects of Low Gravity: Low gravity definitely has beneficial effects on most mechanical devices. There is less internal friction, and power systems have to contend with a reduced work load. The only point that will be discussed here is that of decreased load. A vehicle with a wate of 200 kg world would only have a wate of 150 kg

on a 0.75 g world. The 50 kg that the vehicle is not carrying means that it can function normally with an additional 50 kg of cargo. Because of the reduced wate, wear and tear should decrease, fuel consumption should decrease, and overall performance should be improved. What is not detailed is the effect of reduced friction required by surface vehicles for movement (cars slide more often), or the effect that reduced gravity has on instrumentation designed for normal gravity.

No Gravity

No gravity is the absence of any significant gravitational attraction. No gravity is also known as zero g, null g, or watelessness. The abbreviation chosen here is ZOG, for zero g. An expedition will almost always encounter ZOG while in outer space. ZOG has detrimental long term health effects identical to those of LOG.

Otherwise, ZOG is fun for the expedition, but a terror for the referee, primarily because it lends to 3 dimensional movement caused by many unintentional forces. ZOG is not just an extension of low gravity rules, it must contend with many absolutes for which the lo gravity system does not account. Things like ranges, normal movement (ha!), swimming, floating, weapon kickback, and hit knockback, are just some of the problems that arise due to a complete lack of gravity.

Wate in ZOG: When gravity is absent, wate is absent also. In a ZOG environment a persona can lift virtually anything, and the problem becomes one of inertia as opposed to wate. Personas cannot send orbiting space stations into the atmosphere with a flex of their muscles. The ultimate question about pushing or lifting something in zero gravity is whether the object or the persona moves.

Movement in ZOG: It's not that ZOG has an effect on movement, but that in zero g everything effects movement. Aside from the persona's efforts, hits and attacks may send the persona spinning. Normal walking doesn't work in zero gravity. When the foot pushes off, it expects the body to come crashing back down to earth. Unfortunately the forces generated by the step send the persona flying straight up into the sky.

Scrabble Grabble Movement: The easiest method of movement in ZOG is to pull one's self from one handhold to another. The handholds may be protrusions in a corridor, or natural handholds such as plants or rocks. *The persona can pull herself along at 1/4 her regular movement rate.* When moving in this fashion the persona cannot move while attacking, and must gain a foothold before attacking, to be assured of not floating away.

Push Off Movement: Another method of movement is to push off of a solid base, and to fly along with the momentum generated by the push. The problem is that the persona will continue moving until she hits another solid surface, or friction from the atmosphere slows her down. This continuing motion is based on Newton's first law: A body in motion remains in motion until an unbalanced force acts upon it.

Once in motion the persona will hurtle along at her regular movement rate. In the vacuum of space this means that the persona may head off into oblivion, or while in orbit may mean the persona is headed for re-entry. Zero gravity movement is easily generated, but it can be deadly for the unskilled.

The push method of movement works fine against massive objects, but as the object becomes closer to the wate of the persona, the push becomes less efficient. If the object is lighter than the persona (lower wate) then the object will move away from the persona faster than she will move in her desired direction. A simple formula for determining the resultant velocities of both items (persona and push off object) is shown below.

M = persona's movement
V_1 = persona's resultant velocity
V_2 = object's resultant velocity
W_1 = persona's mass
W_2 = object's mass

$$V_1 = \frac{M}{W_1/W_2 + 1} \qquad V_2 = \frac{M}{W_2/W_1 + 1}$$

For very large objects, the object will not move, and the persona will move away at her movement rate. For very small objects, the object will move away fast, and the persona will remain motionless. An object jettisoned by the persona in an attempted push, regardless of the velocity determined by the equation, will do no more damage than any thrown object. If a player still insists on turning grains of meteor dust into lethal projectiles the result should be nothing more than a spinning persona.

If a persona with a WATE of 70 kg and a 8 h/u movement were to push on a 140 kg piece of space debris, the debris would move away at (8 / 3 = 2.7) h/u, and the persona would move in the opposite direction at (8 / 1.5 = 5.3) h/u. This movement will continue until the persona can find another object to push off of, or can generate some other external force.

Even this oversimplified method of zero-g movement may seem unmanageable, but like all **EXP** systems the referee is not forced to use it. If survival of a persona is at stake, a completely objective movement system may be required, and the push off method should be perfectly adequate.

Combat Effects on ZOG Movement: Combat generates forces intended to damage targets, but in zero g, any force generated also results in movement. Not all weapons generate movement forces, weapons like lazer, sonic, radiation, ray, and stun weapons do not generate momentum through a projectile which can transfer the moving force to a target.

Attacks will generate two types of motion: translational motion and rotational motion. Translational motion is very easy to play, the target simply moves in a direction away from the attack. Rotational motion arises from a force which upsets the rotational equilibrium of the target, and sets it spinning.

Translational movement is easy to convert into play: the target will move at 1 h/u for every 10 HPS of damage inflicted. The type of weapon inflicting the damage will make a difference as to the resultant velocity. Rotational movement can be end over end, side to side, or a combination of both directions of spin. Such spin may cause the spinning persona to suffer an attack of low gravity sickness identical to that discussed under low gravity biological effects. In reality translational motion would be combined with rotational motion, but the complexities of such resultant forces are well beyond the scope of this game.

All incidental movements are cumulative, and if a persona is winging away at 8 h/u, and then gets shot in the back (how callous) for 40 HPS of damage she will continue to move away at 12 h/u.

Non-powered Weapons: Type A weapons are very difficult to use in zero gravity. These are thrusting and striking weapons that must contact the target to do damage. When generating the forces required to hit in gravity, the persona literally throws herself off balance. In zero gravity this should result in rotational forces after every attack. Instead, purely for convenience and not realism, only translational motion will result for the attacker and target when a hit is scored.

Whether they are slowed down, or sped up, by an attack will depend on the direction of the blow. For example, a motionless persona hits a motionless target for 21 HPS of damage. They both will move away from each other at 2 h/u.

This system of resultant translational motion is accurate for personal combat amongst anthropomorphs of equal size. If a light wate persona is hitting a heavy wate target the above formulas for push-off velocity can be applied to the expected recoil. For example, if the previous attacker scored a hit against a target twice her wate, she would move away at 1.3 h/u and the target would move away at 0.7 h/u.

Type B weapons, which are non-powered projectile weapons, will not generate any translational or rotational motions for the attacker in cases where the mass of the projectile is much less than that of the attacker. A hit target will suffer 1 h/u of translational movement for every 10 HPS of damage rolled.

Powered Weapons: Type C weapons are more complex than non-powered projectile weapons because they generate motion forces for the attacker whenever a to hit roll is made. If a player rolls to

hit with a bolt action rifle, her persona will move away from her target at 1 h/u per 10 HPs of *maximum damage possible*. In *normal* gravity, if the weapon is being held properly, the persona will absorb the kickback force and not move. In ZOG the target, if hit, will sustain random damage, and move at a different speed in the opposite direction of the attacker. Only special weapons can counteract the kickback effect on movement.

For example, a XHP revolver inflicts 4 to 48 points of damage. When fired the attacker will move at 5 h/u away from the target. Assuming the target was hit for 12 HPs of damage, it would move away at 1 h/u. These rules do not apply to lazer, sonic, stun, ray, radiation, and other weapons which generate no projectile.

II

Grenades: Grenades which generate projectiles or forces will also generate movement of targets within the area of effect. The targets will move away from the target hex at a rate of 1 h/u per 10 HPs of damage.

Combat in ZOG: Due to the complexities of zero gravity movement the actual mechanics of zero g combat are of little concern. Unless the persona is trained in zero g combat, or is using a weapon specifically designed for zero gravity she will suffer the following penalties: -200 to hit with type A weapons; -100 to hit with type B weapons; and no to hit bonuses (BP or BNP) when using type C weapons. If the persona is trained in zero g combat all her bonuses will apply as normal.

There is no change to the accuracy of ranged weapons, but the projectiles will carry on indefinitely. For example, a crossbow fired in zero gravity would still be completely inaccurate beyond 33 hexes, but the projectile will continue travelling until stopped by atmospheric friction or a solid body.

Damage is unchanged for any weapon attacks in zero gravity. The reasoning behind such conclusions is detailed under low gravity combat effects in this chapter.

ZOG Effects on Other Systems: The effect of zero gravity on performance tables, short term biological exposure, and long term biological exposure are identical to those of low gravity discussed earlier in this chapter. Zero gravity essentially has no effect what-so-ever on the performance of class skills, and irritating effects like tools floating away will be more serious than the total effect of zero gravity.

Watelessness can be just as deadly for weak personas as low gravity can. In fact all of the detrimental biological effects will occur automatically in zero gravity, whereas they are only a possibility in lo gravity. Zero gravity sickness is the same as lo gravity sickness, and is administered in the same fashion.

Mechanical Effects of ZOG: ZOG can have truly drastic effects on mechanical equipment. Any device which depends on friction, levers, or counterbalances may not function properly in ZOG. This does not mean that nothing will happen, but that nothing normal to the *1 g world* will happen. A vehicle's combustion engine would spin the wheels, but if the vehicle is floating 10 cm off of the ground the car will not move. The spinning tires may generate rotational forces causing some movement, but you can see how nothing expected would occur. The referee will have to improvise frequently in zero gravity. If a dispute arises refer to the Sphincter dice, as described in chapter 16, Special rolls.

To determine if a machine can function in zero g roll percentile dice. The die roll is compared against a base 70% chance that the equipment will function in ZOG. The **tech level** of the toy is added to the base chance to reflect the better design of high tech equipment. So a tech level 10 toy has an 80% chance of functioning in zero gravity.

This roll should be used with discretion. Equipment that is designed for zero g such as vac-suits, or spacer equipment need not be subjected to this check. Many mechanical devices which have proven their worth in zero gravity need not be tested either: knives, golf clubs, pistols, pens, etc. What the roll is designed for is the black box technology that neither players, referees, or authors understand the workings of. Some examples are psionic detectors, robots, age determiners, force field generators, etc.

One last important point to make is that zero

gravity assumes normal atmospheric conditions. If a device is being subject to the rigors of space, it must be subject to both zero gravity effects, and vacuum effects. The effects of varying atmospheres are detailed in this chapter under atmospheric effects.

Atmospheric Effects

Atmospheric effects are only concerned with the condition of the atmosphere inhaled by a persona. The atmosphere may be generated by the life support system of a ship, the recycling unit of a vac-suit, or the environment of a planet. Regardless of how the atmosphere is generated, normal atmosphere is called 1 ATM.

Similar to the generic 1 g, 1 ATM will have the ideal conditions of atmosphere for an anthropomorph persona to survive in. 1 ATM has both the correct air composition, and the correct pressure for breathing. Any changes from 1 ATM will have detrimental effects for the persona. Lungs have a very restricted range where they can they can transfer oxygen into the blood (or carbon dioxide into the sap) and any changes to ATM, whether in composition or pressure, will have drastic effects on humanoid (or alien) races.

Changes in ATM usually result from exposure to very high altitudes, or more usually it will result from exposure to the vacuum of space. High ATMs usually occur on the surface of massive planets, which usually means that the effect is combined with high gravity. The general principals of low ATM are easy to grasp: remove the atmosphere and the personas die. Exposure to space will remove all atmosphere, and kill the personas. Exposure to exatmo will usually be accompanied with zero gravity.

Atmospheric Effects in General: A change in atmosphere will have dangerous biological and mechanical side effects. The effects of a vacuum on wate, movement, combat, and performance tables are insignificant when compared to the biological effects. These game procedures are more affected by gravity than by atmosphere. The referee must be aware that atmospheric, and gravity effects are cumulative.

Wates: Atmosphere has no direct effect on the wates of equipment or the wates of personas. If a persona's wate has been reduced significantly due to low atmosphere exposure she is certain to be dead. High ATM makes the persona carry a heavier atmospheric load, and significant increases would literally crush the persona.

Movement: Movement effects due to atmospheric changes are generally meaningless. If a player expects her persona to move faster because of reduced air friction, she would have to contend with both a vac-suit, and zero gravity, which would certainly counteract any movement bonuses due to reduced friction.

Combat: Physical properties are unaffected by the quality of the atmosphere. To hit rolls are unaffected, damages are identical, and ranges are the same regardless of the atmosphere in which combat takes place. Many type C weapons will not work in a vacuum because they are dependant on atmosphere to function. How atmosphere affects mechanical devices is discussed later.

Performance Tables: Performance table rolls are unaffected unless the persona is protected by a bulky space suit. If the persona is protected then the restrictiveness of the protection will hamper performance table rolls. If the persona is unprotected from a vacuum, then survival is of primary importance, and performance table rolls will be mitigated by the detrimental biological effects.

High Atmospheric Pressure

High atmospheric pressure will cause increased wate on the persona because more air than normal is resting on the persona's head. In normal planetary atmosphere a persona is supporting a column of air on her head. In 1.5 ATM an additional 225 kg of wate would be pressing down on the persona. Not only would the sheer force be dangerous, but the change in pressure would also affect performance of the persona's lungs. If the atmospheric pressure continued to increase, the persona's eyes would push in, her lungs would

collapse, and eventually air would force its way into the body through mucous membranes.

The effect of high atmosphere on personas is left for the referee to determine for her milieu. Whatever biological parameters are employed by the referee they should apply to all humanoid races equally.

Low Atmosphere

The effects of low ATM are listed as fractions of an ATM. They represent progressively worse conditions of exposure to low ATM, the categories are hypoxia, dysbaria, anoxia, and ebullia. Each is detailed below.

Normal (1 ATM to 0.70 ATM): Normal atmosphere has no detrimental effects on any of the anthropomorph races (except aquarians). The parameters of this normal range are only included for comparison.

Hypoxia (0.69 ATM to 0.41 ATM): The lungs are having difficulty getting oxygen into the blood, which ultimately results in a shortage of oxygen to the tissues. When the tissues have an oxygen debt, light headedness will result, and repeated CON attribute rolls (d20) will be required to resist fainting spells. The fainting spells can be induced by rigorous activity (such as standing up too fast, or walking), and last for 1 to 20 units (roll a d20).

Dysbaria (0.40 ATM to 0.12 ATM): Dysbaria is the formation of undesired bubbles (primarily nitrogen) in the blood and tissues of the body. When pressure surrounding the body drops, nitrogen can be released in gaseous bubbles which attack the nervous system. This effect can vary from extreme discomfort to death. When subject to dysbaria the persona must save versus intensity 4 to 16 poison (4d4).

The intensity of the attack will determine how dangerous it is. A dysbaria attack will inflict 1d4 per intensity. The damage is halved if the persona saves. If persona was exposed to 0.3 ATM pressure she would suffer a dysbaria attack. The attack has an intensity of 10. The 10d4 roll indicates 27 hit points of damage. If she saves versus intensity 10 poison attack she will take only 14 HPS in damage.

Personas suffering from dysbaria, whether they save or not are also subject to increased hypoxia where CON attribute rolls (d30) must be made or the persona will pass out for 1 to 20 units.

Anoxia (0.11 ATM to 0.06 ATM): Anoxia is the lethal advance of hypoxia. This occurs when the oxygen is so thin in the atmosphere that it cannot be forced into the blood through the lungs. In short the persona is suffocating.

A suffocating persona will be unconscious in a number of units equal to her CON, and she will be dead within 1 minute per 4 points of CON (a minute equals 30 units). There is no saving throw awarded.

Personas rescued before going unconscious must save vs an attack of dysbaria as described previously. Personas rescued while unconscious are subject to TWO attacks of dysbaria. Personas exposed to extreme decompression stand a very high chance of dying, regardless of rescue. If the referee is using the system of anoxia for standard suffocation, it is played as described above except that the dysbaria attacks do not apply.

A persona with a 12 CON is exposed to .1 ATM after a starship's hull has been ruptured by a missile. She would be conscious for 12 units, after which she would succumb to unconsciousness, she would be dead 3 minutes (90 units) later. It is that simple.

Ebullia (0.05 ATM to 00 ATM): Ebullia results from the body being exposed to a complete, or almost complete vacuum. Ebullia is almost certain death, the procedure for its progression is included because nothing is ever truly certain in **EXP**.

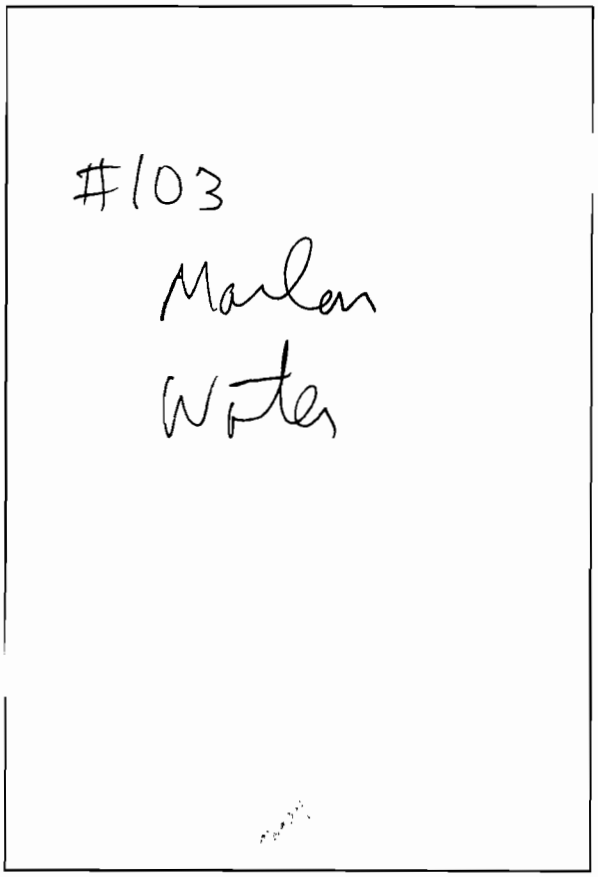
The damaging factor of ebullia is that the fluid vapor pressure of the body is greater than the vapor pressure external to the body. The body fluids immediately vaporize, and escape through the mucus membranes of the body (eyes, mouth, etc.). The body is essentially boiling.

The persona will remain conscious for 1 unit per 4 points of CON, and will survive for no longer than 1 unit per point of CON. There is no save, and death from ebullia is final. Personas rescued while conscious due to ebullia will most likely be killed by

the 3 dysbaria attacks required, and unconscious personas will certainly be killed by the 4 dysbaria attacks required.

Artifacts and Low Atmosphere: Low or zero atmosphere should not be confused with low or zero gravity. Mechanical functions such as levers and pulleys will function normally regardless of atmosphere. Those mechanisms which are adversely affected are those which depend on chemical reactions to function. Self contained chemical reactions (like bullets) will function even in zero atmosphere.

Machines whose mechanisms are not understood, those little black boxes, will have a 50% chance of function +1% per tech level. So an age determiner that was tech level 13 would have a 63% chance of functioning in low atmosphere. The die roll should only be used for equipment which no-one understands the function of, like age determiners, ammo detectors, or psionic helmets. Knowledge of devices that are affected by atmosphere should be applied. For instance, a derringer does work in zero atmosphere, while a sonic pistol does not. Equipment that does not function in a vacuum must sustain a damage roll on the *Extent of Damage* table in chapter 21, Equipment Damage.



Underwater

This part of special terrain is devoted to underwater adventuring. The rules can be applied to virtually any sub-liquid atmospheres which the personas may find themselves in. Water is essential to life for all anthropomorph species; however, an entirely water environment is also lethal (except to aquarians). If a persona finds herself immersed in liquid without proper breathing apparatus she will be killed by anoxia (absence of oxygen). She will drown. Once the survival complications of water adventures have been overcome, the persona will find massive movement restrictions, combat penalties, and general efficiency reduction.

Wate and Underwater: The **buoyancy** (tendency to float) of an object will help reduce its wate when submerged in water. For personal equipment, an object's wate will not be reduced because there is sufficient drag to account for the encumbrance effects. The equipment may have a decreased wate, but it still must be pulled through the water. Moving one's hand first through the air, and then through water should demonstrate this effect.

Adventuring in liquids other than water will affect the buoyancy of objects drastically. The density of the liquid determines buoyancy, so liquids less dense than water will support fewer substances (wood or plastic may sink), and liquids more dense than water will float more substances (lead floats in mercury). For adventures in liquids other than water, it is up to the referee to be fully briefed.

The deeper below a liquid's surface, the greater the pressure the expedition is subject to. Water

pressure can easily crush equipment as well as personas. The damaging effects of water pressure are covered under biological and mechanical effects.

Movement Underwater: To say the least, underwater movement is completely foreign. Not only must the body deal with the restrictiveness of a protection system, it must deal with the 1000 times greater drag of the dense water. Water is very dense when compared to air. Usually personas will sink to the bottom of whatever body of water they are exploring, and walk along the immersed terrain. Terrain effects such as silt, kelp, and hills will deter the persona just as sand, grass, and hills would on land.

II

Walking: A persona walking through water may move at 1 h/u per 6 points of PSTR. Thus a persona with a 14 PSTR could push along at 2 h/u. The effects of WA on movement cannot reduce the persona's movement below 1 h/u. If the persona is in the lift only category she may not move. The persona can also sink at a rate of 1 to 4 h/u depending on the buoyancy of the equipment carried. A persona can safely sink off of crevasses, and such, with the just described movement rate. Whenever downward motion is taken the referee must remember that water pressure due to depth has serious biological and mechanical effects.

Swimming: Swimming will allow the persona to move at 1/5 her on land movement rate. A persona may only do this if she is skilled at swimming. Aquarians can swim at the movement rate designated by their DEX. Once swimming is affected by encumbrance it will rarely be faster than walking along the bottom; however, swimming allows for 3 dimensional movement around obstacles and above targets.

Combat Underwater: The results of underwater combat are as futile as attempts at underwater movement. Because the effects are so drastic, and varied, the parameters of each weapon type is listed in the following paragraphs.

Type A Weapons: Type A weapons are non-powered thrusting and striking weapons. Only thrusting attacks may be used underwater, and weapons with a primarily striking attack are useless. A mace, flail, axe, bo-stick, and hammer are examples of striking weapons whereas a trident, spear, or point are examples of thrusting weapons. Thrusting weapons have a to hit penalty of -200, while striking weapons cannot be used at all. The damage of successful thrusting attacks are unaffected by submarine situations.

Type B Weapons: Type B weapons are non-powered missile weapons such as axes, spears, bows, and objects. Such weapons cannot be used underwater at all. The density of water offers too great a drag for the weapon to be of any use. Type B weapons can be used as their type A alternates to inflict thrusting damage.

Type C Weapons: Type C weapons are powered weapons such as special guns, pistols, and rifles. Because of the effects of water on sighting, ranges and other detriments, the attacker will receive a -300 to hit roll penalty. Type C weapons do not have their damages reduced, but their range is severely shortened.

The range of useable type C weapons underwater is 1/10 of normal range. So a crossbow, a type C weapon, with a range of 25 hexes, and -125 to hit per hex beyond 25 hexes would be reduced to a range of 3 hexes and a penalty of -1250 for every hex beyond 3 (effectively creating a 3 hex maximum range). The effects of water on all type C weapons are not this simple. Some weapons cannot be used underwater, and others turn into area of effect weapons.

Grenades: The most drastic effect of using grenades underwater is that they cannot be thrown any significant distance from the expedition—remember no type B attacks. Once a grenade is detonated underwater, its area of effect may subject a great debate. Grenades like sky lighters, and gas grenades will not function under water, but the area of effect of concussion grenades may be increased. Water has a very stabilizing effect, and grenades are designed to create chaos. So in principle their effect will be reduced, phosphorous fires, and smoke clouds will not get the opportunity to form. Aerosols simply do not work underwater.

Performance Tables Underwater: Water has a dampening effect (no pun intended) on the senses of the persona. Touch is hampered, sight is affected,

and smell/taste are useless. This, of course, is not true for aquarians. The persona must also deal with equipment that wants to float away, sink, or dissolve. The complications are endless, and personas receive a +7DD penalty.

Biological Effects Underwater: The immediate biological effect of water immersion at any depth is anoxia. Anoxia is the absence of the oxygen needed for the lungs to transport into the blood (or the absence of carbon dioxide for the sap), and death quickly results. Underwater anoxia is also known as drowning.

Drowning: A drowning persona will be unconscious within 2 units per point of CON, and dead within 1 minute (30 units) per 4 points of CON after falling unconscious. So a drowning persona with a 12 CON could struggle for 24 units, and then would be dead 3 minutes later. There is no saving throw, and the persona is permanently dead.

Attribute Effects: If the persona has devised some form of defense from the water, she may survive without worry of anoxia, but she will suffer a penalty of -3 on all attributes while in the liquid environment. This is similar to the aquarian's out of water penalty. Aquarians function with their rolled attributes while in water.

Water Pressure: Including the already described biological deterrents, the persona must also deal with water pressure as she descends deeper and deeper into the water. The effect is very simple, as she descends she puts more and more water above her, and this water pushes down with more and more force until it crushes her to death.

For example, the wate of water at a 5 hexes depth is about 420 kg, at 50 hexes it is 4200 kg, and at 5000 hexes it would be around 42 tonnes. A persona could not venture below 25 hexes underwater without pressure protected gear. If personas still insist on going deeper, or if something else is insisting, they will take one d4 damage per unit for every 5 hexes they are below the 25 hex limit. The pressures of deep water will certainly kill personas and whole expeditions if they are unprotected.

Depressurization: If a persona is subject to the increased pressures, she may rush back up to safer depths to avoid being crushed. This has an effect similar to being exposed to low atmospheres, and the persona may suffer from a dysbaria attack. If the persona lets herself float to the surface (about 3 h/u), or travels upwards at any faster pace she will suffer a dysbaria attack. Dysbaria is the formation of gaseous bubbles in the blood and tissues. When a dysbaria attack is indicated the persona must save versus intensity 4 to 16 poison.

Mechanical Effects Underwater: Equipment immersed in water is usually destroyed regardless of the toy's depth. Electronics are destroyed as electrical impulses jump across connections, charging and depleting components with reckless abandon. This is the glorification of a short circuit.

Toys and equipment with electronic components, and those which depend on a gaseous atmosphere cannot function underwater. If the device is not suitable for underwater function but there is some dispute as to whether it can survive underwater, a percentile die roll will determine if it is airtight, or not. The percentage chance is 50 + TL. If the same device has some use underwater, and is proven to be airtight, there is additionally a 40 + TL percentage chance that the device can be used.

Equipment that is not airtight will be damaged as per the *Extent of Damage* table in the Equipment Damage chapter (21). The chance of the equipment remaining airtight is reduced by 1% per 5 hexes of depth. This is due to increased pressure on the item.

Fire

As odd as it may seem in the context of such obvious terrain features as vacuum, or high gravity, fire is an environmental condition likely to be encountered by an expedition (particularly in the midst of combat). As predisposed to carnage and conflagration as most personas are, the referee would do well to remind the expedition of the consequences of detonating fuel air explosives over a forest in which they, themselves, are standing.

The rules for regular combustion (as opposed to chemical gel) are similar to those for the Napalm

Gun in Chapter 46. They differ in that the percentage chance for a heated object to ignite is somewhat lower than for an object covered in sticky flammable goo.

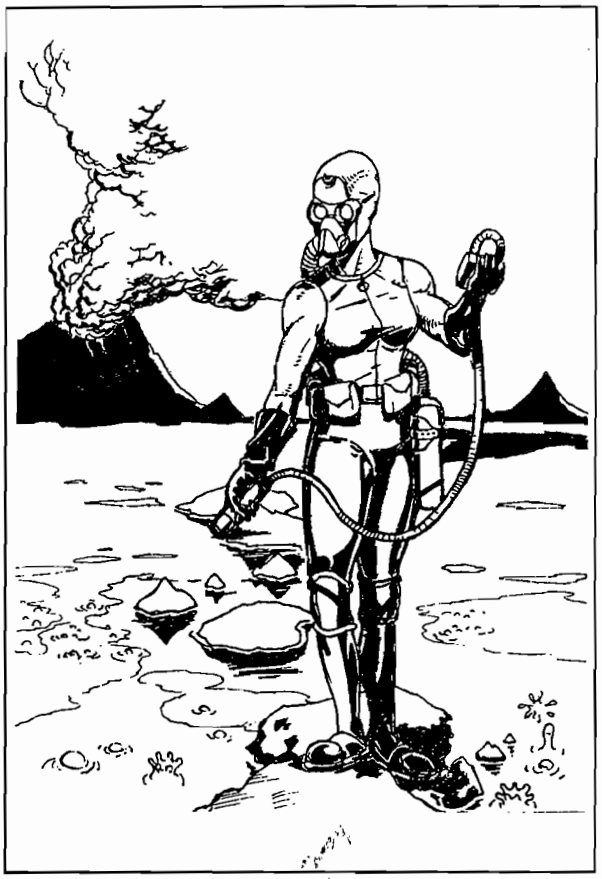
A flame that is consuming dry, fibrous material such as wood, paper, organic cloths and/or rope over a large area can inflict 3 - 30 hit points of thermal damage every unit to anyone caught in that area. A persona is unlikely to spontaneously burst into flames under such conditions, but their clothes might. The percentage chance of clothing catching on fire is equal to the damage rolled. Clothing will burn until gone or until the flames are smothered. Burning clothing will inflict an additional 2 to 20 hit points of damage for every unit it continues to burn.

If the fire is being fed by some form of fossil fuel, petroleum-based plastics (polyester and nylon among these...yechhh) or hot-burning substance like phophorous or magnesium, it can inflict 6-60 hit points to anyone in the area of effect. As well, hair and flesh can potentially ignite if sprayed or splashed with burning fuel. Even if the persona is buck naked (a less than desirable condition in event of a chemical fire), they have a percentage chance of immolation equal to the damage rolled. If they catch on fire, the persona will suffer 2 to 20 points of additional damage per unit for 1 to 10 units.

Substances like molten steel or napalm are the hottest the persona are likely to encounter (discounting fusion plasma). They obey the damage rules for the Napalm Gun in chapter 46.

Fire Escape: Needless to say, few personas that find themselves standing in the middle of a raging brush fire are going to stick around. Fire effects should be administered on a hex by hex, unit by unit basis. Any fire that hasn't actually engulfed its hex can be avoided by a DEX roll. Running full tilt through a burning forest may enable the persona to escape the forest, but they will still take 3 to 30 every unit they are in an engulfed hex.

Smoke: Even if the area in question is not engulfed, the personas may be subject to another fire hazard: smoke. Especially in residential or



industrial fires, the enclosed conditions may doom the persona even if she has successfully avoided getting burned.

Fires of the first category (dry) generate choking ash that eventually deprives the persona of oxygen. The effect is identical to Anoxia, described above. Personas caught in any burning area where there is a finite supply of air will find themselves choking far faster than they burn, especially as the flames consume the local air supply.

Fires of the second variety (chemical) may also produce toxic fumes that inflict an additional poison effect. The rules for Dysbaria apply here.

It should be noted that smoke will spread even where fire can't, and represents the biggest danger in a fire situation. For purely theatrical purposes, the referee may wish to delay the effects of smoke inhalation by some arbitrary number of units after the flames begin to rage in ernest.

Table 19.1: Jumping Terrain Difficulty (DEX)

JUMPING DISTANCE(D)	TERRAIN of LANDING Smooth, Pliant & Flat	Smooth, Pliant or Flat	Sharp/Uneven
≤ 1 hex	Easy (d10)	Difficult (d20)	Difficult (d20)
1 hex < D ≤ 2 hexes	Difficult (d20)	Difficult (d20)	Tough (d30)
2 hexes < D ≤ 4 hexes	Tough (d30)	Improbable (d100)	Improbable (d100)
4 hexes < D ≤ 8 hexes	Improbable (d100)	Improbable (d100)	Bizarre (d1000)
8 hexes < D	Bizarre (d100	Critical Success Only	Critical Success Only

Table 19.2: Hi Gravity To Hit Penalty

ENCUMBRANCE LEVEL	TO HIT PENALTY
Free	50
Unencumbered	100
Encumbered	200
Over encumbered	300
Lift only	Lift only

II

II

Chapter 20
Artifact Identification

Technology is diverse and prolific, and not all technological devices can be immediately identified by personas. Consider what sort of a potpourri of technological devices would exist if they were drawn from varying cultures, races and technological levels. No persona could expect to figure out the mechanism of anything by merely the referee's description. This is why a structured system for identifying artifacts had to be devised.

These systems must be used with the discretion of the referee. The **Artifact Identification** systems should not be used so strictly that players cannot identify anything (very boring for the players), nor should the **AID** systems be used by players to "roll" themselves through a scenario. The referee may refuse AID rolls to players for any device which is important to her scenario. Obviously, if the entire scenario revolves around some mysterious object, there is not much point in letting a player roll herself a solution to the scenario. If a player should happen to identify an artifact herself (as opposed to her persona) this is tough luck for the referee. Remember that this is a role-playing game, and not a dice-rolling game.

Simple AID System

A simple system for AID is based on attribute rolls. The player must make an attribute roll under her INT to successfully identify the artifact. The more difficult to identify the artifact the more difficult the INT roll required. This system offers little flexibility for including factors like: Tech Level, procedure, or experience level.

AID Table System

A better system for artifact identification is the **AID Table**. The *AID Table* is a flowchart (Table 20.1) that allows the player to chart her persona's course through an artifact's identification. The *AID Table* includes factors such as how much time is spent on the artifact, skill level of the identifier, class of the identifier, Tech Level of device, and care of procedure.

The *AID Table* is a flowchart, that has key points indicating **identification**, **activation** and **damage**. Movement around the flowchart is decided by modified d10 rolls. Each d10 roll indicates 1-10 minutes of investigation.

Each circle on the flowchart has three **exit** arrows, and one **entrance** arrow. Which of the 3 exit arrows is taken by the player is determined by her die roll. For example, a player located at circle "b" would return to circle "a" if she rolled 4 or less; she would advance to circle "c" if she rolled between 5 and 11, and if she were to roll 12, or better, the artifact would be identified.

Each flowchart circle could be used to indicate indicate strange sounds or flashing lights on the artifact. Using this table allows the players, and the ref, to get some idea of where they are in the identification process.

Starting the AID Table

The start is obviously where the player begins the identification process. This is when the persona is starting cold. She is picking up an item that she has never attempted to identify before. If a persona has stopped identifying an artifact, she must return within a day if she wishes to restart where she left off. Another persona may continue where the old identifier left off only if the new persona had been paying attention for the whole of the identification process.

Accidental Activation

Accidental activation indicates that the identifier has unwittingly turned on the artifact. For weapons, bombs and grenades, the effects can be deadly. For devices that have been activated, and are wasting



precious batteries, a successful INT roll will immediately deactivate the artifact. When an artifact has been accidentally activated, it releases considerable information about its use. Therefore, the player will return to the start with a *+2 bonus on all successive rolls*. The bonuses for accidental activation are cumulative. If the identifier accidentally activates the artifact again, she will return to the start with +4.

Artifact Damage

This flowchart point indicates that the device has been **damaged**. Arrival at this destination could be announced by horrible crunching noises, or sickening sproings. After this occurs, the identifier returns to the start. High-tech artifacts should not instantly be damaged by the fumblings of the identifier. Any artifact that the ref feels cannot be damaged by the identifier, should not be damaged. If an identifying player continually lands on the point indicating damage, then Table 20.2, *Extent of Equipment Damage*, may be employed. The extent of damage has an effect on the repair of damaged equipment. For more information on damaging equipment, see the Equipment Damage chapter (21).

Artifact Identification

Identification of an artifact can mean many things. Usually identification only indicates the general use of the artifact type. For example, this is a medical device, this is a drug (not perfume), this is

a napalm aerosol (not hair spray). For complete identifications the persona must be a Mechanic. All other classes can only exactly identify items that are related to their own class.

Any persona that picks up an artifact not related to her class can only (via successful identification) determine that the device is not intended for her use. For example, a vet could only determine that the helmet she is trying to identify is not medical equipment, a drug, or vehicle. A mechanic, or a mercenary could identify the type of helmet.

Artifacts can only be identified by classes if the device falls directly into their category of familiar devices. For example, Mercenaries may not be able to identify artillery or bombs unless they have proficiency with these weapons. Artifacts designated for specific classes (miscellaneous equipment section) can be identified by the classes. For example, scopes are included in Misc. Eq., and are classified for mercs and spies.

Items such as climbing equipment may be classed as nomad. Cooking utensils may be classed as "all". All classes can identify vehicles. The ref must be very cautious when applying these rules. Not being able to identify (IDN) a toy can be very frustrating for players. If some thing they can't IDN later turns out to be an essential device a fracas could ensue. Use discretion, and in general be nice when players are trying to identify artifacts. No class restriction apply if a player identifies an artifact by role-playing!!

AID Table Adjustments

The die rolls on the *AID Table* depend on many factors: INT of the identifier, Tech Level of the toy, class of the identifier, and skill level of the identifier. These adjustments are another point where mechanics, and all other classes, diverge. When using the flowchart, mechanics roll a d10, but all other classes roll a d8. All classes are subject to adjustments on the INT Table, the Tech Level Table, and the procedure table. However, only mechanics can use a skill bonus.

Intelligence adjustments: The adjustments for INT are very straight forward: smart personas do better, and dumb personas do worse. Whichever value applies to the persona's INT is added to each *AID Table* die roll. A persona with an 8 INT would subtract 1 from each d8 roll. However, a mechanic with a 16 INT would add 3 to every d10 roll. It should be easy to see who's going to be more successful at identifying equipment.

Tech level adjustments: **Tech level** is a term that loosely represents a artifact's level of technological development. **EXP**'s tech level system is defended in some detail in chapter 56, Tech Level, but the argument goes something like this: A person from the Middle Ages would almost certainly be at a loss in a modern kitchen, and it is unlikely that someone from today's high-tech kitchen could prepare a meal with utensils from the Middle Ages. The problem of Tech Level, however, goes beyond this.

Tech Level is a relative situation. Different societies may be at the same Tech Level in an numerical sense (e.g., both are TL10), but evolution of their technologies may have taken such diverse paths that there are no apparent parallels or similarities. So a persona from a TL10 world couldn't even IDN (identify) everything that is tech level 10. Enough inherent differences would exist between cultures to negate any advantage made possible by the equivalence of Tech Levels. As usual, the conditions and solutions fall under the dubious area of 'referee's discretion'.

All personas are assumed to originate from Tech Level 10 societies. Tech Levels 6-12 are similar enough not to present any serious difficulty to the identifier. For example, a person from our own technical society (Terran, western, 1980) would have a good idea of how to operate most 19th century artifacts, and will likely to be able to function up to about 50 years into the future. Beyond this TL 6-12 range, there are probably enough unfamiliarities to confuse a persona—hence, penalties are added, at the rate of minus 1 per Tech Level above 12, and below 6.

It is interesting to note that several Tech Levels may co-exist in the same place and time. It

is up to the ref to adapt according to the particular conditions involved.

Procedure adjustments: Procedure adjustments are values added to particular *AID Table* die rolls depending on how the persona is conducting her study of the artifact. If the player says that her persona is being very careful she will add 3 to her d8 roll whenever on circle e (accidental activation possible), or on circle f (artifact damage possible). However, while being careful each *AID Table* roll takes d20 minutes of time instead of the usual d10 minutes. Identifying artifacts may appear to be a time consuming, impossible task. However, the procedure adjustments can be combined, and with exuberant role-playing most of the toys will be identified quickly.

Table 20.2: Extent of Artifact Damage

DIE ROLL	EXTENT OF DAMAGE
01-10	Trivial
11-60	Minor
61-90	Major
91-99	Critical
00	Destroyed

Table 20.3: Class Related Equipment

CLASS	RELATED EQUIPMENT
Biologist	Biologist specified.
Knite	Knite specified.
Mechanic	Mechanic specified.
Mercenary	Weapons and Armour.
Nomad	None.
Nothing	Nothing specified.
Spie	Weapons and Armour
Veterinarian	Medical Eq.; Drugs.
Alien	Alien specified
Robot	Robot specified

Table 20.1: Artifact Identification Flowchart

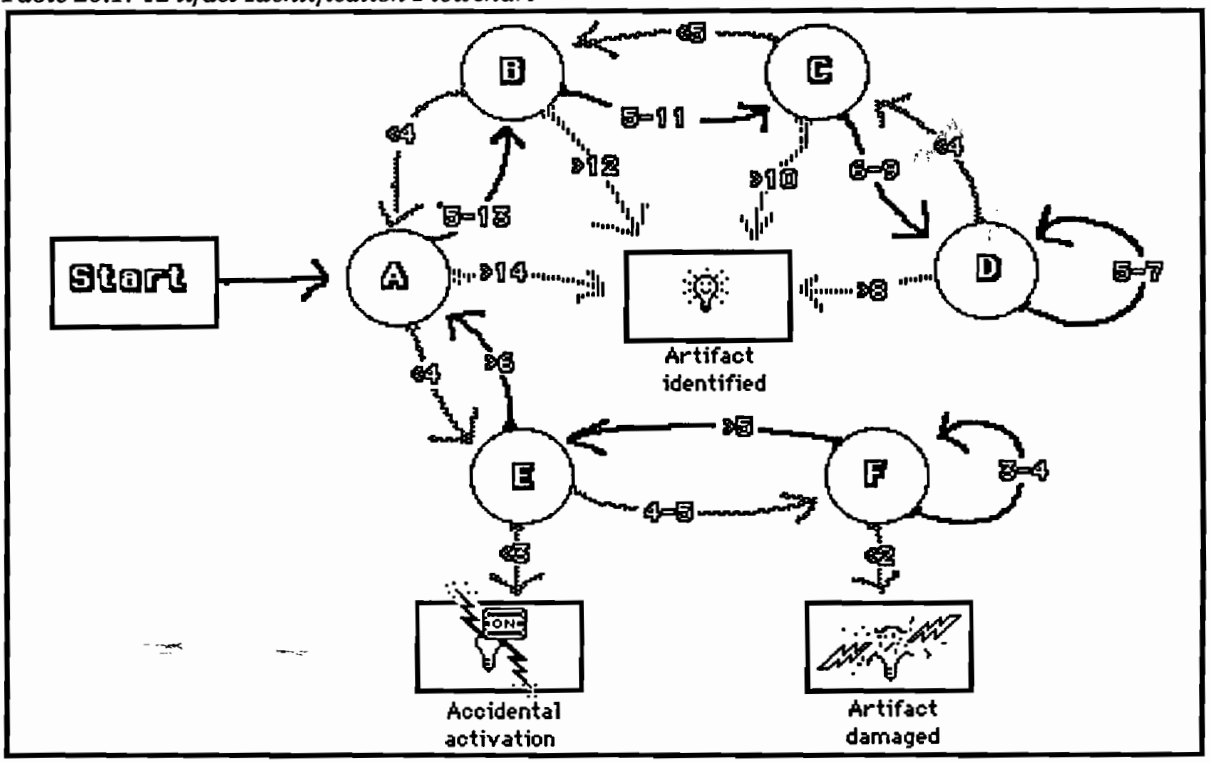


Table 20.4: INT AID Adjustment

INT ATTRIBUTE	A.I.D. TABLE ADJUSTMENT
1	-5
2	-4
3-4	-3
5	-2
6-8	-1
9-11	—
12-13	+1
14-15	+2
16	+3
17	+4
18	+5
19-20	+6
21	+7
22	+8
23-24	+9
25	+10

Table 20.5: Tech Level AID Adjustment

TECH LEVEL	A.I.D. TABLE ADJUSTMENT
1	-5
2	-4
3	-3
4	-2
5	-1
6-12	0
13	1
14	2
15	3
16	4
17	5
18	6
19	7
20	8
21	9
22	10
23	11
24	12
25	13

Table 20.6: Procedure Flowchart Adjustment

NATURE OF PROCEDURE	FLOWCHART ADJUSTMENT	OTHER ADJUSTMENTS
Being very careful	+3 at e & f	double time for IDN
Being careful	None	none
Proceeding briskly	-1 at e & f	half time for IDN
Proceeding haphazardly	-2 at e & f	quarter time for IDN
Artifact is poorly labelled	+1 at all points	add 1-4 min. per IDN roll
Artifact is well labelled	+3 at all points	add 1-4 min.per IDN roll
Using instructions	+5 at all points	triple time for IDN
Research team	Each team member rolls	add 1-6 min. per extra roll

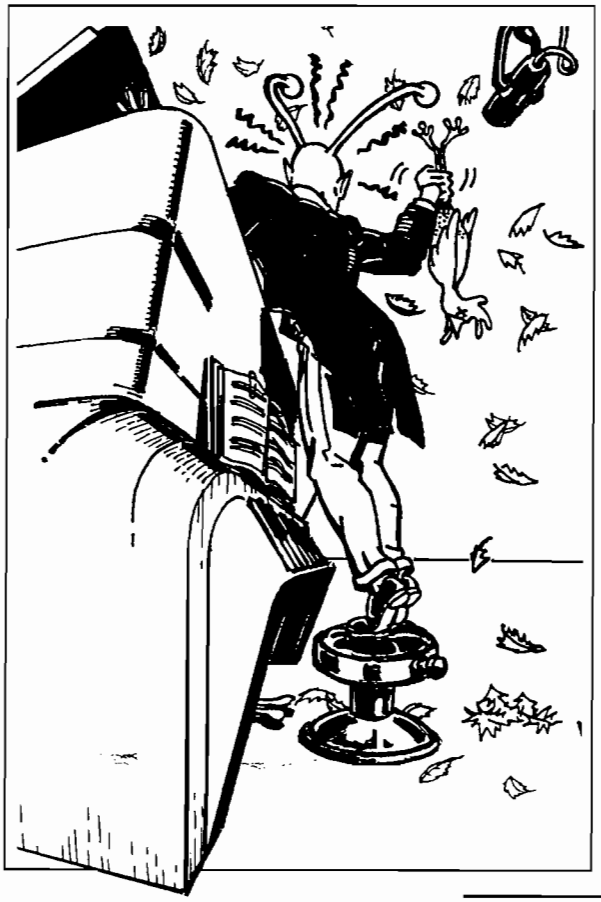
II

Chapter 21
Equipment Damage

Personas aren't the only things that get destroyed in **EXP**. Besides the ceaseless battering of the organic beings, inorganic equipment is also subject to the effects of entropy. The basic premise of equipment damage is that nothing is indestructible, everything wears out, and what can go wrong will. This chapter is not devoted solely to the violent destruction of equipment; over-used equipment will eventually break down also. Equipment maintained by mechanics or maintenance bots will never wear out.

If the referee is an administrative genius, she may keep detailed accounts of all equipment; however, most referees will only record the general status of specific toys. If even the most basic recording of equipment damage is found to be cumbersome, omit it entirely. **EXP** is a role-playing game, and not an accounting practice.

The referee should attempt to maintain equipment damage records for certain expedition equipment, even if the records are only updated occasionally. A toy may play an important role in a campaign, and keeping track of its trials and tribulations can be as important as some of the personas. Also, having toys that wear out ensures the personas respect the artifacts which they own, and may even force them to seek replacements.



How is Equipment Damaged?

Equipment is most easily damaged by area of effect weapons; direct hits; kinetic disorder (crashes and falls); and specific attack types (electricity and magnetics). Anything that damages a persona will damage equipment, yet something that effects equipment may go unnoticed by a persona. Exactly when equipment should face a damage check is up to the referee. The best approach would be, if it won't slow down play, then check for equipment damage.

Determining Equipment HPs

The more EXPs a toy is worth, the tougher it is. Since TL is the most important constituent of EXPs value, it is also an important component of toy HPs. Each toy has an EXPs value. The HPs of the equipment is a given percentage of the EXPs value, depending on the type of toy. Military equipment is sturdier than civilian equipment so it receives a greater percentage of EXPs for HPs. The equipment hit point table gives the percentage of EXPs value for each toy type. The tech level of the device is also added to the HPs score.

For example, a tech level 10 age determiner (Medical Eq., chapter 47) is worth 200 EXPs.

Medical equipment earns 3% of EXPS for HPS. So this device can withstand 16 HPS of damage (3% x 200 + 10) before being damaged. A tech level 20 napalm grenade (Grenades/aerosols, chapter 45) is worth 540 EXPS. Grenades earn 20% of their EXPS value as HPS. So this grenade would have 128 HPS (20% x 540 + 20). The damage is determined by rolling on Table 21.2, *Extent of Damage.*

Some equipment has a very high EXPS value simply because it is complex. Just because an instrument is complex doesn't mean that it is physically tough. What can be done to remedy this situation is to give certain components of larger equipment fractions of the total hit points. If certain components of larger machines fail, then the entire system fails.

How To Damage Equipment

Toys are tougher than they look. Their sleek cases are composed of alloys, and polymers, stronger than skin, and as strong as most bone. Equipment has the universal damage indicator—HPS—like the personas, and takes damage in the same fashion.

Equipment simply takes damage from any of the previously described methods: blasts, shocks, falls, etc. Whatever HPS are taken by the organic targets are subtracted from the equipment's HPS also. Nothing happens to the equipment until it has no HPS left. When this happens the toy is not necessarily dead, or unconscious, but it is damaged in some way.

A roll on the *Extent of Damage* table will determine what shape the toy is in. The extent of damage roll shows what percentage of previous function the toy presently has. This can vary from no damage what-so-ever (trivial), to complete destruction (destroyed) of the artifact. Complete explanations of these effects are detailed under Extent of Damage in this chapter.

Equipment that is used, but un-maintained, will deteriorate at a rate of 1 HPS each month it is used. A month of use is any month in which the device is deployed. These un-maintained toys will lose 1 HPS each month of use until no HPS remain. At that point a roll is made on the *Extent of Damage* table. When the extent of damage roll is made, an important component may malfunction, or some unimportant button may get sticky. Equipment subject to routine maintenance will not be affected by wear and tear.

Extent of Damage

The extent of damage roll can be either non-changing or detrimental to the piece of equipment in question. There are 5 different levels of equipment damage. A roll is made on the Table 21.2 each time the equipment's hit point total reaches zero. Thus if a artifact with 5 hit points takes 15 HPS in damage there would be 3 rolls on the table.

Trivial Damage: The least detrimental is trivial damage. Trivial damage does not affect performance of the device. It results in a mere annoyance, such as a stuck button or a gummy switch.

Destroyed: The worst possible damage that a device can sustain is destroyed. When equipment is destroyed, it will not function at all. Destroyed equipment cannot be repaired, the artifact becomes a dead wate which may only be valuable for a few spare parts. Un-maintained equipment can destroy itself as easily as violently damaged equipment can be destroyed. Things such as battery spills, complete power drains, or internal explosions can destroy unmaintained equipment.

Minor, Major and Critical Damage: The 3 remaining extents of damage indicate percent levels of function. A toy which has sustained minor damage will function at 90% of previous performance, a device sustaining critical damage will function at 30% of regular performance. Successive damaging effects are cumulative, 2 bouts of critical damage, with no interim repairs, would leave an artifact at 9% performance. Cumulative damage rolls can render a toy inoperative without destroying it.

The results of reduced performance affects all aspects of the device's performance. Range, battery duration, duration of effect, area of effect, to hit bonuses, and armour ratings are examples of what is reduced when equipment is damaged. If the age

determiner discussed earlier were critically damaged (30% of previous performance) its new range would be 1 hex, its new battery life 1.5 years, its value reduced to 1500 eps, and possibly its accuracy reduced to 30% (30% chance of success per use).

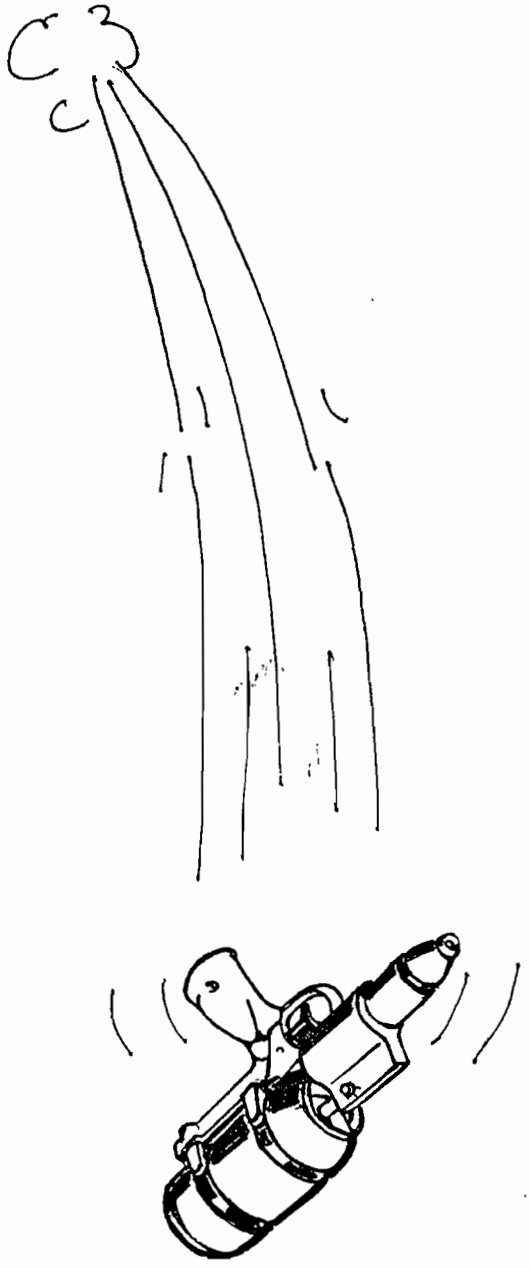
All equipment damaging should be monitored by the referee's common sense. If a situation arises where the tables aren't doing their job, the ref must moderate the system. For example, the equipment damage system should not be used to destroy scenarios that require survival/destruction of certain toys.

Complications: Certain problems arise under extent of damage that the referee should be prepared for. Do destroyed bombs, or grenades, detonate themselves? High tech ones do not, lo tech ones may; this depends mostly on the mood of the ref, but the ref must remember that a precedent is being set when the first bomb explodes. Very fragile pharmaceuticals are completely protected by packs or flaps of clothing. Only when pharmaceuticals are directly exposed to damage are they destroyed. Can a tech level be determined by smashing around equipment? If the ref is treating this manner of tech level identification accordingly, the perpetrators will only be able to find out what tech level the equipment *was*.

Weird Equipment Damage

Personas will often insist on damaging absolutely mundane items that surround them. They may wish to destroy a door, crash through a wall, blow a hole in the road, or destroy a bridge. It is recommended that the referee have the HPs of architectural items such as walls, doors, windows and the like prepared for her particular scenario. However it is not always possible, for the referee to be this well prepared, and the following list will give her a frame work for the HPs of mundane items.

Mundane items are not treated the same as toys from the technology section of this book. Mundane doors and walls are destroyed when they lose all their HPs. This is unlike artifact technology which will only suffer a degree of dysfunction. For instance, a mundane door has 30 HPs. Anything that will damage the door will subtract HPs from the door's total and once it loses all 30 HPs it will cease to be a door.



ARCHITECTURE

Doors	
Normal	20
Armoured	50
Fences, railings	
Chain	15
Chain link	20
Picket	10
Stone	30
Fire hydrant	40
Lamp standard	75
Stairs	25
Telephone pole	100
Pier	
Concrete	2000
Floating	750
Wooden	1500
Bridges	
Steel	1200
Suspension	1000
Wooden	800
Pathways, roads	
Concrete	200
Gravel	100
Tarmac	150
Walls	
Exterior	40
Interior	20
Stone	50
Windows	
Glass	5
Plexiglass	25
Armoured	75
Floors	
Wooden	50
Concrete	220

FURNITURE

Bath tub	20
Bench	25
Chair	15
Couch	15
Mirrors	5
Shelves	10
Sink	18
Table	10
Toilet	20

THINGS

Books	3
Dishes	2
Lights	5
Random junque	100
Rope	25
Stationery	1
Telephones	10

Table 21.1: Toy Hit Points

EQUIPMENT TYPE	HIT POINTS
Aerosols	10 % of EXPS
Armour	1 HPS per pt AR
Artillery	15 % of EXPS
Bombs	25 % of EXPS
Grenades	20 % of EXPS
Guns	10 % of EXPS
Medical Eq.	3 % of EXPS
Misc. weapons	7 % of EXPS
Misc. Eq.	2 % of EXPS
Pharmaceuticals	1 HPS only
Random junke	Indestructible?
Spaceships	—
Treasure	1 HPS only
Vehicles	—
Add tech level to HPS.	

Table 21.2: Extent of Damage

DIE ROLL	EXTENT OF DAMAGE	% OF PREVIOUS PERFORMANCE
01-10	Trivial	100
11-60	Minor	90
61-90	Major	60
91-99	Critical	30
00	Destroyed	0

Chapter 22
Negotiation

Negotiation is the only game system which *appears* to be designed to replace role-playing. Negotiation is not used to replace persona referee conversation. The system should be used by the referee to make a decision for a referee persona where one hasn't already been predetermined.

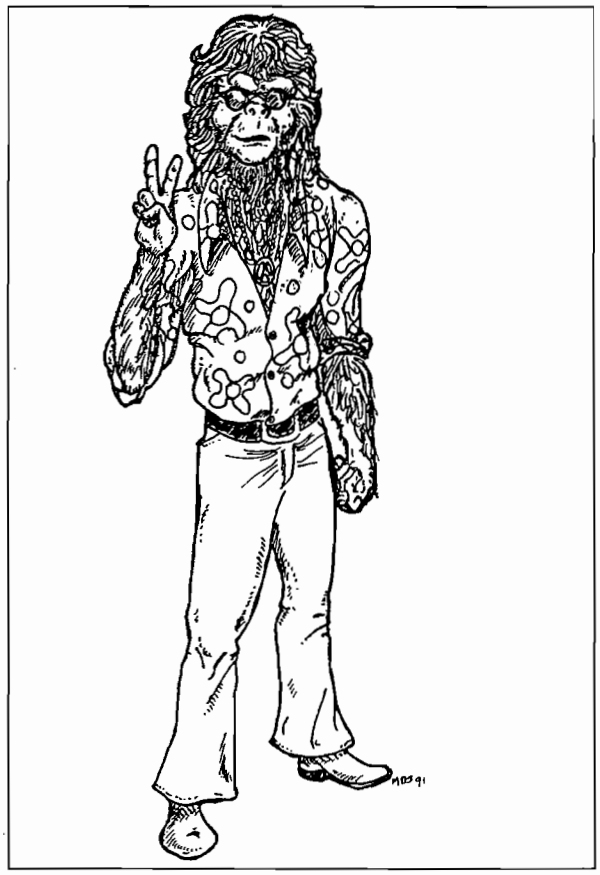
The referee cannot think like all beings at all times, and negotiation rolls replace such thought processes. The negotiation tables give results for conversations between the expedition and intelligent aliens, civilians, or mad robots. Negotiation rolls bring an essential randomness into unprepared scenarios. If refs are forced to continually improvise, their own personality will invade all the personas that they play, and their actions will become predictable. Negotiation does not apply to detailed scenarios where reactions are predetermined like: ambushes, pirate raids, muggings, or starving aliens. The negotiation system can be used only if there is a definite opportunity for parley.

When to Roll

An initial percentile roll (d100) can be made on the negotiation table when the referee personas are sizing up the expedition. This **pre-greeting roll** consists of judging the smell of the expedition, the numbers of the expedition, and the body language of the expedition members. This roll could set up the mood of the greetings, and may affect subsequent negotiation rolls. The pre-greeting decisions are made as the two expeditions approach each other. There may be actual air sniffing and staring going on, but most of the preliminary actions are entirely unconscious. The pre-greeting roll is determined almost entirely on first impression.

Once conversation begins the referee may make another negotiation roll to determine how the RPs will respond or act. The result of the d100 roll may lead to a reaction that varies from openly helpful, to lethally violent. The higher the d100 roll the better the negotiation result is for the expedition. The referee should moderate these reactions with her common sense: no random die roll system can accurately replace role-playing parley, but it can help.

Do not use the negotiation tables too literally. The referee should adjust the reactions with what little common sense she has left.



Administrative Negotiation

Not all failed negotiation results in violence. Obviously a merchant isn't going to attack a persona that walks into her shop. A shopkeeper's tone may vary from openly helpful to belligerent, but combat with a customer would be an impossibility. When combat should not be a possible outcome of negotiation, use Table 22.1, *Administrative Negotiation.*

Typical negotiations requiring an *Administrative Negotiation* table would be: dealing with a receptionist; getting a traffic ticket; or enquiring with a shopping store clerk. The results may have varying degrees of bureaucratic annoyance, but no violence. If the referee is trying to pull a fast one on the expedition, and is attempting to turn a seemingly harmless situation into a violent one, a properly prepared scenario should be used.

Let's consider a persona who goes to buy a loaf of krenoj at the local krenojeri. This is not a potentially lethal encounter, so the *Administrative Negotiation* table is used. The cashier at the krenojeri is a quiet, conservative avarian woman. The persona buying the krenoj is a flamboyant, exotically dressed feline fellow (11 CHA). The unadjusted pre-greeting roll is 42. Looking directly on the table would indicate that the cashier is going to treat the customer in a perfectly functional manner, however there are adjustments.

The feline's CHA is added to the roll, making it 53. This is still functional. The two personas obviously have conflicting personalities, so a penalty of -5 reduces the roll to 48. In the pre-greeting roll the primal instincts of the avarian take over, and the racial penalty (avarians hate felines) of -20 reduces the roll further, to 28. The final result of the pre-greeting roll is 'bad vibes'. The cashier expresses this feeling by serving someone else, out of queue, and ahead of the feline.

When the feline speaks up, expecting to be served, the second negotiation roll, the action roll is made. The ref rolls an 18 (ooh that's bad) for her avarian persona. The total penalty of -14 still applies, but an additional penalty of -15 for 'bad vibes' on last roll increases the penalties to a total of -29. The final adjusted negotiation roll is -11. On the *Administrative Negotiation* table this indicates 'look out'.

The worst possible course of action will usually be taken by the RP at this time. The avarian then plunks a sign under the nose of the feline stating 'gone for lunch', and she strides to the back of the krenojeri. This is infuriating, but not violent, and the same system can apply to traffic cops, holo-movie ushers, pets, sales people, etc., etc.

Combative Negotiation

Apart from **administrative negotiation** is **combative negotiation**. The *Combative Negotiation* table (22.1) is used for situations which realistically could result in combat. Examples would include when the expedition meets a herd of intelligent animals in the wilderness; when the expedition collides with a group of drunken revellers: or when the expedition comes across another foraging expedition. Any of these situations could require the referee to roll a d100 against the *Combative Negotiation* table. If the referee has an encounter properly prepared the negotiation tables should not be used.

Two human expeditions come across each other while looting an ancient ruin for high technology. The persona expedition was trying to open a jammed door, and didn't notice the approaching expedition. The referee expedition didn't try to ambush the personas, so the personas send their eloquent spokeswoman out to meet the group. Her CHA is 16, and she steps towards the apparent leader of the other group. The pre-greeting die roll is adjusted by +10% for a preferred race (human to human), and +32% for CHA (CHA > 14 is added twice). The pre-greeting die roll of 55 is adjusted to 97, which indicates 'give full assistance'.

The expedition spokeswoman is greeted in a very friendly manner, though the referee expedition is politely ready to defend themselves. The spokeswoman greets the other expedition, and simultaneously gives them a sack of electrum

worth about 900 eps. This bribe will increase her bonus by +5%, to +47%. The actual roll is 46, adjusted to 93 (46 + 47) so they 'give full assistance' by helping with the imposing metal door.

Table 22.1: Negotiation Results

ADJUSTED DIE ROLL	ADMINISTRATIVE RESULT	COMBATIVE RESULT
>95	Openly helpful	Give full assistance
80-94	Good vibes	Good intentions
60-79	Above functional	Polite yet cautious
40-59	Functional	Functional
30-39	Below functional; slow to assist	Impolite; openly cautious
10-29	Bad vibes; belligerent	Bad intentions
<9	Look out; cheat, steal	Engage in combat

BONUSES	PENALTIES
+ CHA to die roll	+ CHA twice if CHA < 0
+ CHA to die roll again if CHA > 14	- 5 for conflicting personalities
+ 5 for matching personalities	- 15 if animosity towards race
+ 10 if preferred race.	- 20 if hatred towards race
+ 1 per 100 eps bribe, max is +5	



Chapter 23
Money

The money chapter gives the referee a baseline to work from when she creates a money system for her own milieu. Personas can come across money in two different ways: they start with it; or they find it during play. The money that a persona starts out with is dependant on her persona class. Use the *Player Money* table in chapter 9, Incidentals, to determine how much money the persona has. Money can also be acquired from chapter 53, Treasure, when the player is generating toys for her persona.

Kinds of Currency

The most standard form of money is coins. Currency can actually come in any form: cards, chemicals, credit vouchers, or paper. Currency also has an endless source of common names: bucks, domars, cubits, credits, crillos, bytes, sense, and dol-hairs.

The standard unit of money arbitrarily chosen for **EXP** is the **electrum piece**. The value of equipment is listed in electrum pieces, unless otherwise stated. Other standard coins are coppers, silvers, golds, and platinums. These all are coins composed of, or backed by the metals which describe them. The coins are about the size and wate (25 gms) of a Canadian quarter dollar. So every 42 coins would have a wate of about 1 kilogram. It is recomended that the referee always select her own money format, and make the coin a metric wate. Each coin type has an abbreviation and an individual value (relative to the electrum piece). Consult Table 23.1, *Currency Type* for an explanation.

Barter

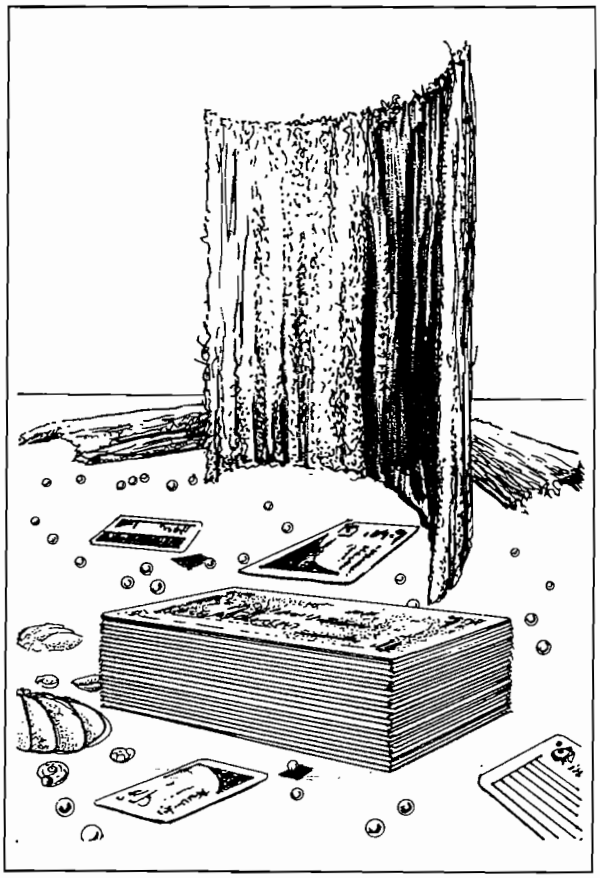
If your milieu has currency you are already implying a certain amount of cohesive society. The most likely form of exchange for a technologically collapsed society would be **barter**. Currency represents a cross society acceptance of a substance which is equivalent in all bartering situations. I will not, and probably could not, offer any suggestions on how to run a bartering system for your campaign. The bartering system does conjure up an infinite supply of role-playing situations. If barter is being used the ref should be happy to know that the values of all equipment are relative, and the values do not represent fluctuations due to supply and demand.

Real Money

Hypothetical gaming money cannot be converted to present day dollars, yen, pounds, or drachma. The world's money market is hairy enough, let alone trying to create a conversion procedure for non-existent equipment. Even if a conversion procedure did exist it would be made obsolete by inflation or deflation. If the procedure included inflation/deflation then supply and demand would upset it. The complexities are endless. Finally, how many tech level 22 fusion pistols do you have around the planet which can be compared for a conversion to a present day dollar value? Not many.

Table 23.1: Currency Type

COIN TYPE	COIN TITLE	EQUIVALENT ELECTRUM (EPS)
Copper	cps	1/100
Silver	sps	1/10
Electrum	eps	1
Gold	gps	10
Platinum	pps	100



Chapter 24
Equipment Costs

The equipment lists allow the players to outfit their personas with survival equipment, armour and weapons. The equipment lists are copmpilations of low tech artifacts which personas can easily obtain in even the least organized of societies.

The equipment lists are made as generic as possible. If any equipment appears which the ref's milieu does not support, then it cannot be purchased. The referee reserves the right to change wates and costs without notice. Campaign forces unknown to the players may force costs to change, and new previously undiscovered alloys may drastically alter wates.

The lists are divided into distinct groups, and each group contains the type of equipment, wate, cost and sometimes alternates for each equipment type. The equipment titles should be self explanatory. Almost all the equipment in this chapter can be found in any respectable English dictionary. Equipment wate is always listed in kilograms (kg). Some of the very light items have their wates listed in grams (gm). The more wate a persona carries the less efficent she becomes. The effects of wate bearing are detailed in chapter 18, Encumbrance. The costs of equipment are listed in electrum pieces (eps).

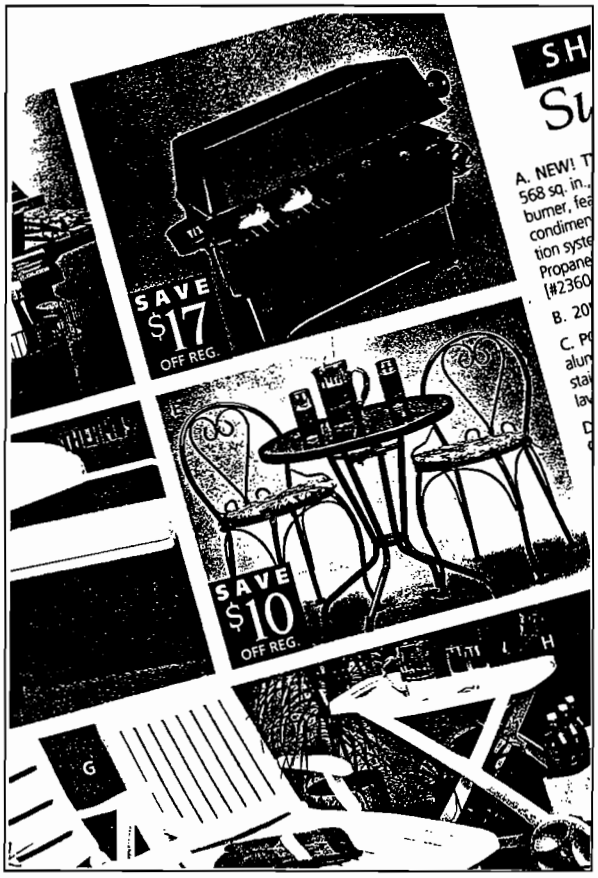
The mundane equipment in this chapter has its prices listed as costs and not as value. In terms relative to toys, the low tech equipment in this chapter is valueless. The starting equipment can be given to the personas, or they can buy it with the money that they start the campiagn with.

The allotment of start money is determined in chapter 10, Incidentals, during persona generation, and the value of the currency is detailed in chapter 23, Money. Alternate equipment indicates everyday items that can be used to replace more specialized equipment. Not all equipment can be replaced with an alternate item.

High Tech Equipment

The articles on the equipment lists are of a low tech nature, with a underdeveloped, medieval nature to their construction. Anything bought directly from the equipment lists is low tech. Low tech equipment is constructed from animal parts, poorly smelted metals, shoddy plastics and untreated woods.

High tech equipment is composed of alloys, polymers, and other synthetics. High tech equivalents are no more efficient than their low tech counterparts, but they are lighter (1/2 the wate), and more expensive (3 times the cost). High tech items are just synthetic age versions of items



II

on the equipment lists and in no way should be confused with toys. For example a suit of chain mail has a wate of 5.9 kgs, and a cost of 80 eps. The high tech version of this chain mail would cost 240 eps and have a wate of 3.0 kgs. The higher tech armour would have the same restrictiveness, and the same armour rating as its low tech counterpart. It is not to be confused with artifacts generated in the toy system.

Armour

The parameters of armour are detailed in chapter 29. Armour and shields also have high tech versions. There are two armour lists, general and designer. General armour has a flat rate and cost. The wate is directly added to the persona's WA (unless it is worn), and the cost is directly subtracted from the persona's savings.

Designer armour depends on the body wate of the persona wearing it. If a persona with a wate of 50 kg were to purchase a suit of tailor made scale mail, the mail would have a wate of 5.7 kg. The cost of the designer armour is 39 eps. Designer armour is usually less expensive, but it takes longer to purchase. Designer armour should be used for personas that have unique body structures, but still want to be armoured. Personas such as these are aliens, and anthropomorphs with strange body parts such as wings or multiple arms.

Type A, B and C Weapons

Type A weapons are thrusting and striking weapons. These weapons do not have lighter high tech versions because they depend on inertia to inflict damage. The wate of these weapons is listed in kg, and the cost in eps. A persona may use one of the alternate weapons; however, she cannot use her BP on her her to hit roll. Only the BNP can be added to to hit rolls for alternate weapons.

Type B weapons are non-powered missile weapons. There are high tech versions of type B weapons. Such weapons do no extra damage, and can only beneift the persona by having a decreased wate. A persona may use one of the alternate weapons; however she cannot use her BP on her to hit roll. Only the BNP can be added to hit rolls for alternate weapons.

Type C weapons include guns and other powered weapon attacks that are usually only found in the tech book. Crossbows are the only type C weapon that can be purchased in this chapter.

Class Equipment

Class equipment aids the personas in performing their class skills. The simple collection of devices results in a bonus added to the player's PT roll. The equipment can only be used by the persona in the pursuit of class skills. Using class equipment for anything other than class skills will usually damage the items beyond usefulness. Chapter 14, Performance Tables, has all the details necessary for successfully completing class skills.

The class equipment for one persona will appear as useless junk to another persona. Each kit of class equipment essentially acts as a black box that allows the persona to operate smoothly in her class skills. It is not required that the persona or the referee describe exactly how the equipment is being used.

Survival Equipment

Survival equipment is divided into two lists, Essential survival equipment, and Non-essential survival equipment. The essential equipment consists of useful pieces of survival equipment: backpacks, tents, food, water, rope, etc. The non-essential equipment is devoted to items which are not essential, but are nice to have: sleeping bags, tents, rainsuits, etc.

All of the wates are listed in kilograms (kg), and the costs are listed in electrum pieces (eps). High tech versions of miscellaneous equipment are 1/2 the wate, and 3 times the cost.

The Survival Pack: The survival pack costs 70 eps, and has a wate of 13.5 kg. The survial pack is designed to speed up the equipment buying procedure. A ref may not allow the survival pack to be purchased as one lump, but the list of equipment can be used to ensure that each expedition member is properly equipped.

Basic Survival Pack

Backpack Bed roll
Food, 1 week's Knife
Oil, 5 flasks Rope, 8 hexes
Skin, 2 litres Tinder box
Torches, 5

Table 24.1: Body Armour Cost

ARMOUR TYPE	ARMOUR RATING	DESIGNER ARMOUR: WATE(%)	COST	GENERAL ARMOUR: WATE (kg)	COST
None	500	0.0	0	0	0
Furs, skins	550	3.2	1.2	2.7	3
Leather	550	4.3	1.5	3.0	5
Padded	550	2.9	1.8	2.0	4
Studded	575	5.4	3.3	3.8	15
Ring	575	7.1	5.3	5.0	30
Scale	600	11.4	6.9	8.0	60
Cured hide	600	3.5	34.5	2.5	90
Plant fibre	600	2.4	100.0	2.2	170
Chain	625	8.3	12.9	5.9	80
Splint	650	11.3	8.9	8.0	75
Banded	650	10.0	21.3	7.0	160
Plastix	675	1.6	500.0	1.1	600
Plate	675	12.6	40.0	9.0	375
Plate armour	700	14.2	44.0	10.0	450

Table 24.2: Shielding Cost

SHIELDING TYPE	ARMOUR RATING	WATE (kg)	COST	ALTERNATE
Chain	25	2.0	5	Rope
Net, cloak	25	2.0	7	Curtain
Shield				
large	50	4.0	30	Chair
medium	45	3.0	24	Street sign
small	35	2.0	20	Garbage can lid

Table 24.3: Type A Weapon Cost

WEAPON TYPE	WATE (kg)	HPS DAMAGE	COST	ALTERNATE
Axe	1.8	d10+2	10	Throwing axe
Brass knuckles	0.3	d3	15	Hand wate, guantlet
Chain	2.0	d6+1	2	Rope, hose, golf club
Fist, paw (punch)	—	d4-3	0	Glove
Flail, small	0.5	d4	6	Nunchakas, arm
Flail, large	1.5	d8	15	None
Foot, hoof (kick)	—	d4-1	0	Boot
Fork	1.6	d4+d4	8	Pitchfork, rake
Hammer	3.0	d6+d6+2	14	Warhammer
Lance, small	10.0	4 by d4	18	Horse, cycle mounted
Lance, large	11.0	4 by d6	24	Vehicle mounted
Mace, small	1.0	d3	8	Wrench, pipe, hammer
Mace, large	2.5	d6	16	Crowbar, shovel
Morning star	1.75	d6+d4	10	Ball and chain
Orchid (razor glove)	0.9	d4+1	25	Broken bottle
Pick, small	1.0	d4	10	Nail in board, t-square
Pick, large	2.2	d10+2	16	Hoe, shovel
Pike	8.0	d6+d6	5	Pole
Point (dagger)	0.3	d3	3	Dagger, ice pick, scissor
Scimitar	1.2	d8	30	Saw
Spear	2.5	d12+1	2	Pole, pointed staff
Staff, small	1.5	d4+1	5 sps	Club, cane, bone, 2x4
Staff, large	2.3	d6	1	Pole, coat rack
Sword, short	0.4	d4	16	None
Sword, medium	0.6	d10	20	None
Sword, long	1.2	d12	30	None
Sword, combo	1.8	d8+d8	50	None
Sword, double	2.4	3 by d6	60	None

Table 24.5: Ammunition Subtable

WEAPON TYPE	WATE (gm)	HPS DAMAGE	COST	ALTERNATE
Arrow[a], small	30	d6	2 sps	Large arrows, pencils
Arrow[a], large	50	d6	4 sps	None
Bolt[b], small	40	d10	3 sps	Small arrows, pencils
Bolt[b], large	60	d12	5 sps	Large arrows
Bullet[c]	10	d4	2 cps	Rock, ball bearing

a Arrows are the ammunition for bows.
b Bolts are the ammunition for crossbows and are type C weapons.
c Bullets are the ammunition for slings.

Table 24.4: Type B & C Weapon Cost

WEAPON TYPE	WATE (kg)	HPS DAMAGE	COST	ALTERNATE
Axe	1.75	d8	10	Throwing axe
Bolo	1.25	d3+d3	15	None
Boomerang	0.45	d6+1	10	Right angle
Bow, small	0.95	d6	30	None
Bow, large	0.1	d6	120	None
Bullwhip	0.8	d3+1	25	Chain, rope, towel
Crossbow, small	1.35	d10	120	None
Crossbow, large	2.85	d12	250	None
Grenades (tech)	Varies	Special	—	Not for sale
Mace, small	1.0	d3	8	Wrench, bat, hammer, pan
Object (rock)	0.75	d3	1 sps	Rock, bottle, lunchbox
Point (dagger)	0.25	d3	3	Knife, scissors, pen, dart
Shuriken	0.4	d4+1	6	Glass, tin can lid
Sling	0.15	d4	10 sps	None
Spear	2.0	d8	2	Fork, staff javelin
Staff, small	1.5	d4	5 sps	Club, board, cane, bone
Staff, large	2.0	d6	1	Pole, coat rack
Sword (all kinds)	2.0	d4	—	Any thrown sword
Wham (discus)	1.75	d6	20	Dish

Table 24.6: Minimum Equipment

PERSONA CLASS	MINIMAL EQUIPMENT
Biologist	Note books
Knite	MSTR at least 18
Mechanic	Screwdriver, glue
Mercenary	Weapons
Nomad	Nothing
Spie	Dark sunglasses, trench-coat
Vet	Needle, thread, knife and a smile

Table 24.7: Class Equipment Cost

PERSONA CLASS	MINIMAL EQUIPMENT	PT AWARD	WATE (kg)	COST (eps)
Biologist	Research library	+AWE	1 per level	500 per level
Knite	Concentration symbol	+MSTR	Neglible	Must be given
Mechanic	Tool kit	+INT	5	250
Mercenary	Any weapon	None	—	—
Nomad	Nothing	None	—	—
Nothing	Degrees, lineage	+CHA to SS	Neg.	100000 per
Spie	Lock picks	+DEX	0.2	200
Veterinarian	Medical bag	+INT	2	1000

Table 24.8: Essential Survival Equipment

SURVIVAL ITEM	WATE (kg)	COST (eps)
Backpack	1.0	25
Bed roll	1.0	1
Box, small	1.5	15
Box, large	2.5	40
Candle	75gms	1 sps
Felt pen	50gms	2
Food, meal	0.2	1 sps
Food, days	0.6	5 sps
Food, week	4.2	3
Knife	0.3	3
Medikit	See tech book	
Oil, flask	0.5	5
Pole, 1 hex	2.0	3 cps
Pot	0.5	3
Pouch	0.7	3
Rope, 8 hexes	1.7	3
Sack, large	1.8	16 cps (18 kgs)
Shovel	1.0	10
Skin, 1 litre	0.1	15 sps (1kgs full)
Soap	10gms	75
Spike	5.0	10
Tinder box	30gms	5
Torch	0.5	1 cps
Towel	0.4	8 sps

Table 24.9: Non-Essential Survival Equipment

SURVIVAL ITEM	WATE (kg)	COST (eps)	SURVIVAL ITEM	WATE (kg)	COST (eps)
Abacus	0.1	50	Ladle	0.3	2
Air matress	3.0	93	Lantern	1.0	18
Air pump	1.0	75	Lighter fluid	0.8	35
Alarm clock	0.7	25 gps	Magnif. glass	0.2	2 gps
Axe	1.75	10	Medikit	See Technology	
Backpack	1.0	25	Mirror	0.1	20
Bed roll	1.0	1	Oil, flask	0.5	5
Binoculars	0.8	3 pps	Pan	2.3	11
Blanket	1.5	2	Plate	0.3	4
Bottle, and lid	0.3	3 gps	Pliers	0.3	5
Bottle opener	0.1	1	Pole, 1 hex	2.0	3 cps
Bowl	0.7	1	Pot	0.5	3
Box, small	1.5	15	Pouch	0.7	3
Box, large	2.5	40	Purse	0.8	6
Broom	0.9	6	Quiver, dozen	0.7	20
Bucket (5L)	1.6	55 sps	Rope, 8 hexes	1.7	3
Bug repellant	35gms	20	Sack, sml (6kgs)	0.6	4 cps
Can opener	0.3	2	Sack, lrg (18kgs)	1.8	16 cps
Candle	75gms	1 sps	Saw	0.5	8
Carton, 20kgs	0.2	3 cps	Scissors	0.1	5
Charcoal	5.0	5 sps	Screwdriver	0.1	5
Clothing vs wet	2.0	25	Sewing kit	75 gm	15 eps
cold	3.5	30	Shovel	1.0	10
hot	0.7	10	Skin, 1L	0.1	15 sps
Comb	10 gm	2	Sleeping bag	3.0	30
Compass	1.0	4 pps	Soap	10 gm	75
Cork screw	0.4	25 sps	Spike	5.0	10
Corn popper	2.0	4	Sponge	0.2	8
Cup	0.1	1	Spoon	150 gm	1
Felt pen	50 gm	2	Sun screen	10 gm	25
Fire starter	10 gm	2	Telescope	2.1	4 pps
Food, meal	0.2	1 sps	Tent, 2 person	10.0	30
Food, days	0.6	5 sps	Tent, 4 person	25.0	75
Food, week	4.2	3	Tent, 8 person	62.0	175
Fork	90 gm	1	Tinder box	30 gm	5
Griddle	2.3	11	Toilet paper	20 gm	20
Hammer	3.0	14	Toothbrush	45 gm	1
Hammock	1.0	10	Toothsoap	96 gm	4
Jerry can, 8L	2.7	5	Torch	0.5	1 cps
Knife	0.3	3	Towel	0.4	8 sps

II

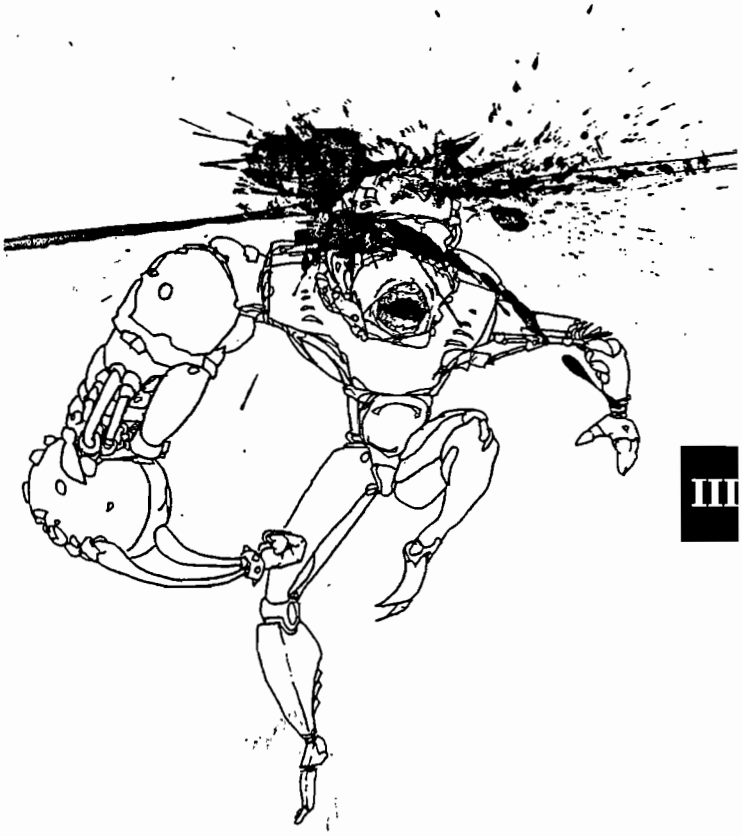
Chapter 25
Introduction to Combat

Many players (referees included) often find that violence is the simplest solution to a problem. Regardless of the moral issues of using physical force, a role-playing game must have a system for deciding combat. There are many different types of combat: **psionic, space, robotic,** and **vehicular.** The type of combat covered in this and the following two chapters is **lethal personal combat.** Lethal personal combat for **EXP** must be able to simulate physical violence between diversely equipped personas, and their opponents.

No combat system can account for all the detailed trajectories, deflections, material strengths, or other such physical peculiarities of real life combat. All any combat system can do is have arbitrary rules and regulations that are consistently applied to varying situations. A combat system must treat all members of combat equally. Referees, and players, should note that 'equally', does not mean 'fairly'. Equally only means that the same rules must apply to all sides of combat, regardless of an apparent mismatch.

Combat situations are different from all other situations in that time and movement are critical. Everyone must know their location during combat at all times. It could be important for area of effect weapons, ranged attacks, or line of sight. How players resolve the bookkeeping of persona location is up to them. Drawings on paper are often sufficient, but other more elaborate ways also exist, such as lead figures and sheets of plasticized paper. Gamers that do not use tokens, or figures, may opt to eliminate movement rules, but time will always remain a critical component.

When regular play becomes combat is the referee's decision. Regular play involves bantering with referee personas, trying to figure out strange new artifacts, or arguing over how an alien culture would respond to a new idea. Situations where combat rules would begin to apply would be in any one where the course of a campaign could be changed, or the existence of a persona is at risk.



Combat time and combat movement need not be employed for the sake of an angry blow from a club, or the striking out of a paw.

It is recommended that the referee proclaim a combat situation whenever a projectile weapon, or an area of effect weapon is about to be deployed. When to declare 'combat time' (the use of combat movement and timing) is not the sole prerogative of the referee. If the players want to start using combat time then they can ask for 'combat time' from the referee.

Lethal personal combat has the potential for staggering complexity. Imagine trying to integrate

hand held fusion weapons with medieval pole arms in the same room. Luckily enough, all attack weapons are designed with one goal in mind, to kill the opponent. This goal is carried out by shattering bones, puncturing internal organs, tearing muscle tissue, and severing nerves.

These little factors are too gruesome, and too complex, to include in a combat system. **EXP** has a figurative way to judge the destruction of the physiological life support system. This process is euphemistically called the removal of **Hit Points**. Removing hit points from a creature is the same as damaging a creature, and the number of hit points removed is called the **Damage**. All weapons are capable of doing damage, and the severity of accidents are measured by the amount of damage they inflict (falls, car accidents, etc.). Hit points are also used to measure the strength of inorganic objects too: doors, walls and robots also take damage.

Before a weapon can inflict damage, it must **hit** the target. Furthermore, the weapon must hit the target in a particular way. It is possible to hit a target without doing damage, and these sorts of hits are of no interest in lethal personal combat. Those weapons that have scored a proper hit will do damage.

Different weapons do different amounts of damage. E.g., a large mace that hits a target would subtract 1 to 6 hit points; a blast from a lazer pistol would do 2 to 20 points of damage (subtract 2 to 20 from the target's hit points).

Weapons inflict variable amounts of damage because it cannot be predicted how a blow will land, or how a projectile will ricochet. The more damage inflicted, the more critical the hit. Another general rule is the more deadly the weapon, the greater the potential damage.

When a weapon makes contact with a target in a particular way, it can inflict damage. A weapon that can inflict damage has **Hit** the target. An attack that makes contact with a target, like a glancing sword blow, or a hair singe from a lazer pistol, but causes no damage, is called a **Miss**. Any attack that does not inflict damage is called a miss. All attackers (those attempting to inflict damage) must make a **Roll To Hit**. A roll to hit determines if the attacker's weapon has made contact, and penetrated the armour of the target thus inflicting damage.

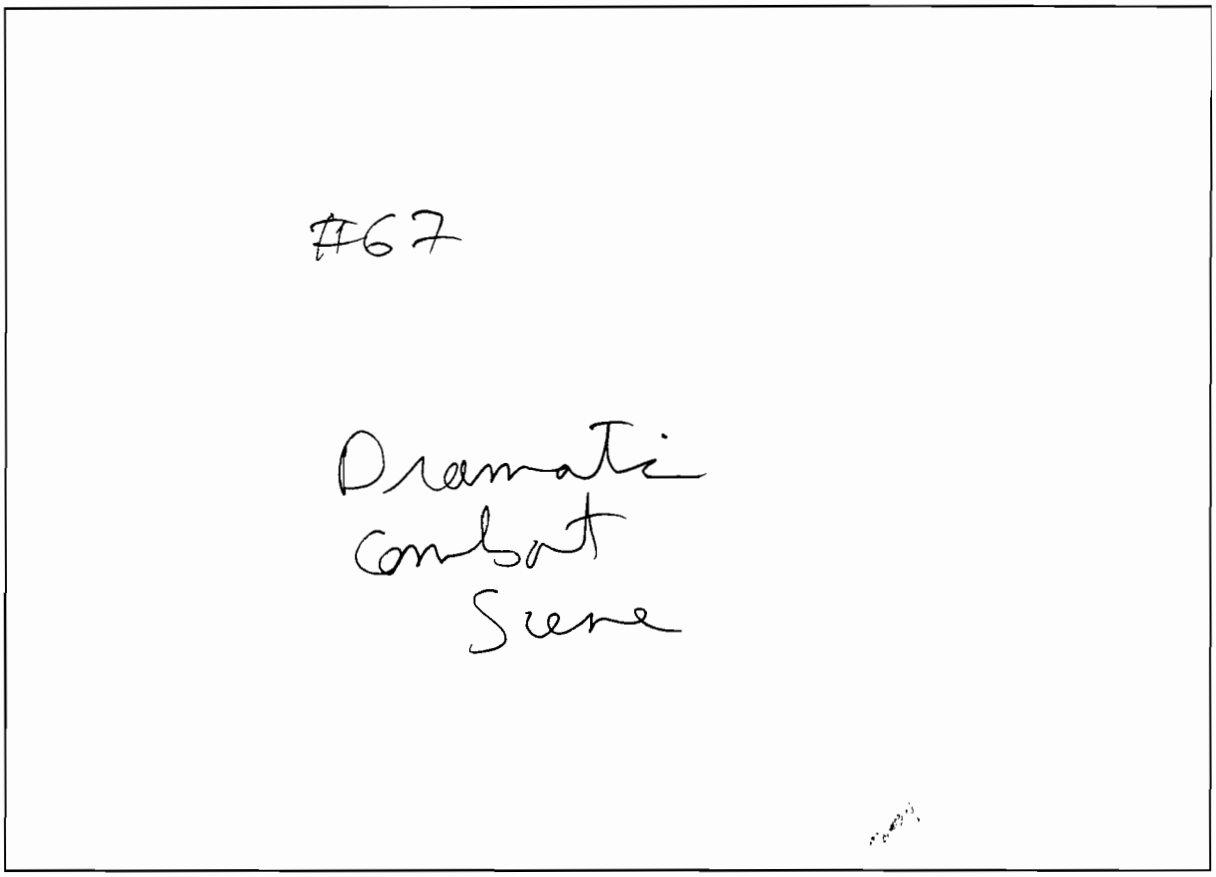
Tale of Two Combat Systems

To try to simulate all of the potential occurrences in modern combat is virtually impossible. Some gamers like to account for every possible physiological, geographic, and technical aspect humanly possible. Others want nothing more than an arbitrary, but fair die rolling system. **EXP** has two distinct combat systems that cater to both types of players. Both combat systems are integrated into the technology of the game, and both are fun to play. They are fun to play for different reasons, and these reasons are detailed in the following paragraphs.

EXP offers both **theatrical**, and **tactical combat systems**. The theatrical system is presented first, because it is easier to learn. Both formats explain in detail all the elements of their combat system. This way neophytes can start out with either system. It is recommended that new referees start out with the theatrical system. It prompts fewer (i.e. leaves more time for) potentially argumentative situations. Eventually you'll find that one system will best suit your group. It is expected that most groups of gamers will find that the inadequacies of the theatrical combat system will force them to look to the tactical one for increased realism. Be forewarned that the technology section is better suited to the tactical combat system.

Theatrical Combat System

This combat system does not require figures or detailed maps. The process is very fast, compared to the tactical combat system, and leaves more time for vivid descriptions from the referee, and the players. More importantly it leaves more time for the campaign to focus on things other than combat. This is definitely the easier of the two combat systems to learn, but it not necessarily



designed just for beginners. Experienced players that don't like combat, and don't feel it is worth the time spent meticulously resolving it may prefer the theatrical combat system. The theatrical combat system is explained in chapter 26.

Tactical Combat System

This game system for resolving lethal personal combat is much more detailed than the theatrical one, but it would be false to say that it is realistic. The tactical combat system is delicate balance between playability and realism. It considers factors like movement terrain, attributes, and weapon types for each to hit roll. It is best played with tokens, or figures, placed on a grid (hex or graph paper). This way terrain, and ranges can be carefully monitored for as much detail as humanly possible. The tactical combat system is found in chapter 27.

Essay: Kilodie (Kill-o-dice, kilodice, d1000)

The word **kilo** means **one thousand**, and the word kilodie means a dice with a thousand sides. There are not very many dice that have one thousand sides, unless there is either a very large one, or a very rounded one that is manufactured somewhere. The solution for this is to roll several dice that in collaboration are capable of generating the numbers 1 through 1000. When you feel the urge to roll a kilodie, like maybe when a referee persona is trying to kill your persona, take 3 ten sided dice, and roll them all at once. This action in itself won't protect your persona, but what you attach to it might. One of the ten sided dice (which usually have twenty sides, but only the numbers 0 to 9 emblazoned on them) will indicate the hundreds place, another ten sider will indicate the tens place, and another ten sider will indicate units place (ones). The player must choose the order of her kilodie, before she rolls. This means that one of the dice is pre-determined as the 100's place another as the 10's place, and another as the 1's place. Obviously this could be replaced with 3 rolls of one dice where the 1st, 2nd, and 3rd rolls are the 100's, 10s' and 1's. It is more fun to roll 3 dice all at once. If a player chooses her red die to indicate 100s, her green die to indicate 10s and her black die to indicate 1s the following to hit rolls would be made

green 100's	**red 10's**	**black 1's**	**final to hit roll**
4	3	8	438
5	0	0	500
9	9	2	992
0	0	4	4
0	1	3	13
2	2	5	225
0	0	0	1000
6	0	9	609

Kilodie rolls are made when the player is trying to defend her persona by trying to hit another persona in combat. **To hit rolls** are made on kilo dice each time the persona swings her sword, fires her lazer, throws a grenade, or tries to punch her opponent. The larger the number that the player rolls the more likely her persona is to score a hit, and the more often she rolls high (a large number) the more likely her persona is to survive combat.

Chapter 26
Theatrical Combat

The whens, whys and ethics of lethal personal combat are discussed in chapter 25, Combat Introduction. Please take the time to read that chapter if you haven't already.

There are often alternatives to combat, and the more mature players will avoid combat at most costs, in part due to risk to their personas and in part due to the nature of advanced role-playing. However, combat is fun, and there are classes that are devoted to training in it and engaging in it. The combat systems are presented here to resolve such violent encounters.

Attacks and Defenses

The theatrical combat system is very simplistic. Although if one is unfamiliar with the idea of role-playing games, then even the theatrical system will appear completely alien. The to hit roll is one of those concepts completely unique to role-playing games. The to hit roll is made on kilodice (kilodice are explained in chapter 25, Combat Introduction), and the higher the dice roll the better the attack.

In terms of the game the persona is trying to damage her target. Let us consider a persona that is trying to crunch an attacker with her sword. The persona will swing the weapon at high speed, hoping to deceive the defender and hit her in some place that will do damage.

Attacking: The player doesn't choose the attack that her persona makes, but rolls dice to see if the attack was successful. The player doesn't say, "My persona hits her in the head", she would say "I'm going to try and hit her with my sword", and then would make a to hit roll. If the to hit roll was very high, it is more likely that she will hit the target, but not necessarily in the head.

The most important goal of combat is to score a HIT. Attempting to score a hit depends on many factors: the attacker's combat skills, and the defender's defences. A combat system balances these elements to determine an attacker's chance to hit.

The player rolls to hit for her persona. The to hit roll indicates the accuracy of the particular attack chosen by her persona. It is expected that the persona will make every effort to hit, choosing what she expects is the best hit location, speed and combination. The random die roll determines how good a choice this was. A high roll, anything above 600, indicates that the persona made good combat decisions and is more likely to hit. A low roll, anything below 500, indicates that the persona made a bad combat choice. One that was either parried, deflected or dodged by the target.

The player makes a to hit roll for any type of weapon that she is using. If the weapon is a club, gun, rock, punch or tackle the player must always roll kilodice to determine the effectiveness of her persona's attack. The results of the attack depend on the armour rating of the target and the damage inflicted by the weapon.

Defending: Dexterity, armour type, hide structure, body structure, and many other factors are combined into one factor called the **Armour Rating**. The armour rating is a quantitative value that represents the quality of the defender's protection. The higher the armour rating value the better the protection it offers.

The attacker has an armour rating too, and when the defender attacks her the armour rating functions the same. The armour rating of aliens is determined by their hide, speed of movement and structure. Robotic armour rating depends on their case construction. All humanoid personas have a standard armour rating, which is based mostly on their ability to avoid being hit. A more detailed explanation of how armour rating works is given in chapter 29, Armour Rating.

Generating A To Hit Roll

An attacker generates a roll to hit by rolling a kilo-die (hence to hit 'roll'). The random integer that is generated accounts for the enormous number of

possibilities that cannot be accounted for on a normal gaming scale. Armour deflection, air currents, velocities, tensile strengths, concentration levels etc., are just some examples. These factors are so complex, and therefore unpredictable, that they might as well be considered random. The random roll to hit simulates this fact, and it must be re-rolled for every attack.

Rolling the Dice: In general, the higher the roll the better. The player must roll a number higher than the target's armour rating. Eg: If some creature were to have an armour rating of 580, an attacker would have to roll equal to or higher than 580 before a hit could be scored. Thus, any roll between 580 and 1000 would indicate a hit. Any to hit roll less than 580 (001 to 579) would not count as a hit. This is called a **Miss**. A miss indicates nothing more than the loss of ammunition, or a battery drain.

Frequency of Attacks: A to hit roll can be made, depending on the weapon, every 2 seconds. This amount of time is called a **Unit**. The unit is the basic value of combat time. Combat time is imaginary time, or scaled time. Two seconds of game time could actually take several minutes of real time discussing rules, referring to books, or describing surroundings. Each player should get to have her persona act during each unit. The unit ends once everyone has had a turn to act. The unit is the equivalent of a game turn that one would expect in any game with multiple players. Turn taking and keeping track of time is discussed in detail in chapter 12, Movement and chapter 33, Initiative.

Successful To Hit Rolls

At first a successful to hit roll will be one where the player remembers how to work kilodice. In terms of the persona a successful to hit roll will mean that she has connected with her sword and seriously hurt her target. Remember that this is lethal personal combat, and it is a system for resolving fights to the death between anthropomorphs, machines and aliens.

The higher the to hit roll made by the player, the more likely her persona has hit her target. A high to hit roll doesn't always guarantee that the persona has hit her target. The to hit roll must not only be high, but it must be higher, or equal to, the target's armour rating. The target's armour rating is a fixed value that represents how hard she is too hit. A to hit roll that might hit one target may not be good enough to hit another target.

If a player were to roll 657 for her persona trying to damage a small alien with an armour rating of 650 she would hit. If the player were to roll 657 against another alien that has an armour rating of 660, the roll would be a miss. The second alien (AR 660) is considered better at defending itself in combat that the first alien (AR 650). When the enraged alien attacks the persona the referee will make a to hit roll against the persona's armour rating. Combat continues in this fashion, a series of to hit rolls, until someone is smart enough to run away, or unlucky enough to get killed.

Inflicting Damage

When a player makes a roll higher than the target's armour rating it is called a **Hit**. A hit means that the persona has succeeded in doing whatever is needed by her weapon to be able to inflict damage. For instance a sword needs a solid hit, and a bullet must hit a none-deflecting surface. Damage is explained later in this chapter. Whenever the player rolls less than her target's armour rating that is a **Miss**. A miss is any attack that does not inflict damage. It does not mean that the persona completely fanned on the attack; she may have even contacted the target, but she didn't do it well enough to inflict damage.

Hit Points: Hit points reflect the target's ability to withstand physical damage. The important components of HPs are based on body construction: how well is the brain protected; the amount of protective tissue around vital organs; and the connective tissue's ability to resist tearing and shattering. There are other less gruesome components of hit points. These include the innate skill of the target's body, as a whole, to react to threat, and just plain old luck. These components

are combined as a single number which is reduced each time the target is hit. Targets that lose too many hit points will die.

The hit point doesn't convert to some unit of energy—like an erg. However, the hit point is a constant value. Any humanoid, alien, or robot at 10 HPs can only withstand 10 HPs of damage. What varies is how each race type is affected upon reaching 0 HPs. How aliens and robots respond to very low hit point totals (less than 1) is covered in their respective chapters. How humanoids respond to particular HPs totals is detailed in chapter 3, Attributes.

All in all hit points are a general indicator of a being's overall hardiness. The more HPs the creature has the better condition she is in, but the more often she is hit the more HPs she loses and the worse her condition becomes. When a target is hit, it is damaged by removing hit points, the more deadly the weapon the more hit points it can remove.

Weapon Damage: When a hit has been scored the player gets to roll damage on the target. The amount of damage inflicted is dependant on the weapon used by the attacking persona. The more deadly the weapon the more damage it can inflict.

The amount of damage inflicted is rolled randomly by the player. **EXP** is not a game that is devoted to the gruesome destruction of body tissue, and the amount of damage a target can withstand is represented by its hits points (HPs).

The amount of hit points that a weapon can remove from a target when it hits is called its **Damage**. The damage inflicted by weapons such as swords, clubs and bows is discussed in chapter 28, Weapon. Rifles, pistols, grenades, lazers and other weird technological weapons have their damages listed in the technology section. A sword can inflict 1-8 hit points of damage, but an extra high powered lazer rifle could inflict 5-50 hit points in damage. The lazer is much more deadly than the sword.

If a 4th level mercenary, wielding a sword, and a 5th level biologist, wielding an extra high powered lazer rifle, were to both hit the same target (one that has 43 HPs) their players would then roll damage. The player running the mercenary rolls a 4 on a d8 (a sword does 1-8 HPs damage), and the referee would subtract 4 hit points from the target's total. The target now has only 39 HPs. The biologist also hit so her player rolls 5d10 (her persona's lazer rifle does 5-50) getting 8, 5, 9, 10, and 4 for a total of 36 hit points damage. The referee would subtract 36 hit points from the target's remaining 39 HPs. After the attacks by the mercenary and the biologist the target has only 3 HPs left. Success in lethal personal combat is achieved by removing the HPs of the targets and leaving them unconscious or dead.

Combat Movement

Combat is supposed to be dynamic, and neither the target nor the attacker remain motionless at any time during combat. It is expected that a target will do everything in its power to avoid being hit by the attacker's weapon. It is also expected that target will attack the attacker at the first opportunity. So when a persona tries to hit a target in lethal personal combat she can expect to become a target herself.

Combat Success

Success in lethal personal combat is to stay alive. The persona must disable her opponent in order to do this though. Once a target has had enough hit points removed it will fall unconscious, and no longer pose a threat to the persona. Often there will be several opponents and the process of killing all of them may be quite time consuming.

To Hit Roll Bonuses

To hit roll bonuses include skills and experience that make a persona more likely to hit her target. This is done by adding numbers to the player's to hit roll.

The theatrical combat system does have some to hit roll bonuses that are easily included in combat. These are experience level bonuses. When

a persona becomes more and more experienced she is expected to get better at combat.

This improvement in the persona is represented by a bonus that is added to the player's to hit roll. This bonus is added to every to hit roll, whether it be a punch, shot gun blast, lazer attack, or spit. The bonus is dependant on the persona's class and experience level. To determine a persona's to hit bonus consult Table 26.1, *Theatrical Level To Hit Bonus*.

If a persona were a 4th level mercenary the player would add 200 to every kilodie roll that she made. A kilodice roll of 533 would be increased to 733, and a kilodice roll of 856 would be increased to 1056. This makes it more likely that the player will roll higher than the target's armour rating, and therefore it will be more likely that the persona will hit her target. A 5th level biologist would have a to hit bonus of 75.

If the 5th level biologist and the 4th level mercenary were in the same expedition, and were fighting a target with an armour rating of 880 (quite high) the player running the biologist would have to roll 805 or more to score a hit, but the mercenary would only have to roll 680 or more to hit.

The difference in the bonuses per level depends on the class of the persona. Players running personas with combat classes, like mercs and spies, add more to their to hit roll because their personas are better trained and skilled in combat than the non-combat persona classes.

This is the greatest difference between the tactical combat system and the theatrical combat system. The tactical combat system has a series of detailed bonuses that are added to every to hit roll that a player makes. The bonuses represent attribute skills, class skills, and experience level. There are other bonuses that can consider terrain, cover, and flanking attacks. These are detailed in chapter 35, Combat Adjustments, and they work equally well for both the theatrical, and tactical combat systems. It is not recommended that these adjustments be included when you are first learning the rules. Any of the adjustments found in the technology part of the book can be added to to hit rolls or armour rating as the referee sees fit.

Combining The Combat Systems

The theatrical combat system is not meant to be an entity unto itself. It is by no stretch of the imagination a complete combat system designed to adapt easily to any obscure situation that can arise. For that matter neither is the tactical combat system. Both the systems are expected to be adapted by the referee and players to a degree which supports the level of realism desired, but still remains playable. The theatrical combat system is a good start for getting used to the non-combat intricacies of **EXP**. It is very easy to add parts of tactical system in as the campaign proceeds, keeping them as permanent rules in combat or discarding them when not needed.

A lengthy discussion of the melding of the two combat systems would be lost to those who do not have a reasonable grasp of how both systems work, but here are some pointers on what you may find most important to work out.

The tactical combat system has **attribute bonuses** as well as **level bonuses**. This means that the persona's attributes can be added to the player's to hit rolls increasing the chances of stronger and more dextrous personas to hit their targets. There are also weapon damage adjustments for using hand to hand weapons that are based on physical strength. This increases the damage done by physically strong personas. Damage adjusters are so easy to employ that most gaming groups will include them when they use the theatrical combat system.

The tactical system has detailed rules for **weapon proficiencies**. In the theatrical system personas can use a brand new weapon as well as a one they are well practised with. Proficiencies ensure that personas will be better with familiar weapons than with newer ones by having bonuses for proficient weapons, and bonuses for non-proficient weapons.

The tactical combat system has weapon types. Each combat weapon is classified into one of three weapon types. Each weapon type functions

differently in combat, relating to number of attacks per unit, range, damage adjustment, and to hit bonuses.

The tactical combat system has combat absolutes by having maximum allowable to hit rolls. This means that the personas cannot have a to hit roll higher than a certain number. The **maximum roll** increases as level increases, and it ensures that high level personas will be better than low level personas in combat.

If any of these rules sound like they would add to the fun of playing **EXP**, then looking at the tactical combat system is highly recommended...

Table 26.1: Theatrical Level To Hit Bonus

PERSONA CLASS	BONUS PER EXPERIENCE LEVEL
Biologist	15
Knite	40
Mechanic	25
Mercenary	50
Nomad	30
Nothing	—
Spie	35
Veterinarian	5
Alien	DEX
Robot	INT

III

Chapter 27
Tactical Combat

The tactical combat system is used to resolve those persona differences that negotiation cannot resolve. The tactical combat system is much more detailed than the theatrical one, but they both are equivalent in their degree of lethality.

It is expected that anyone using the tactical combat system at least has previous experience with other combat systems. That previous experience could be with the theatrical combat system or with the combat systems from other role-playing games. If you have never played a role playing game before it is recommended that you read chapters 25 and 26 before proceeding here.

Every combat system has its flaws in realism and playability, but the tactical combat system is the most realistic, most playable system that **EXP** has to offer.

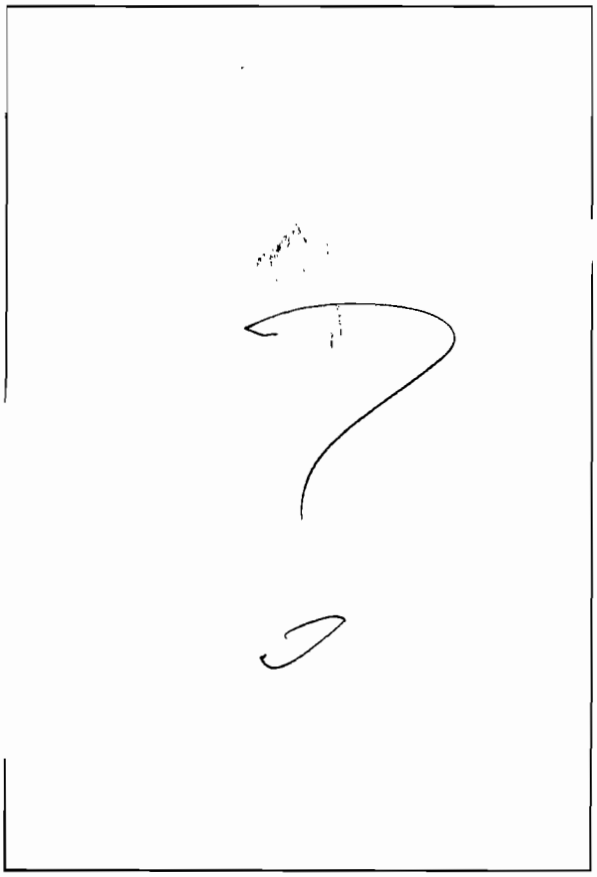
Attacks and Defenses

The most important goal in tactical combat is to score a **Hit**. Attempting to score a hit depends on many factors: the attacker's attributes and skill level, and the defender's combat defences. A combat system revolves around these elements that affect an attacker's chance to hit.

Attacking: An attacker generates a to hit roll by rolling a kilo-die (hence 'roll' to hit). The random integer that is generated accounts for the enormous number of possibilities that cannot be accounted for on a normal gaming scale. Armour deflection, air currents, velocities, tensile strengths, concentration levels etc., are just some examples. The total effect of these factors is so complex they are unpredictable. The kilodie roll is a random factor that attempts to account for this minutæ. Combat is incredibly dynamic, and these factors change so much each moment that the to hit roll must be re-rolled for every attack.

In general, the higher the to hit roll the better. The player must roll a number higher than the target's armour rating in order to score a hit. If some creature were to have an armour rating of 580, an the player would have to roll equal to or higher than 580 before her persona could score a hit hit. Thus any to hit roll greater than 580 would indicate a hit. A **Miss** indicates a non-damaging attack, and nothing more than a loss of ammunition, or a battery drain.

Defending: Dexterity, armour type, hide structure, body structure, and many other factors are collectively called the **Armour Rating**. The armour rating is a quantitative value that represents how difficult it is to hit the target. The higher the armour rating the better the protection it offers. The armour rating of anthropomorph



personas is determined mostly by the type of armour that they are wearing. A very detailed discussion of armour rating is given in chapter 29.

Combat Adjustments

There are components of combat that increase the attacker's chance of scoring a hit on her target. These factors are called bonuses. The bonuses are added to the player's to hit roll, which increases the chance of her persona scoring a hit. In the tactical combat system different weapon types have different bonuses, and the personas have a limited number of proficiencies. These bonuses are contained on a matrix that cross references weapon types and weapon familiarity. This matrix is called the **Combat Table**. Each persona has her own combat table. The combat table is the basis of the tactical combat system. Other factors, such as terrain, range modifiers, and meteorological effects can easily be included in the theatrical system, but the idea of the combat table cannot. The generation of the persona's combat table is outlined in chapter 9.

EXP has an enormous variety of weapons. In order to make the combat table manageable these weapons are divided into three identifiable types. Not surprisingly each category is called a weapon type. The three weapon types that appear on the combat table are discussed in the following paragraphs.

To the persona the weapon types are invisible. They do not decide to use a certain weapon labelled with a "C" because they have just completed physiological testing that indicates that they are faster than they are stronger. It is only the mundane player that knows such details about her persona. The player may role-play that her persona has a favourite weapon, which just might be one of the weapon types that her persona has the largest bonus proficient for.

Weapon Type A

These are *non-powered thrusting and striking weapons*. The non-powered part of this weapon type description implies those weapons that are dependent on the physical effort of the attacker to inflict damage. Thrusting and striking weapons are those that either poke or strike their targets to inflict damage.

Type A weapons are primarily hand held, or can include the hand itself. The list includes swords, maces, pole-arms, fists, paws, beaks, spears, etc. A more exhaustive list is included in chapter 28, Weapons.

Type A weapons are characteristically the slowest weapons because they are so labour intensive and require special conditions to inflict damage. They must contact with a cutting edge, or they must connect without deflection to inflict damage. Combat time must be spent preparing each attack (spotting an opening, dodging, parrying, etc.). Type A weapons can only attack every second unit. A player attacking one unit (making a roll to hit), would have to wait out one unit before attacking again. The lost unit is spent parrying other type A attacks, and creating combinations for the next attack.

Type A weapons are very dependent on the PSTR of the persona. Personas with high PSTRs will be more likely to hit, and will inflict more damage when they do, when using type A weapons. Aliens will most often have no choice but to use their natural type A abilities.

Weapon Type B

These are non-powered projectile weapons. Again non-powered implies that the weapon's damage depends on the physical activity of the persona. Throwing weapons are ones that can inflict damage at a distance from the attacking persona.

Type B weapons include: rocks, daggers, boomerangs, whips, spitting, arrows, darts, etc. A more complete list of type B weapons is given in chapter 28, Weapons.

These weapons are as much dependant on the aiming ability (DEX) of the attacker as they are on the attacker's PSTR. Type B weapons can attack every unit, but they cannot be used at close range. Any weapon that is drawn, thrown, or heaved will get a roll to hit mostly dependent on the persona's DEX value. Type B weapons are more difficult to use than type A weapons, because the attacker must consider additional factors such as range and movement in order to score a hit.

Weapon Type C

These are powered weapons. Powered weapons do not depend on the physical strength of the attacker to inflict damage. Type C weapons require little or no physical effort to attack and inflict damage. The killing forces are generated by batteries, expanding gases, springs, or other methods that are independent of the persona's PSTR.

Powered weapons include lazers, crossbows, rifles, fusion guns, death rays, machine pistols, etc. A typical type C weapon can attack every unit without taxing the persona in any way.

Type C weapons are highly dependant on the DEX of the persona because their most important factor is how they are aimed. Once properly aimed and triggered the powered weapon does the rest of the work. There are no damage bonuses for type C weapons.

Other Powered Weapons: Type C weapons include all powered weapons that require aiming. The referee will encounter other weapon types such as D, E, and F. These are powered weapons also and they are treated the same as a type C weapon. These weapons have one important difference. Those weapons that are labelled type D, or type E attack 2, or 3 times each unit. A type F weapon would get 4 attacks each unit. This means that its firing mechanism is so delicate that the player gets 4 to hit rolls each unit her persona uses this weapon.

There is another powered attack type called 'special'. This is only employed by fully-automatic weapons that can empty their entire ammunition stores in several seconds. Special assumes that the persona is spraying bullets, or lazer bolts, into an area in an attempt to hit as many targets as possible.

The player gets 5 to hit rolls whenever **special** is being employed. Each to hit roll accounts for a burst of 3 rounds of ammunition. If a to hit roll is a miss then all three rounds miss the target. If a to hit roll indicates a hit, then between 0 and 3 rounds hit the target. If 0 rounds hit the target then no damage is inflicted, but if 3 rounds hit the target damage is rolled 3 times. Special uses 15 rounds of ammunition each burst. More information on the attack type special is found in chapter 46, Guns.

Employing The Combat Table

Chapter 9 gives a great deal of information on the statistical makeup of the persona's own combat table, and even should give some idea of its use. A brief review of the combat table components is in order, however.

Consider a third level nomad persona that has the following attributes: AWE 12, CHA 6, CON 17, DEX 15, INT 12, MSTR 4, PSTR 10 and HPS 43.

Calculating her **Bonus Proficient, Bonus Non-Proficient, Maximum Roll** and **Damage Adjuster**, for weapon types A, B and C; the combat table is assembled, taking into account the nomad's experience level:

	BP	BNP	MR	DA
A	176	87	801	10
B	184	104	843	5
C	234	74	909	0

III

Bonus Proficient: Let us suppose for the moment that our nomad finds herself in a breathless chase over frozen arctic wastes. Occasionally she and her pursuers pause to catch their breaths and take a few shots at one another. It so happens that our nomad is packing a 1.5 metre long harpoon used normally for spearing the Giant Arctic Sea Slug that frequents the waters below. She happens to be proficient in said harpoon (see section on Proficiency). When one of her assailants clumsily drives right past her hiding spot on a snow mobile, she stands up, takes aim and lets fly with the wickedly barbed weapon.

The nomad's player rolls kilodie to hit. She is entitled to add the nomad's type B Bonus Proficient score of 184 to her final roll. In this case, taking into account the snowmobile's motion and local winds, the +184 is still enough to exceed the goon's armour rating. Scratch one goon.

III

Bonus Non-Proficient: Unfortunately for the nomad, she is now sans harpoon. The only other weapon available to her is the nasty icepick tucked into her boot She slides down an icy incline, hoping to reach the fallen goon's snowmobile, but when she's a mere ten paces away, a second evil mercenary springs out from under the snow and confronts her. The faceless merc is wielding a military survival knife, so the nomad grabs her icepick.

Knife-fighting is not the nomad's forte, sadly. She doesn't have a proficiency in "icepick," so after dodging the merc's first slash, she gets to attack adding only her Type A Bonus Non-Proficient to the kilodie roll. She rolls a natural 249, which added to her BNP of 87 totals 336. This figure is well under the merc's AR of 575, and she misses completely.

Maximum Roll: After a knock-down, drag-out slashfest lasting several units, our nomad loses her well-worn icepick in a drift. This puts her at a considerable disadvantage, so she decides to flee the advancing mercenary. In doing so, she trips over the body of the first merc (the one with a harpoon stuck through the back). While scrambling to her feet, she finds the fallen merc's XHP Sotto Pistol. By a shear twist of fate, it happens to be the exact model handgun with which she has a proficiency.

Spinning on her atacker, who chose to lunge at just that moment, our nomad unloads a XHP round into her target's head. She rolls a 852, which added to her Type C BP of 234 gives a grand whopping total of 1086, which one might like to believe equates instant decapitation for the villain. However, the nomad's Maximum Roll of 909 prevents the well-placed shot from being anything other than just that. Taking a deep breath of cold air, the nomad watches the merc slump to the ground and hurries away.

Reasons for an MR: The maximum roll is important to the tactical combat system because it is the ultimate differential between high and low level personas. There are certain armour ratings that inexperienced personas will not be able to hit except under extremely lucky circumstances (see Critical Rolls in chapter 16). Without the MR the referee will find that low levels personas are just as successful in lethal personal combat as higher level personas. If there is no difference between low and high level personas in combat then there is no point in having combat classes advance in experience levels.

The players will hate, unless it's working in their favour, the maximum roll. Occasionally a persona will be unable to hit a particular target because its armour rating is too high. This will leave some players feeling helpless and frustrated, while others will find out how to help the expedition by assisting those that can score a hit.

The maximum roll also raises a problem of realism for the referee. Should a persona know that she cannot hit a target? Is it realistic for a persona to stop attacking a ferocious alien after just one failed attack? The referee may deceive the players (for realism of course), by pretending that a maximum roll is a hit, recording the damage, but not subtracting it from the target's hit point total. After a while the players will realize that the alien has withstood tremendous amounts of damage, but it is still being ferocious. It is then a role-playing decision whether or not to continue the combat, or to enact a tactical withdrawal.

Damage Adjustment: Our nomad was very pleased to find that the 3-30 points of damage inflicted by a single XHP round was sufficient to push the already wounded merc into negative hit points and subsequent DSS. She was less pleased to learn that the round in question had been the last in the Sottopistol.

When it comes time to eliminate the last remaining merc, who is standing by the group's communications gear, the nomad takes the biggest, heaviest chunk of ice she can lift and attempts to crush the guard's skull with it. Given the benefit of surprise, she has no difficulty connecting with the target. Because her own muscles go into propelling the bludgeoning device, she adds her Damage Adjuster for Type A weapons. For damage, she rolls a d6 for 4 hit points. To this she adds her DA of 10 for a total of 14 pts. The disgruntled merc turns to the nomad and has words with her.

Proficiencies

Proficient means that the persona can use the design of a weapon so that it aids her in combat. Proficiency is more similar to weapon familiarity than it is to weapon skill. It allows the persona to hit with the edge of a sword, use the full leverage of a pike, and point a gun in the right direction. Each single proficiency refers to a single weapon. Thus a persona that can have 3 proficiencies can choose 3 specific weapons that she is proficient in. If a persona is proficient in a weapon it means that her player can add the BP to any to hit rolls that she makes. Proficiency does not increase the persona's ability to score a hit by increasing her bonus proficient, but it allows the player to add her entire BP to any to hit rolls that she makes.

Initial Proficiency: Personas are not automatically proficient in all weapon types, and they must choose them carefully. For example, being proficient with a lazer may be really fun until its batteries run out, and in the long run a crossbow proficiency may have been a better choice. What weapons a persona is proficient in is completely determined by the player. Weapon proficiencies need not be chosen all at the same time, and the player can wait until the right weapon for her persona comes along.

The number of weapons that a persona can be proficient in is limited, and is dependant on her class. Combat classes start with more proficiencies and learn new ones faster, while non-combat class personas will become proficient in very few weapons.

Each persona has an initial number of proficiencies when she starts at first level. The number of proficiencies is determined on Table 27.1, *Weapon Proficiency*. Each proficiency represents familiarity with one particular weapon. According to this table a nomad could be proficient in up to three powered (type C weapons), and three non-powered weapons (types A, and B) at first level. She does not have to choose all three of these proficiencies in first level, and in the case of type C weapons the persona may not even encounter them.

Acquiring More Proficiencies: If the player chooses that her persona is proficient in a particular weapon then she simply records it on her persona record sheet. The player may find that 3 non-powered weapons aren't enough proficiencies for her nomad, because she has encountered some additional weapon that she would love to be proficient in. The player can add new proficiencies as her persona increases in experience levels. If the nomad described earlier had used up all her proficiencies for type A and B weapons then she would have to wait until 3rd level before she can add another non-powered weapon proficiency. The number of initial proficiencies, and the intervals that new ones are added are listed on the *Weapon Proficiency* table.

Further points: Mercenaries are proficient with all weapons. Any player with a mercenary persona will always add the BP to anything that is a weapon.

If the device is not designed as a weapon then the player can only add the BNP to her to hit roll. If the persona cannot identify the artifact as a weapon then it is considered a non-weapon. For more information about identifying artifacts refer to chapter 20, Artifact Identification.

Table 27.1: Weapon Proficiency

	WEAPON TYPES A & B		WEAPON TYPE C	
	INITIAL # OF PROFICIENCIES	ONE MORE AT LEVELS	INITIAL # OF PROFICIENCIES	ONE MORE AT LEVELS
Biologist	1	3, 6, 9, 12	1	5, 10, 15, 20
Knite	2	2, 4, 6, 8, 10	2	2, 4, 6, 8, 10
Mechanic	2	3, 6, 9, 12	2	4, 8, 12, 16
Mercenary	-	As needed	-	As needed
Nomad	3	3, 6, 9, 12	3	2, 4, 6, 8, 10
Nothing	1	None	1	None
Spie	2	2, 4, 6, 8, 10	2	2, 4, 6, 8, 10
Vet	1	4, 8, 12, 16	1	5, 10, 15, 20
Alien*	None	None	None	None
Robot*	None	None	None	None

*If class skilled use the class proficiency.

III

Chapter 28
Weapons

This chapter is devoted to everything you ever wanted to know about non-powered weapons, but were too smart to ask. The weapons discussed are primarily type A and type B weapons. These are the generic kind of hand to hand combat weapons that almost any anthropomorph tool users would be expected to make. The referee's milieu should designate which weapons are readily available, and which are not. As stated earlier these are generic non-powered weapons. These are the mundane weapons of personal combat that have been made famous by popular media. The weapons are discussed by type covering each weapon type's peculiarities, and the particular weapons that fall into that type. There is also a brief introduction into type C weapons (powered).

Weapon Type A

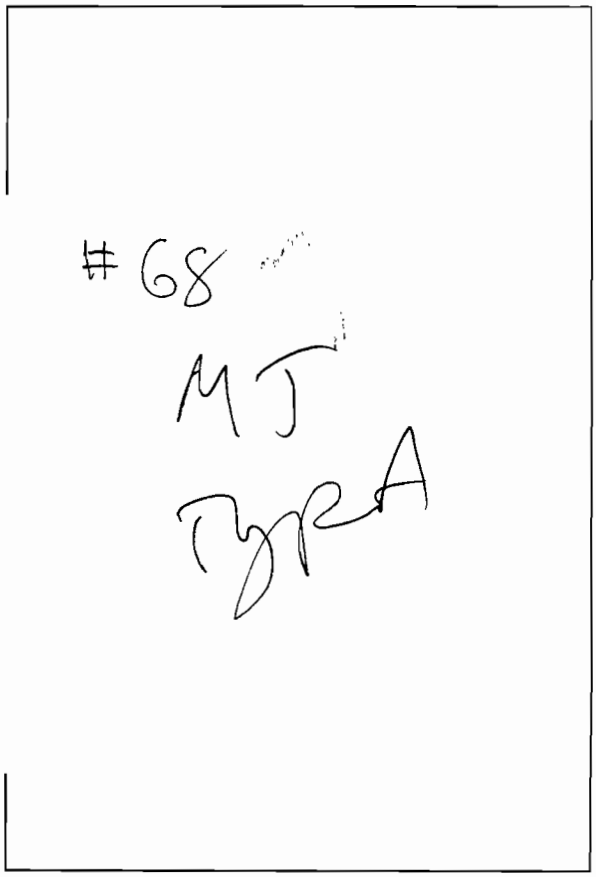
These are non-powered thrusting and striking weapons. The "non-powered" part of this weapon type description implies those weapons that are dependent on the physical effort of the attacker to inflict damage. Thrusting and striking weapons are those that must either poke or strike their targets in order to inflict damage.

Type A weapons are primarily hand held, but can include the hand itself. Type A attacks include swords, maces, pole-arms, fists, paws, beaks, spears, etc. A more complete list is found on the Type A Weapon Data Table.

Type A weapons are characteristically the slowest weapons because they are so labour intensive and require special conditions to be able to inflict damage. Type A weapons must contact with a cutting edge or a particular hitting part, i.e., they must connect on the target without deflection to score a hit. Because these weapons require such specialized circumstances to inflict damage it is expected that some combat time is spent preparing the attack.

All of this requires combat time, and the type A weapons are restricted to attacking every second unit. In simple game terms it means that the player can only make a to hit roll every second unit. A player attacking one unit (making a roll to hit), would have to wait out one unit before attacking again.

Weapon Data: Table 28.1, *Type A Weapon Data*, is fairly self explanatory. Each weapon included is fairly basic, and should be familiar to most people. Those that aren't can be researched quite easily in a dictionary or an encyclopedia. What isn't immediately obvious are the parameters of the weapons.



The parameters of the weapons are as follows: The **Length** is listed in cm, and is the length of the entire weapon. The length includes hilts, blades, and points of the weapon. The **Wate** is listed in kilograms, and should be included in the persona's wate allowance. If a persona finds herself encumbered by a weapon, she should get a different one.

The **AR Bonus** indicates how well the weapon can be used for defensive purposes. It is representative of how effective the weapon is at parrying an attack, or creating a defensive feint The value of the weapon's AR bonus is multiplied by the persona's DEX. This value is added to her AR when using this weapon in combat. A persona with a 12 DEX using a small flail, would add 12 to her armour rating.

The weapon **Damage** is the most important component of the weapon's data. The damage is the range of HPS that are subtracted from any target that is hit by the weapon. An axe will inflict d10 + 2 HPS (3-12) in damage each time a hit is scored. The damage is generated each time a score is hit, so it is unknown exactly how much damage will be inflicted each unit. Type A weapons add the persona's PSTR to the die roll for a damage adjustment.

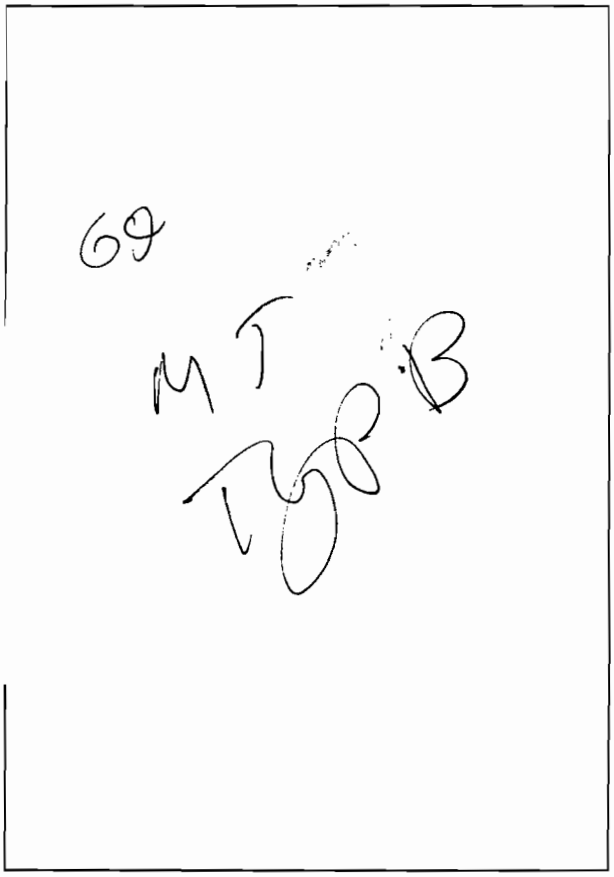
For even more mundane data about weapons refer to chapter 24, Equipment Costs, where the relative expense of various weapons is included. If the persona is being innovative, and is using strange household utensils as weapons this is discussed in chapter 24 also. For instance a persona may not be able to afford a mace, so she may steal a shovel instead.

Weapon Type B

These are non-powered projectile weapons. Again non-powered implies that the weapon's damage depends on the physical activity of the persona. Throwing weapons are ones that can inflict damage at a distance from the attacking persona. Type B weapons include: rocks, daggers, boomerangs, whips, spitting, arrows, darts, etc.

A more complete list of type B weapons is given on Table 28.2, *Type B Weapon Data*. These weapons are as much dependant on the aiming ability (DEX) of the attacker as they are on the attacker's PSTR. Type B weapons can attack every unit, but they cannot be used at close range. No type B weapon can attack if its target is within 1 hex.

Obviously there are some type B weapons that can only be used once. For instance an axe would have to be retrieved before it could be used again. Any weapon that is drawn, thrown, or heaved will get a roll to hit dependent on the persona's DEX value. Type B weapons are more difficult to use than type A weapons, because the attacker must consider additional factors such as range and movement in order to score a hit.



Type B Weapon Data: The *Type B Weapon Data* table is fairly self explanatory. Each weapon type is straight forward, and can be looked up in any respectable dictionary. Several of the weapons are unique to **EXP** and are detailed here. An **Object** is any solid, hand sized chunk that can be hurled by the persona. This includes rocks, books, canned vegetables, or whatever. A **Point** is any hand sized, thrown weapon which damages with a pointed end, screw driver, dagger, ice pick. The **Wham** is a lethal flying disc.

The parameters of the weapons are as follows: The **Wate** is listed in kilograms, and should be included in the persona's wate allowance. As with the Type A weapons, if a persona is encumbered by a weapon, she should get a different one. The wate of ammunition for weapons such as bows and slings is found in chapter 24, Equipment Costs.

The **Range** of type B weapons indicates the number of hexes the target can be from the attacker before penalties are issued. If the target of an axe attack is within 14 hexes their is no range penalty. The **Decay** of a weapon indicates how inaccurate the attack is once it is beyond the weapon's effective range. The Decay is subtracted from the roll to hit for every hex beyond the weapon's range. So if the axe attack just mentioned were 16 hexes from its target the to hit penalty would be -600.

Those weapon types that have their Range listed as PSTR have a range dependant on the physical strength of the attacker. If a persona with a PSTR of 12 were to throw a staff, she would have an effective range of 12 hexes, and no further.

The weapon **Damage** is self explanatory, these are the number of **Hit Points** subtracted from the target when a hit is scored (remember to add half the persona's PSTR to the dice roll). Grenades are area of effect weapons, and they do not receive a damage adjustment when they detonate. Type B attacks are used for grenades because they are usually thrown at a target, where they explode under their own power.

The costs of these weapons are listed in the even more mundane chapter 24, Equipment Costs. Also included in the Equipment Costs chapter are emergency replacements for various weapon types. A drafting right angle may be able to imitate the attack of a boomerang, and a flag standard that of a spear.

Weapon Type C

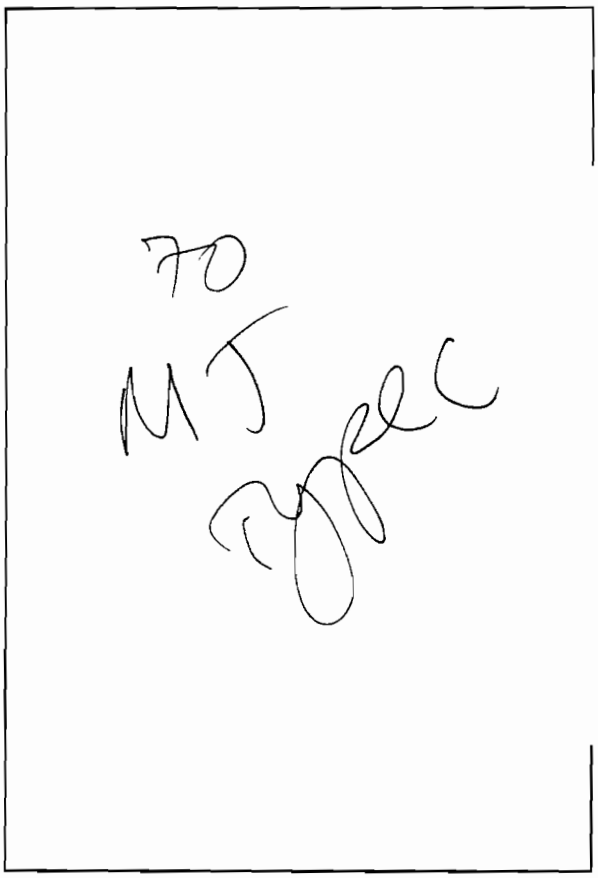
These are powered weapons. Powered weapons do not depend on the physical strength of the attacker to inflict damage. Type C weapons require little, or no, physical effort to attack and inflict damage. The killing forces are generated by batteries, expanding gases, coiled springs, or other mechanisms that are independent of the persona's PSTR.

Powered weapons include lazers, crossbows, rifles, fusion guns, death rays, machine pistols, etc. A typical type C weapon can attack every unit at very great range, without taxing the persona in any way. Mundane type C weapons are listed on Table 28.3, *Type C Weapon Data*, all others are found in the technology part of this book.

Type C weapons are highly dependant on the DEX of the persona because their most important factor is how well they are aimed. Once properly aimed and triggered the powered weapon does the rest of the work. There are no damage bonuses for type C weapons.

Other Type C Weapons: Type C weapons include all powered weapons that require aiming. The referee will encounter other weapon types such as D, E, F. These are treated the same as type C weapons, because they are powered, but they have one important difference. Those weapons that are labelled type D, or type E attack 2, or 3 times each unit. A type F weapon would get 4 attacks each unit. This means that its firing mechanism is so rapid that the player gets 4 to hit rolls each unit her persona uses this weapon.

There is another powered attack type called 'special'. This is only employed by fully-automatic weapons that can empty their entire ammunition stores in several seconds. Special assumes that the persona is spraying bullets, or lazer bolts, into an area in an attempt to hit as many targets as possible. The player gets 5 to hit rolls whenever special is being employed.



Each to hit roll accounts for a burst of 3 rounds of ammunition. If a to hit roll is a miss then all three rounds miss the target. If a to hit roll indicates a hit, then between 0 and 3 rounds hit the target. If 0 rounds hit the target then no damage is inflicted, but if 3 rounds hit the target damage is rolled 3 times. Special uses 15 rounds of ammunition each unit it is fired. More information on special is found in chapter 46, Guns.

Area Of Effect Weapons

There are some mundane non-dependable area of effect weapons that personas may want to carry with them on an expedition. Area of effect weapons have a range equal to the persona's PSTR, and they also have an area of effect which will damage all targets in the area as a grenade would. Grenades are discussed in more detail in chapter 30, Grenades and Aerosols.

Personas cannot buy these weapons, and they must be made by a mechanic in the expedition. A to hit roll is made like any other type B attack. The persona can only use her BP if she is proficient in grenades, and mercenaries can only add bonuses if they have weapon skills. All other personas will only be able to add their BNP to the grenade throw to hit roll.

Each device takes one unit of preparation before a to hit roll can be made

All these weapons have a wate of 1 kilogram, and specific chances for malfunction. Any unadjusted to hit roll that is less than 200 (but greater than 42) will indicate that the device has failed, and any unadjusted to hit roll less than 43 will indicate that the device has accidentally detonated.

If a home made bomb accidentally detonates then there is a chance that other home made bombs will also detonate. The chance is 2% per device. Mechanics can reduce the chance of malfunction with a 1 DD per 10 points of reducing the chance of a dud, and 1 DD per 2 points of reducing accidental detonation. A 5DD roll could be made to reduce the chance of a dud to 150 in 1000, and the chance of accidental detonation to 32 in 1000. Each device can only be upgraded once.

Corrosion flasks: This weapon explodes on impact, throwing acidic, or alkaline material in an area of effect blast. Area of effect is 0-1 hexes, and the damage is 2d10. Construction is a DD 5 maneuver

Molotov cocktail: This grenade contains a flammable liquid that explodes on impact burning everything that is flammable. The area of effect is 0-2 hexes, and the damage is 2d10. The Molotov will burn for an additional 1 to 10 units after the attack, inflicting d8 damage to those targets caught within its area of effect. Construction is a DD7 maneuver

Pipe Bomb: This is a handmade bomb that explodes on impact with a 0-3 hex radius. It inflicts 2d12 damage on all targets in the area. A pipe bomb is a DD 9 maneuver, and a critical failure indicates a detonation on construction.

Table 28.1: Type A Weapon Data

WEAPON TYPE	LENGTH (cm)	WATE (kg)	AR BONUS	HPS DAMAGE
Axe	70	1.8	1	d10+2
Brass knuckles	—	0.3	0	d3
Chain	70	2.0	0	d6+1
Fist, paw (punch)	—	—	0	d4-3
Flail, small	70	0.5	1	d4
Flail, large	120	1.5	0	d8
Foot, hoof (kick)	—	—	0	d4-1
Fork	175	1.6	2	2d4
Hammer	130	3.0	0	2d6+2
Lance, small	400	10.0	0	4d4
Lance, large	500	11.0	0	4d6
Mace, small	40	1.0	1	d3
Mace, large	75	2.5	2	d6
Morning star	120	1.75	0	d6+d4
Orchid (razor glove)	20	0.9	1	d4+1
Pick, small	40	1.0	1	d4
Pick, large	90	2.2	2	d10+2
Pike	300	8.0	-	2d6
Point (dagger)	35	0.3	0	d3
Scimitar	90	1.2	1	d8
Spear	200	2.5	2	d12+1
Staff, small	90	1.5	1	d4+1
Staff, large	180	2.3	3	d6
Sword, short	60	0.4	0	d4
Sword, medium	90	0.6	1	d10
Sword, long	120	1.2	2	d12
Sword, combo	150	1.8	2.5	2d8
Sword, double	180	2.4	3	3d6

Table 28.2: Type B Weapon Data

WEAPON TYPE	WATE (kg)	RANGE, DECAY	HPS DAMAGE
Axe	1.75	14, 300	d8
Bolo	1.25	10, 125	d3+d3
Boomerang	0.45	20, 125	d6+1
Bow, small	0.95	24, 120	d6
Bow, large	0.1	24, 120	d6
Bullwhip	0.8	2,—	d3+1
Grenades (tech)	Varies	PSTR	Special
Mace, small	1.0	15, 400	d3
Object (rock)	0.75	PSTR	d3
Point (dagger)	0.25	PSTR	d3
Shuriken	0.4	20, 95	d4+1
Sling	0.15	10, 200	d4
Spear	2.0	10, 145	d8
Staff, small	1.5	PSTR	d4
Staff, large	2.0	5, 220	d6
Sword (all kinds)	2.0	10, 150	d4
Wham (discus)	1.75	30, 200	d6

III

Table 28.3: Type C Weapon Data

WEAPON TYPE	WATE (kg)	SPEED FACTOR	RANGE, DECAY	DAMAGE
Crossbow, small	1.35	2	25, 125	d10
Crossbow, large	2.85	3	35, 120	d20

Chapter 29
Armour Rating

Personal body armour is a perverse form of self-defense. It is designed to protect someone who cannot, or will not, avoid combat situations. It is as much an instrument of violence as any weapon. The best way to avoid taking damage from combat is to avoid combat, but many personas happily wade into any altercation they can find or create.

The body armour described in this chapter is mundane, or non-artifact, armour. Artifact armour is described in chapter 42, and includes things like force fields, lazer reflection, and powered armour. Mundane armour is not as exciting as artifact armour, and it is usually cumbersome, uncomfortable and difficult to put on.

The armour rating is a universal measurement of how difficult something is to hit. Alien and robotic armour ratings are discussed in their respective chapters. Other targets such as walls, doors, and broad sides of barns have armour ratings also. Just because something has no active defences, or no active interest in defending itself doesn't mean that it has no armour rating. The armour particulars discussed here are for anthropomorph personas; however, the principles are the same whether they be applied to aliens or furniture.

Armour Rating

The protection of mundane armour is offered through simple mechanics: thicker hides absorb and distribute forces, while special surfaces deflect blows. The persona's DEX attribute also plays an important role in a persona's defence: dodging, twisting, etc. All of these factors are combined into one single value called armour rating (AR). The higher the AR the better. Stronger materials, better armour design, and superior quality of workmanship all contribute to a higher AR.

When the player is making a to hit roll she is trying to roll higher than the target's armour rating. Like the target's armour rating the persona's armour rating is used when someone is trying to hit her. If a referee persona should score a hit on a persona then that means that the referee rolled higher than the persona's armour rating. The persona is hit, and takes damage the exact same way as any target would.

Armour types vary greatly in protection restrictiveness, and weight. Very light, and non-restrictive armour (no armour, or leather) benefit the persona by allowing her to use her DEX to her advantage. The other extreme is cumbersome and heavy armour (plate mail, banded) which protects the persona by force absorption and deflection, and does not allow for dextrous dodging. To players the most important difference in the armour types is their armour rating.

The AR of various armour types can be found on the Table 29.1, *Mundane Body Armour*. A persona wearing chain mail would have an AR of 625. Anyone trying to hit the persona would have to roll 625, or higher, on her to hit roll to damage the persona. An unarmoured persona would be much easier to hit, because her AR would be only 500.

Layering of armour is to be discouraged. If two armour types are combined the persona will only gain protection from the higher AR, but the two restrictivenesses are added. When armour is being layered PSTR can only reduce the restrictiveness on one of the armour types.

Restrictiveness

The next most important factor of body armour is its **restrictiveness**. Restrictiveness is a general rating of how badly the armour hampers a persona's actions when compared to an unarmoured state. The higher the restrictiveness, the more binding, cumbersome and generally claustrophobic the armour is. Heavy protective armour is usually very restrictive while light evasive armour is not. Usually the heavier the armour is, the more restrictive it is.

Armour restrictiveness is represented by a number. The lower the restrictiveness the less restrictive it is. An unarmoured persona has a restrictiveness of 0, while a persona wearing plate armour has a restrictiveness of 5. Just for interest, **deactivated powered armour** has a restrictiveness of 15. There is no reason why armour couldn't have a negative restrictiveness, where it actually assists the persona's movement when she is wearing it, but this armour type definitely wouldn't be found in the mundane armour chapter. The restrictiveness of the armour can affect movement, PT rolls and even armour rating.

Restrictiveness and PSTR: Sheer power can be used to reduce the restrictiveness of armour. For every 5 points of PSTR that the persona has she can reduce the effective restrictiveness by 1. The armour still has its restrictiveness but when worn by the persona it can be reduced. A person with an 11 PSTR wearing plate armour would reduce the restrictiveness from 5 to 3. A persona with an 8 PSTR could wear padded armour as if he were unarmoured. The are benefits to reducing the restrictiveness of armour.

Restrictiveness and Movement: The restrictiveness of armour affects the movement rate of a persona. The more binding and cumbersome armour type is the more the persona is slowed. Table 29.2, *Movement Penalty* gives the h/u penalty of various restrictivenesses. A persona wearing studded armour would have her movement rate reduce by 2 h/u because that armour's restrictiveness is 3. Certain personas may find that it is not worth their while to wear certain armour types. A persona can reduce an armour's restrictiveness with her PSTR, and this may allow her to move faster than a weaker persona wearing the same armour type.

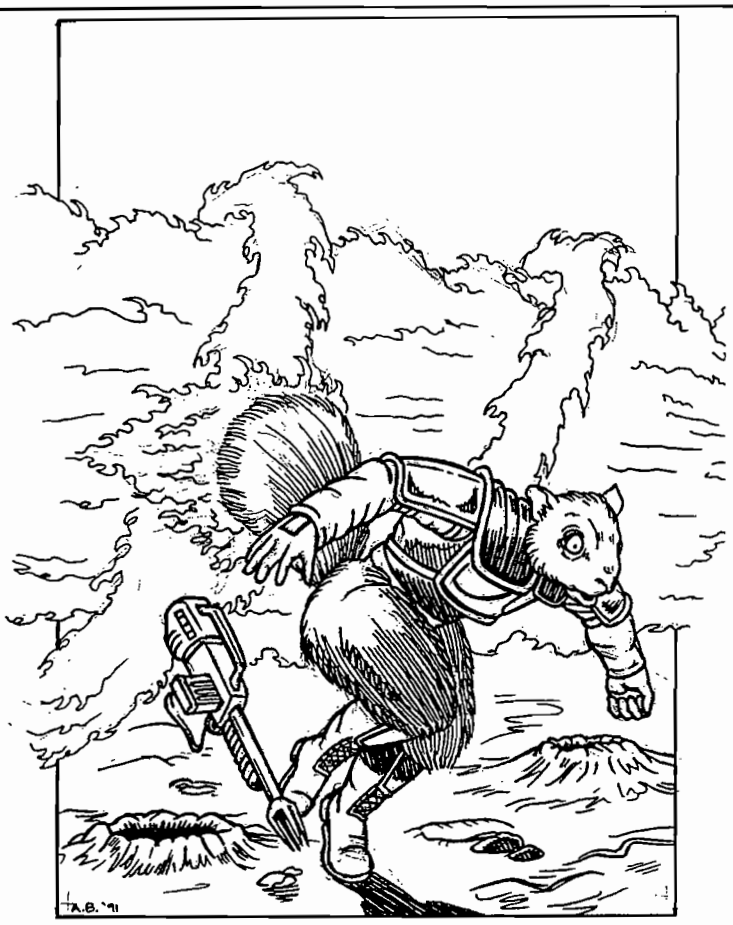
Personas with very high PSTRs create a potential conundrum for referees. The *Movement Penalty* table is incomplete in some respects because a negative restrictiveness could easily occur. For instance a persona with a 16 PSTR, and leather armour (rest. 1) would have an effective restrictiveness of -2. Does this mean that she gets a movement bonus? Most referees will immediately rule that there can be no movement bonus from extensions of the *Movement Penalty* table, but it might be an excellent way to include PSTR into the assignment of movement rates.

Restrictiveness and PTs: Many classes must pay attention to the restrictiveness of armour types. Classes which require nimble actions, physical contact, or keen senses, are penalized when attempting class skills while wearing certain armour types. This does not stop personas from wearing any armour they wish, but any class skills they pursue will be penalized.

To avoid the performance table penalty does not necessarily require removal of the entire suit of armour, but rather gauntlets, helmet or other appropriate part. If the relevant piece is not removed, the DD of the task attempted in increased by an amount equal to the restrictiveness value of the entire suit of armour. If a veterinarian, wearing scale mail, is trying to do a quick fix on a wounded persona she must remove her helmet and gauntlets or suffer a DD 4 penalty. If there are further questions about DDs and performance table then refer to chapter 14, Performance Tables.

Restrictiveness and AR: An armour type's restrictiveness determines the AR DEX bonus awarded to personas when using the tactical combat system. The theatrical combat system is not obligated to AR DEX bonuses, but they can easily be included. The AR DEX bonus improves the persona's armour rating, and it makes the persona harder to hit.

An unarmoured persona receives an AR DEX bonus of six times her DEX. Thus an unarmoured persona with a 15 DEX would increase her AR by 90. According to the *Mundane Body Armour* table an unarmoured persona (armour type none) would have a base AR of 500. Including the DEX bonus for a 15 DEX this persona's AR would be 590. If the same persona were wearing splint armour (restrictiveness 3) her AR DEX bonus would be reduced to 45, and her total AR would be 695. Highly restrictive armour reduces the persona's DEX bonus, but usually offers more protection. Except in rare cases, being armoured will offer more protection than being unarmoured. The



following equation gives the AR DEX bonus dependant on restrictiveness.

Armour Rating DEX Bonus
(6 - **Restrictiveness**) x DEX

If the persona's armour has been reduced to a negative restrictiveness (due to PSTR) it is up to the referee to decide whether she can get more than 6 times her DEX in AR bonus. According to the equation armour with a restrictiveness of -2 should get 8 times DEX added to it. Most referees, being sane and rational people, will not allow AR DEX bonuses to exceed 6 times the persona's DEX.

Armour Rating

The wate of armour is excluded from the persona's wate allowance if she is wearing it. Armour is designed for combat movement and its wate should be properly distributed over the entire body. Only if the armour is carried is its wate added to the persona's wate allowance.

Armour wate is listed on Table 29.1 as either **general** or **designer**. The general armour wate simply indicates the wate of the suit of armour in kg. According to the general heading, a suit of leather armour would have a wate of 3 kilograms. The general heading is the basic wate of all suits of armour for that type. It is independent of the size of the persona, and can be used when armour wate is desired quickly.

The designer heading gives the % of body wate that the armour should weigh when suited to a particular persona. This means that armour will vary according to the individual wearing it. If a persona whose wate is 83 kg were to have a suit of banded armour (10% body weight) made for her, the armour would weigh 8.3 kgs.

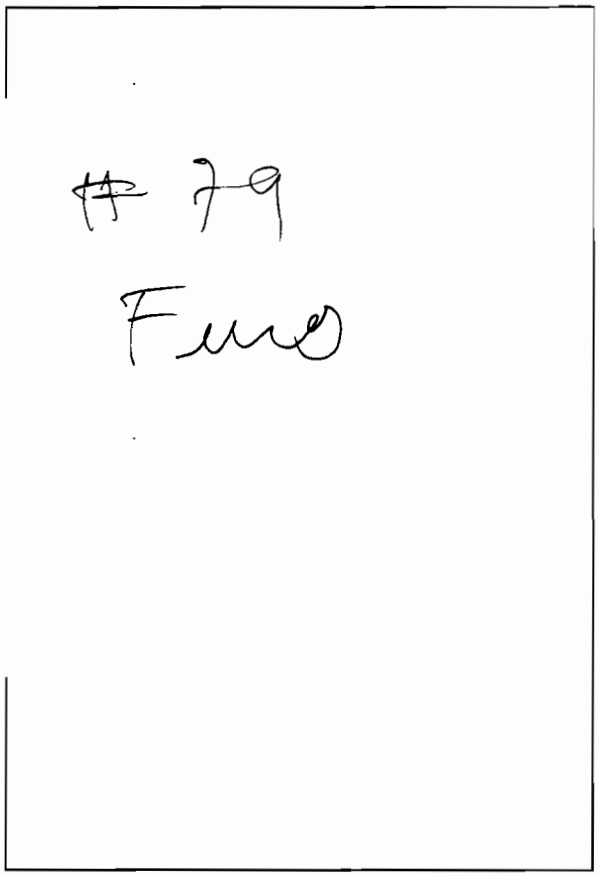
Mundane Armour Types

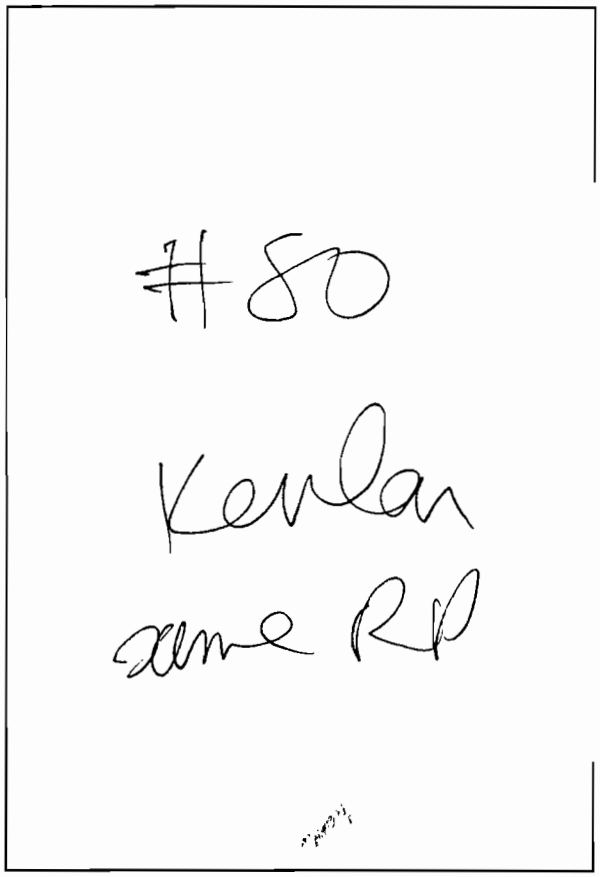
A brief description of the composition, advantages and disadvantages of each armour type is listed below. This may aid referees and players in deciding if armour is flammable, buoyant (hah!), edible, repairable, etc. The list is arranged in order of lowest to highest armour rating.

The ref may alter the composition and weights of these armour types according to the scenario at hand. The detailed technical information is listed on the armour table in this section.

None: No armour, civilian dress or daily attire. This armour type has no movement or restrictiveness penalties and grants the maximum DEX bonus, but it also has the lowest armour rating.

Furs, skins: Composed of layers of uncured and unpreserved animal hides. This armour type is very inexpensive, but loses its composition as it rots.





III

Leather: This is the preserved hide of some thick-skinned animal. Leather armour is light and non-restrictive.

Padded: Two layers of leather armour sandwiching some from of stuffing. All materials are sewn.

Studded: Padded armour with metal studs connecting the two pieces of leather.

Ring: Padded armour base, with large rings draped on the outside.

Scale: Padded armour with metal strips (or scales) hung loosely on the outer layer of leather.

Cured hide: A thick animal hide hardened by curing. This armour has low restrictiveness.

Plant fibre: Material woven from preserved cellulose. This armour is light and not very restrictive.

Chain: A suit composed of many small interlocked rings. This is separate from ringmail, which is composed of loose metal rings.

Splint: Strips of concrete or hardwood affixed to a padded armour base. Can be restrictive.

Banded: Overlapping metal strips fastened to cured hide.

Plastix: Any synthetic (kevlar, fiberglass, plastix) composition arranged in sheet form. This armour type has a high armour rating, but is light and non-restrictive. This armour is different from the artifact plastix listed in chapter 42, Armour.

Plate: A large, single metal breastplate covering a suit of padded armour. Very, very cumbersome.

Plate armour: Covering the torso and limbs with pieces of interconnected metal. This armour

type is extremely cumbersome and extremely restrictive.

Helmets and Gauntlets

It is expected that helmets are composed of the same material as the suit of body armour. Padded armour would have a padded hat, etc. Helmets are designed to protect the head, but at the same time they hinder a persona's hearing, field of vision and occasionally her sense of smell. Because of these sensory reductions, many classes won't perform their class skills while wearing helmets.

The gauntlets (gloves) that are included with a suit of body armour are composed of similar materials. For example, chain mail would have an intricately woven ring material covering the hands. Players and referees must remember that gauntlets are very restrictive to the hands. Imagine, for example, trying to unlock your car door while wearing a hockey glove. The ref must consider whether or not artifacts are designed to be handled with a mailed fist. Considering this, there are also some class restrictions for wearing gauntlets.

Shielding

Shielding is any non-garment device used to reduce the chance of being hit. Shielding usually deflects blows or reduces exposed surface. In the tactical combat system, many weapon types can aid a persona's AR if properly used. Before any device can be used as shielding, the persona must take proficiency in that device. This means that a persona with three proficiencies would only have two after choosing a shield for shielding. Contrary to some opinion, the ability to use a shield is not innate and trivial, but rather an acquired ability. The AR bonus awarded for the described shielding types are listed on Table 29.3, *Shielding*.

Shield: This consists of a piece of metal, wood, or some other material attached to one arm. The shield can be used for deflection, cover and deception. A shield hand cannot be used for any thing other than manipulating the shield. Shields are useful against all weapon types.

Net, cloak: Any strong sheet that can be easily manipulated by one hand. this device primarily entangles an incoming attack. This shielding type can be used against all weapon types. Type A weapons can also be disarmed with proper use of a cloak or net.

Chain, pipe, stick: Any pole or flexible tube about half a meter in length constitutes this shielding type. This shielding is designed to block type A weapon attacks, and is ineffective against weapon types B or C.

Paying For, Fitting Up, Putting On and Maintaining

Any armour bought by the persona will fit. Armour found while adventuring, or scavenging unlucky personas, will not necessarily fit. Before armour can fit it must meet two criteria. First, it must be designed for the same basic body shape of the persona (not for a four armed avarian tripod). Second, it must be made for a body wate within 15% of the new owner's wate. Thus a persona with a wate of 70 kgs could wear armour designed for a previous owners with wates between 59.5 and 80.5. If a persona insists on wearing armour that doesn't fit, increase its restrictiveness.

Suiting up for battle is very time consuming. The more restrictive the armour type the longer it takes to put on the armour. A good rule of thumb is 1.5 minutes per point of restrictiveness. A suit of chain mail would take about 8 minutes to put on. This rule should be applied whenever time is "running out".

Well maintained armour should never wear out. To keep armour well maintained, it should be kept out of inhospitable environments (acid bathes, combat, fires, vacuums, etc.), and tended to after every battle. Unattended armour will take damage. Whatever damage that the persona takes, the armour will take also. Armour has one hit point per point of AR. When reduced to 0, the armour is ruined. A suit of unmaintained studded armour could withstand 575 hit points of damage before being wrecked.

Some of the poorer personas will insist on mixing up armour types. The combinations could involve a plastix helmet with no armour, or a metal breast plate with padded arms and studded leggings. The only way that this armour type can be run is by employing the *Hit Location* table (See chapter 36). The ref determines where the attack is going to land, and then rolls to hit against the appropriate armour rating.

Weird Armour Ratings

The first thing that referees will realize once they have understood the basics of armour rating is that personas will immediately start attacking things that aren't really targets. These include door knobs, walls, windows, car wheels, and a host of other things that the referee can't possibly have prepared armour ratings for.

In light of the expected unexpected some guidelines for ad libbing are included here. The following tables do not reflect combat ARs, they are targeting ARs. Hitting with these to hit rolls will still damage the target, but none of these tables can be used to increase the chance to hit opponents in combat. The tables are for none combat targets, things that are not normally struck at or shot at. Remember that these tables are not combat armour rating tables for personas, or anything else. They are just a guideline for assigning an AR to those things that the referee has no preset AR for.

III

Table 29.1: Mundane Body Armour

ARMOUR TYPE	ARMOUR RATING	RESTRICT-IVENESS	ARMOUR WATE DESIGNER (%)	GENERAL (kg)
None	500	0	0.0	0
Furs, skins	550	3	3.2	2.7
Leather	550	1	4.3	3.0
Padded	550	2	2.9	2.0
Studded	575	3	5.4	3.8
Ring	575	4	7.1	5.0
Scale	600	4	11.4	8.0
Cured hide	600	2	3.5	2.5
Plant fibre	600	1	2.4	2.2
Chain	625	4	8.3	5.9
Splint	650	5	11.3	8.0
Banded	650	3	10.0	7.0
Plastix	675	1	1.6	1.1
Plate	675	4	12.6	9.0
Plate armour	700	5	14.2	10.0

Table 29.2: Restrictiveness Movement Penalty

ARMOUR RESTRICTIVENESS	MOVEMENT PENALTY (h/u)
0	0
1-2	1
3-4	2
5	3
6	4
7-8	5
9-10	6

Table 29.3: Shielding

SHIELDING TYPE	ARMOUR RATING	SHIELDING WATE (kgs)
Chain, pipe, stick	25	2.5
Net, cloak	25	2.0
Shield		
large	50	4.0
medium	45	3.0
small	35	2.0

Table 29.4: Target Size

TARGET SIZE	ARMOUR RATING	EXAMPLE
Minute	800	Marble, button
Tiny	700	Doorknob
Small	600	Fire hydrant
Medium	400	Filing cabinet, mannequin
Large	300	House
Gigantic	200	Barn, high-rise
Humongous	100	Moon, planet

Table 29.5: Target Durability

TARGET DURABILITY	ARMOUR RATING
1. Very tough	+200
2. Tough	+100
3-4. Moderate	0
5. Weak	-50
6. Very weak	-100

Table 29.6: Target Velocity

-10 per h/u,
or -100 per 10 h/u,
or -3 per kilometer per hour



III

III

Chapter 30
Grenade and Aerosol Combat

Grenades and **aerosols** are area of effect weapons. An area of effect weapon is one where the attack's effect is not just on a single target, but on every target within a certain area. All grenades have an area of effect that spreads outwards from a central point damaging everything within the area. Aerosols have area of effects like sprays, and spherical blobs. Both area of effect weapons are easy to use, but the rules are designed with a marked combat field in mind. Using grenades in the tactical combat system, where a hex covered combat field is expected is very easy. However using area of effect weapons without a combat field, such as in the theatrical combat system could prove very difficult.



Grenades

Grenades are area of effect weapons which can be thrown a reasonable distance. Molotovs, acid misters, pipe bombs, explosives and hi-tech grenades are included in this category. The point of grenades is that, besides being destructive, they are simple to use. The grenade combat system reflects this. The ease with which grenades can be discharged is in part what makes them so deadly. Everyone should remember that anything caught within the area of effect—personas, targets, equipment, walls—is subject to the grenade's full effect. Some points to remember about grenades:

1. Many grenades cannot be manually thrown out of their area of effect. Such grenades were designed for grenade launchers or specially armoured troops.

2. Armour, unless specifically stated in the armour description, does not absorb grenade damage.

3. Grenade effects are three dimensional, affecting anything above the blast hex.

Grenade activation: There are many different ways to activate a grenade (pin, twist cap, etc.). Most grenades should have at least one safety feature, which allows them to be transported and handled roughly. This does not apply to homemade grenades such as molotovs or pipe bombs. All grenades have a setting where their detonation is irreversible. Personas can very easily set grenades into this mode by fiddling with them.

The fuse type of a grenade can be confusing. Contact fuses (molotovs, some pipe bombs, and most hi-tech grenades) detonate the grenade when it contacts a solid or dense liquid surface. Timer fuses (lit fuses, and some hi-tech grenades) detonate the grenade at a preset time following activation. Regardless of the fuse type, the persona need only throw the device to activate it.

The following situations should be considered by the ref (and players). What happens if a persona rolls a contact fuse grenade? Is it morally acceptable for a ref to generate a grenade with a no-second fuse? Can opponents toss back grenades with long fuses? The cold calculating objectivity, and immediate mood of the ref will determine the results of such problems.

Rolling to hit with grenades: The standard to hit roll on kilodice determines how successfully the persona has thrown the grenade. The target hex can be the hex containing an opponent, or a hex that is within a group of opponents. A successful to hit roll will indicate that the grenade has detonated in the target hex, having whatever effect that is described. A miss with a grenade will cause it to detonate somewhere other than the target hex.

The characteristics of the fuse type can help explain a grenade "miss". Possibly the contact fuse bumped some solid object en route to the target. Perhaps a timer fuse detonated sooner, or later, than expected. Either occurrence could cause short, long or wide grenade detonations. More often than not, it is bad aim which causes a grenade to miss, and it strays over the distance that it is thrown.

Grenade To Hit Bonuses: Personas throwing grenades make an attack with a Type B weapon against a specific hex on the playing table (or against a general location if not using a grid system). The persona usually adds her BNP to the roll. Grenade proficiency will allow the persona to use her BP, and grenade skill will give her bonuses to hit. Any penalties for Type B weapons apply to grenade attacks. It is very important to regard ceilings and low branch penalties when grenades are being used. A grenade can be accurately thrown one hex per point of PSTR. Grenade launchers and grenade slings can increase this range.

To Hit Requirements: For a player to hit the target hex, she must roll over 600. The target hex does not actually have an armour rating. What the roll represents is the chance of aim, timing, and grenade skills being successfully integrated for the grenade attack. A miss does not always indicate a poor shot; it indicates that the grenade did not detonate in the desired hex. This could occur because of bad aim, or strange bounces, but it is a miss all the same.

Direction of Miss: Table 30.1, *Distance of Grenade Miss* indicates how far the grenade lands from the target hex. The direction from the target hex is determined by a die roll. A d6 is used to decide which facet of the target hex the direction of the miss is counted from. Consult the diagram Figure 30.2. Facet #1 is the direction that the grenade was thrown, and facet #2 is to the immediate right.

The grenade miss system is acceptable for grenades with a blast radius greater than 3 hexes. The system can be used for smaller area of effect grenades, *if the grenade target cannot adjust its position relative to the target hex.* The reason for these worries becomes obvious if anyone charts the possible blast radii of small area of effect (less than a 3 hex radius) grenades. Safety areas, hexes where such a grenade cannot damage, are easily determined. Movement to potential safety areas is not a problem if the targets have no idea of the grenade's target hex location prior to their last move. Thus the location of the target hex should be kept secret until everyone has finished moving.

Range of Grenades: The target hex chosen by the player can be anywhere within throwing range of her persona. A persona can throw a normal grenade 1 hex per point of PSTR. Heavier than normal grenades would have a shorter range. The player can count the hexes to see how far her persona can throw the grenade, but she cannot count hexes to determine the area of effect. So when a player's persona is about to throw a grenades she can count the range of the grenade throw, but she cannot count the hexes of the grenade's area of effect. The diagram below demonstrates the area of effect for a 1 hex and a 2 hex radius of effect grenade.

Grenade Malfunction: The chance of a grenade being a dud (malfunction) is roughly 1 in 1000 (roll on kilo die) for artifact grenades from chapter 45, and 200 in 1000 for the homemade grenades from chapter 28. Homemade grenades

will detonate when thrown if the kilodie roll is less than 42. Grenade malfunctions are determined by the unadjusted kilodie roll of the player, and BPs are not considered. If a persona were to throw a molotov and her unadjusted kilodie roll was 194, she might still hit the target hex (by adding her BP), but her grenade would not detonate.

Cover and Damage: Cover from grenades can be offered by very sturdy protection such as bunkers, rocks, or vehicles. A completely covered target will take no damage from a grenade attack. If the referee feels that there should be some damage reduction for cover a simple rule may be to reduce the damage by the percent cover that a persona has. If a target has 90% cover then reduce the damage by 90%, if the target has 33% cover then reduce the damage to 33%. Concealment has nothing to offer versus grenades. For more information about cover and concealment see chapter 29, Armour Rating.

Aerosols

The aerosol is a simple weapon to use in both play, and in "reality". An aerosol is kind of like a safe grenade, where the user merely points and pushes the eject button. Almost all aerosols have their business ends clearly marked. The weapon is generally foolproof, and even mercenaries can use the device with little difficulty. The various types of aerosols are detailed in chapter 45, Grenades and Aerosols. A military aerosol is simply a device designed to eject lethal materials such as flames shrapnel or poisons. Most of the other aerosols are industrial in nature, but are effective in lethal personal combat.

The ref is not obligated in how to describe her aerosols, if the players insist on an explanation for the destructive capacity of aerosols. They may be modelled after the present day format, or after some unforeseen prototype of the future. Regardless of their appearance, all aerosols should work in the same manner.

Rolls to Hit: An attack with an aerosol requires no roll to hit, and targets in the area of effect are hit. If a specific target were the goal of an aerosol, the aerosol would attack as a type C weapon. Aerosols are not discerning, and will damage a fellow expedition member as easily as a target. The only questions that are important about the aerosol are its effects, and its area of effect. The effects of the various aerosols are described in chapter 45, and the mechanisms of their area of effect are covered here.



Spherical Area of Effect: Most aerosols spray out to their maximum range, and then explode outwards, with a spherical area of effect. So an aerosol with a 10 hex range, and a 5 hex radius of effect, would spray 10 hexes, and then explode in a

10 hex diameter ball. Anything caught within this sphere will be damaged, coated, poisoned, or whatever.

The aerosol attack would be best described as a blob first travelling over the 10 hex range, and then atomizing into a mist cloud 5 hexes in radius. The attack is instantaneous. If the blob, while travelling along its course, strikes any particularly dense object it would immediately atomize to its full area of effect. If a persona were to accidentally fire an aerosol into the back of a persona in front of her, the entire expedition is likely to be affected by the attack.

Stream Area of Effect: Another type of aerosol has a stream area of effect. Such aerosols may have a 2 hex x 9 hex area of effect immediately in front of the aerosol. So when this type of weapon is discharged it will cut a swath 2 hexes wide, and 9 hexes long. Whatever is caught in this jet stream will be affected by the aerosol.

Aerosol Confinement: When aerosols are used in close quarters some of the worst gaming complications can arise. For example, what happens if an aerosol with a 9 hex radius of effect is used in a 4 hex by 4 hex room? What happens when a stream aerosol is fired against a wall? If the ref proceeds to calculate volume, areas, 3 dimensional vectors, etc. combat will quickly become bogged down.

There is a pseudo-scientific explanation-science students bite your tongues please-and it goes as follows: The aerosol attacks depend on the delicate atomization of liquid before they are effective. When the gaseous particles strike a solid surface, after they have atomized, they immediately condense, and lose their effectiveness. The condensed liquids are in a non-volatile, impotent form which means the effects of the aerosol are only carried out to within a molecule's width of the constraining walls, and proceed no further. Yet the violent effects of the attack are fully transferred to the containing surface. The condensate will be conveniently useless to the personas in the expedition because it will immediately evaporate. Note that if an aerosol's area of effect can surround an object, that object cannot be used for cover.

III

Table 30.1: Distance of Grenade Miss

DIE ROLL	MISS DISTANCE*
500-599	d3-1
350-499	d3
100-349	d4
10-99	d6
1-9	d6-1

* from hex of origin

Figure 30.2: Direction of Grenade Miss (Roll d6)

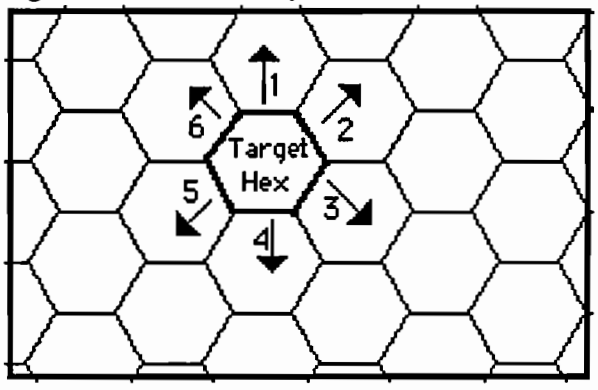


Figure 30.3: Example area of effect blasts on hex paper.

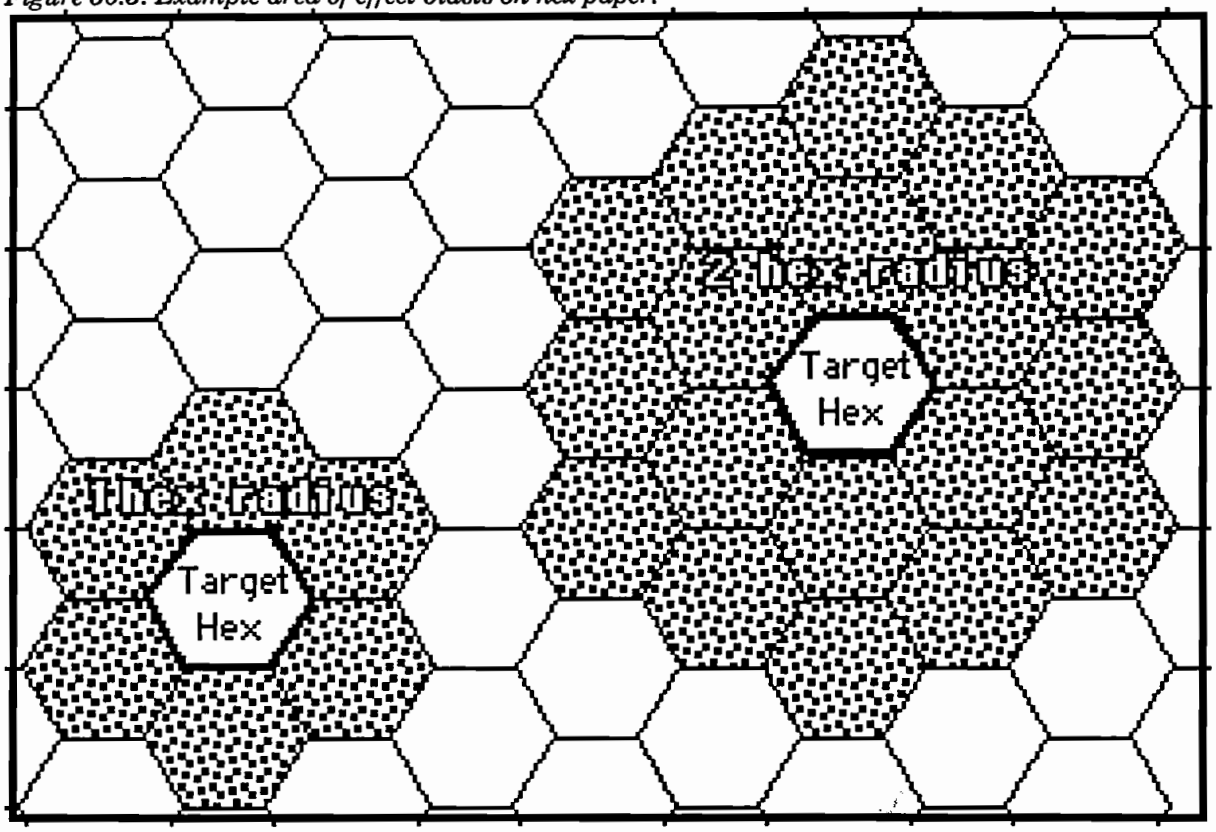
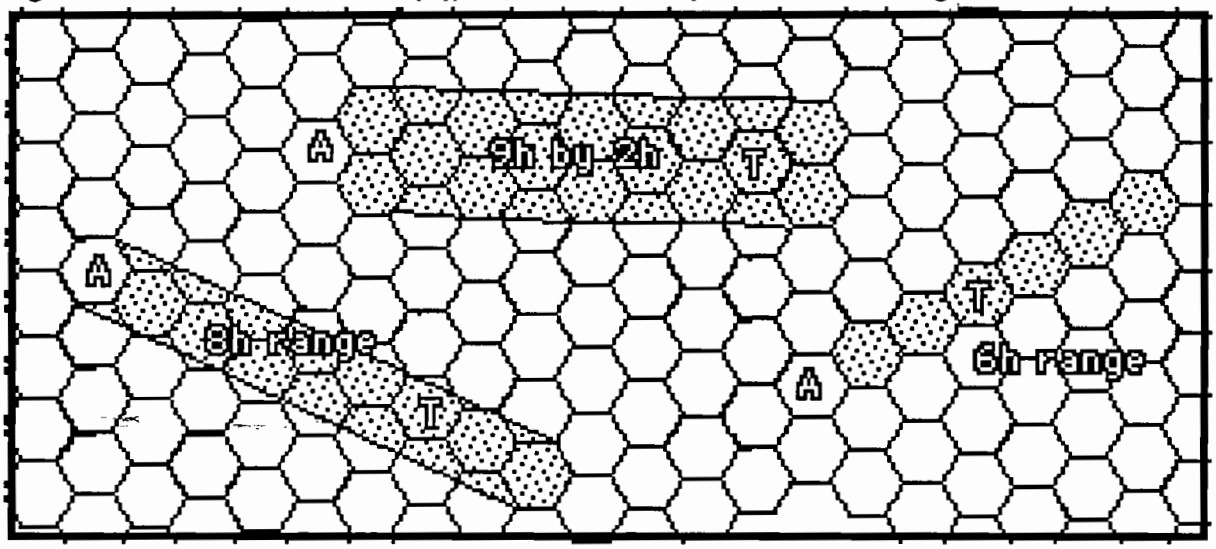


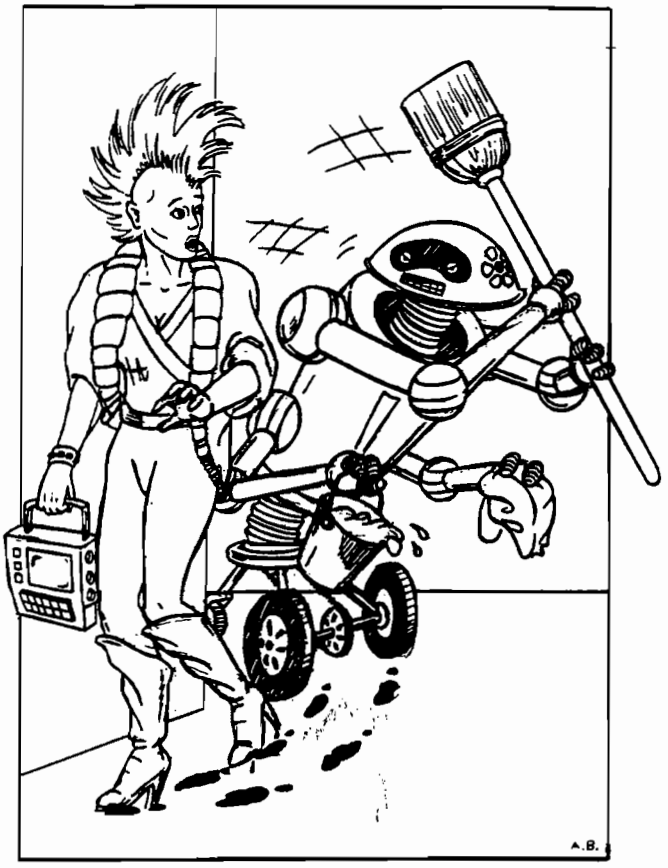
Figure 30.4: Aerosol stream area of effects, where A is the firer and T is the target.



III

Chapter 31
Robotic Combat

Robots cannot easily engage in combat. No robot, unless otherwise noted, may harm its manufacturing race, or in any way allow that race to come to harm (Asimov). This means that a robot may attack an entire expedition, and leave one persona alone. This means that a robot will not fire a grenade into a crowded room if a lone member of its manufacturing race may come to harm. Robots cannot be convinced to attack their own base race, nor can they be easily tricked. The ref must closely watch that robots do not try to squeeze through any loopholes of this ruling; as long as they see even the potential for harming their base race, they must take precautions to avoid doing so. It is also important that the ref makes sure that robots are not manipulated due to this law.



Lethal personal combat with robots will certainly exist. The previous para-graph is emphasizing how insane a robot must be before it will get into combat with an expedition. By no means does this imply that there will be any dirth of insane robots for the expedition to fight, but those fights won't always be toe toe brawls. Even when a robot is technically allowed to bash an organic being, many robots find themselves lacking an attack. Therefore crazed bots will often be reduced to locking expeditions in rooms (forever), turning off the air conditioning, or even reconnecting power supplies.

When robots are involved in lethal personal combat, whether it be with an expedition, an unlucky anthropomorph, or another robot they engage in the same combat as non-robotic personas. The player running the robot must make a to hit roll higher than the target's armour rating before she can roll damage against her target. There are no special benefits that are given a robot to hit. Conversely any to hit roll made on the robot that is higher than her AR will inflict damage. The robot will take damage regardless of whether she is hit by an avarian feather, or a fusion blast. The rest of the chapter deals with how robotic combat is different from anthropomorph and alien combat. These differences are all procedural for the robot persona and should not affect combat at all.

Robotic Attacks

Robotic attacks vary considerably, and some robots that can engage in combat will have no weapons to speak of. Robotic weapons are most often regular non-violent appendages that are being used to damage a target. The next question is, how does a robot with no built-in attacks damage an opponent? This is left to the ingenuity of the player. It may be

as simple as ramming (always ramming as a blunt flat), or as complex as mopping the opponent's face.

Robotic Combat Table

The robotic combat table appears the same as any other persona's combat table. There are of course differences in how this table is filled in. If the idea of a combat table is unfamiliar to the reader she should refer to chapter 9, Combat Tables. If the reader is using the theatrical combat system then she should simply ignore what appears here.

The robotic combat table (Table 31.1) has three weapon types like all other combat tables. The way in which each weapon type's bonus proficient is generated is different from both that of anthropomorphs and aliens. A robot with a 10 PSTR and a 15 DEX would had a BP of 125 for type A weapons. The BP is used for any weapon that is part of the robot. The robot will use the BP for deadly random abilities as well as built in weapons.

The bonus non-proficient for robots is 0. The BNP is used for any weapon that is not part of the robot. For instance, a robot with an articulation that picks up a gun would use her BNP, in other words there would be no to hit roll bonus at all. Robots have no maximum roll to limit their to hit rolls. If a robot were to roll 986, and have a BP of 110, her to hit roll would be 1096, and it would not be limited by her MR. Robotic damage adjustment is straight forward, and is simply added to the damage of the appropriate weapon type.

Damage With Random Peripherals

How much damage does a mop to the head do? Here again the referee, and the player, must improvise. A quick system is any one to four dice combination whose maximum damage is less than the robot's PSTR. E.g., a bot with a 9 PSTR could do d8, 2d4 3d3, or 4d2, while a robot with a 24 PSTR could do 1d20, 2d12, 3d8, or 4d6. The maximum number of dice in the combination is 4.

The amount of damage that a certain peripheral inflicts is determined at the beginning of the campaign, and does not alter. Deciding whether an attack is a type A or a type B attack depends on the description of the deadly random peripheral. If there is difficulty in deciding the nature of the peripheral, then it can be generated on the *Robotic Peripheral* table in chapter 5, Robots.

If it appears that a particular weapon is not doing a realistic amount of damage the referee may have to defend the random peripheral by reminding the players that these are malfunctioning robots, and that the peripherals are not being used for what they are supposed to. For example an excavating shovel of a robot may not automatically crush everything it manages to hit because there is still a section of the robot's safety programming keeping the shovel from doing that.

The number of deadly random peripherals that a robot has is determined when the persona is generated. Some of these peripherals will be well described, and not require too much creative effort on the part of the players involved. It is assumed that the procedure has managed to hardwire itself into the robot's violence response, and no other peripheral may be used to inflict damage. Other peripherals can be used to distract, annoy or otherwise endanger opponents.

Robot Ramming Damage

Ramming damage for robots is dependant on the type of ramming surface, and the relative wates and speeds of the robot and its target. Robots that have no attacks what so ever can resort to ramming, but they must first make a successful control factor roll. Ramming a target will certainly damage it, but it will also damage the robot. Such self destructive behaviour for a robot will only be allowed by its programming if its insanity were to overrule it. This is what the control factor represents. If the robot has ramming as an attack, it does not have to make the CF check.

Relative Speeds: How much damage a robot inflicts is dependant on the relative speed of the robot and the target. If the bot is chasing the target, and scores a hit; the target's speed is subtracted from the robot's ramming speed. Thus

a robot moving at 12 h/u ramming a target running away at 8 h/u could only generate 4 h/u of ramming speed. If the target happens to be travelling in the opposite direction of the bot; the target's speed is added to the bot's ramming speed. If the same robot and target described previously were to meet head on, the robot's ramming speed would be considered 20 h/u. A robot ramming at 10 h/u with a blunt flat would inflict 4d4 HPS damage. A robot ramming with a sharp protuberance at 21 h/u would inflict 8d10 HPS damage.

Tangential hits and their resultant relative velocities are left to be calculated by the most pure of purists. Often it won't be worth even calculating the relative velocities. Don't make any more work than is necessary. If relative robot speeds are slowing down the flow of combat too much, eliminate them. Don't use anything that isn't fun to play with. **EXP** combat is supposed to be fun, and fast, and not a chore.

Relative Wates: Not only does relative speed affect ramming, relative wate is also an important factor. If a robot has a greater wate than its target, it will inflict additional damage. If the target has a greater wate than the ramming robot, the target will take less damage. The damage factor is calculated by dividing the wate of the robot by the wate of the target. This damage factor only applies to robotic ramming, and not to any other robotic attack.

RAMMING DAMAGE FACTOR:
WATE ROBOT / WATE TARGET

After damage for the ram is rolled, the HPS damage is multiplied by the ramming damage factor. If a 120 kg robot rammed a 40 kg target for 22 HPS of damage it would inflict triple damage, or 66 HPS. If a 40 kg robot were to ram a 120 kg target for 24 HPS of damage, the bot would inflict 1/3 damage, or 8 HPS. The damage factor cannot exceed 4, or be less than 1/4.

Robotic Armour Rating

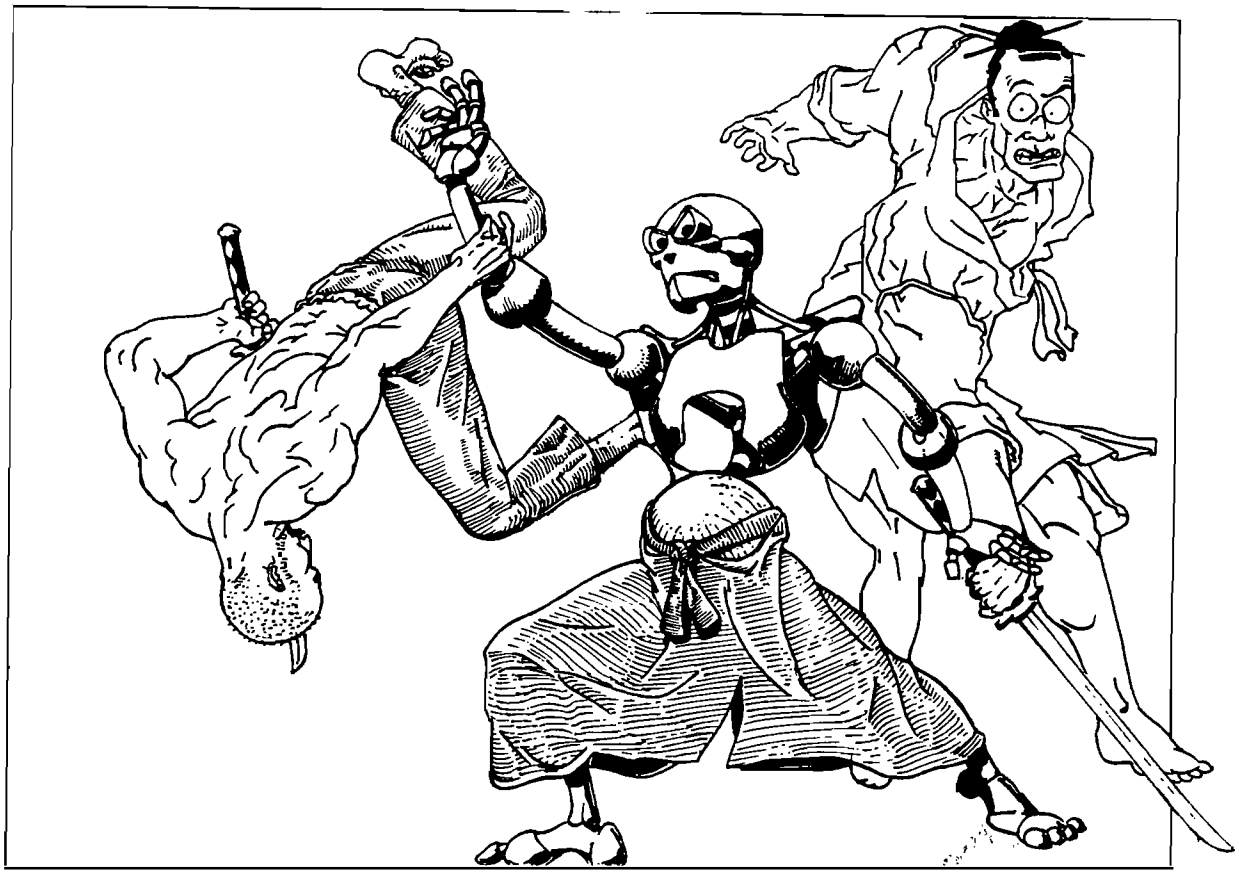
Making physical contact with a robot is fairly easy, but penetrating their metallic hides can prove difficult. This difficulty is only reflected in their armour rating, and a hit is a hit if the attacker has rolled over the robot's AR. Robots are given a base AR (armour rating) when they are manufactured, and cannot increase it with DEX bonuses. A robot's AR is usually 700. No part of a bot is any more vulnerable than any other, and attackers cannot pick parts to damage, like sensors or treads. The location and effect of damage is explained under Damaging Robots.

Damaging Robots

Damage to robots poses an interesting dilemma. They can take more damage than any other persona type, and gain experience (become more insane) at the same time. Robots take double damage from concussion and force attacks (bomb blasts, solid blows), and triple damage from corrosive and electrical attacks. Robots are damaged the same way as any other persona is: if a hit is scored it means HPS are subtracted from the robot's HPS total.

Many of the robot types seem to have enormous HPS totals. This is because they need them. Many attacks, such as electrical, and disintegrations do triple damage, and robots cannot repair HPS like other personas. When a robot is hit, any damage it takes is subtracted from its HPS total. Damage to a robot is the same as damage to any other persona. A punch does no less damage to a robot than it does to any other biological life form. The HPS still represents a universal value. This means that a robot will quickly lose HPS, but will be unable to heal itself.

Zero Hit Points: A major difference between robot and other personas is that robots do not expire upon reaching zero HPS. When a robot dips below zero HPS, it is damaged, not dead. Some random part of the bot has been eroded by some degree. This erosion is represented by a drop in the robot's attributes, including the HPS total.



Regardless of how the robot was damaged the system that is damaged is randomly determined. This could roughly be considered the hit location of the damage taken. An attacker could specifically damage a bot's sensors or power plant without ever aiming for any particular part. Each time the robot is reduced to zero HPs another part is damaged. Robotic death, the fatal malfunction, occurs whenever any of a robot's attributes, or its HPs max, is reduced to zero.

Hit Points Maximum Losses: When a robot's HPs total does drop below zero the robot has malfunctioned. Damaging a robot reduces its HPs max by ten percent, and randomly reduces another attribute. The bot is then returned to full HPs max, less the ten percent. For example, a bot with a total 110 HPs drops below zero. The bot returns to the new HPs maximum—which is less 10% of the previous one—in this case, 99 hit points. This new hit point total is now the bot's HPs maximum. If this robot were to accumulate more than 99 HPs in damage, it would be damaged, and its new HPs max would be 89. This process of diminishing returns is undergone each time the bot reaches zero HPs. So the robot's HPs max would continue to decline 80, 72, 57 etc. until it reaches zero HPs max, where it is destroyed.

The easiest way to calculate this is to multiply robot's present HPs max by 0.90 and round the result **down**. *Always* round the result down.

Robots may now seem indestructible. They are tough, compared to organic personas, but they are far from indestructible. Usually, long before the robot's HPs max reaches 0, the bot will suffer a

fatal malfunction. It is important to note that bots cannot heal any damage that they take, and they slowly, or quickly, fall apart and break down, until their sentience is no longer supported by their machinery.

Attribute Losses: In addition to losing 10% of its HPS max, the bot will also have some system malfunction. Depending on which system malfunctions one of the robot's attributes will be reduced. When ever any of these attributes is reduced to zero the robot is irrevocably destroyed. The robot part damaged is determined randomly on Table 31.3, *Robotic System Malfunction*. And the extent of damage is determined on Table 31.4, *Robotic Malfunction Severity*. The Robotic Malfunction Severity is rolled for each attribute that is damaged when the robot's HPS drop below zero.

A bot has been rendered inoperative when its maximum HPS are less than one, or when any attribute is less than one.

Robot Decay Table: The first question that any self-respecting referee will ask is how in the hell does one destroy a robot without drastically reducing playability. If the players and referee gain particular enjoyment out of destroying robots then then tables may not present any problem, but when speed is preferred, a **Robotic Decay Table** is recommended.

The Robot Decay Table is prepared by the referee before the robot enters combat. The table lists what happens to the robot as it accumulates HPS. The referee's tally of how much damage the robot has taken is listed as TTL (total damage), and the corresponding attribute ef-fects are on the same line. In the given ex-ample, if the bot has taken 45 HPS of damage, it would have reduced its AWE, DEX, INT, PSTR and HPS max.

These attribute reductions were done by damaging the robot's locomotion system, and brain. If the robot's total damage exceeds 99, then it is destroyed by a fatal malfunction of its AWE. Using a robot decay table allows the referee to have things like drops in wate allowance, and reductions in movement rate prepared for combat. It is generally not necessary for the referee to alter a robot's combat table as it decays, but ideally that could be done too.

Controlling Robots

Robots are machines and their free will is an anomaly of their circuitry, and damaged artificial intelligence. They were initially designed to be completely under the control of the race that had them manufactured, and often personas will try and restore this robot's previous servitude. There is nothing that indicates that a member of the robot's manufacturing race will be able to order around an insane robot. These robots are free willed, and mere verbal ordering would be no more successful than it would be with other personas.

Loss of Control: There are special conditions where a robot may involuntarily revert to its mindless nature. All of these conditions depend on the control factor of the robot, and the nature of the task undertaken. Whenever a robot voluntarily does a task that its robot type is designed to do then it may lapse into a state where it is again simply a mindless machine. For example, a janitorial bot would have to make a control factor roll if it were to clean up a messy room. If the player were to fail the CF check then her robot would be out of control. Control factor fits are described in chapter 5 under Control Factor.

Aggressive Overrides: There are other ways that robots can be taken over, these are robotic over-rides and priority commands. Robotic over-rides are mechanisms that can reprogram a robot, changing its goals and altering its ownership. The effectiveness of the over-ride attempt is determined mostly by the skill of the user. A robot's only defence against a robotic over-ride is its control factor. Robotic over rides are artifacts and are found in chapter 48, Miscellaneous Equipment.

Priority Commands: Priority commands are specially worded orders that can immobilize the robot by creating logical dilemmas within its reasoning circuitry. They are like combat within the robot's circuitry. Priority commands are great opportunities for role-playing between the expedition and referee personas. The higher the

robot's control factor the more difficult it is for a priority command to be successful. Referees will often have priority commands prepared for their robot personas, and little clues can be given to the expedition to give them a chance to avoid confrontation with a robot.

Mechanics are the only class that can regularly phrase priority commands to cause robots logical difficulties. The DD of such a maneuver is equal to the robot's CF divided by 5, plus a random factor of 0 to 9. The robot will suffer debilitating effects for the length of time 1 to 100 units in length. Priority commands may cause the robot to move at half, not use a certain weapon, forget how to open doors, or only remember how to turn left. The effect of the priority command will somehow disable the robot but not completely put it out of commission.

Robotic Over-ride: This is a mechanically supported effort to take control of the robot. This can be done by any persona that has the right equipment, but it will be most effective when done by a mechanic. The equipment for attempting a robotic over-ride is found in chapter 48, Miscellaneous Equipment. If the mechanic is attempting a robotic over-ride based on a series of priority commands the DD of the maneuver will be equal to the robots control factor divided by 2, plus a 0 to 9 random factor.

III

Table 31.1: Robotic Combat Table

	BP	BNP	MR	DA
A	5 x DEX + 5 x PSTR	Zero	None	Add PSTR
B	5 x AWE+ 5 x INT	Zero	None	Add 1/2 PSTR
C	5 x DEX + 5 x INT	Zero	None	Zero

Table 31.2: Robotic Ramming

DIE ROLL	SURFACE DESCRIPTION	AMOUNT OF DAMAGE
01-45	Blunt flat	d4 + d4 per 3 h/u
46-75	Blunt protuberance	d6 + d6 per 3 h/u
76-90	Edge	d8 + d8 per 3 h/u
91-99	Sharp protuberance	d10 + d10 per 3 h/u
00	Other	

Table 31.3: Robotic System Malfunction

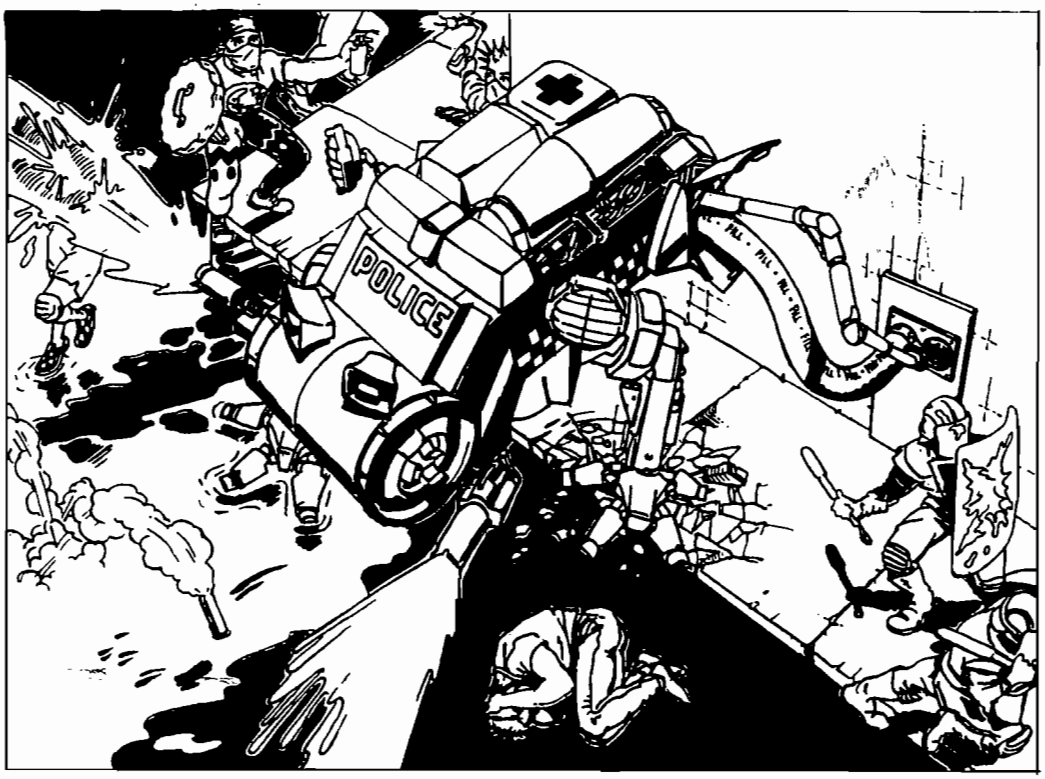
DIE ROLL	DAMAGED SYSTEM	ATTRIBUTE(S) REDUCED
01-15	Articulations	DEX, AWE
16-25	Brain	INT, add d3 to CF
26-40	Control unit	All attributes; d2-1 to CF
41-55	Locomotion	DEX, PSTR
56-69	Peripheral	Lose an attack, defence, ability or sensor
46-75	Power plant	PSTR, CON, lose 1 month storage
76-99	Sensors	AWE, INT
00	Other/choose	

Table 31.4: Robotic Malfunction Severity

DIE ROLL(d6)	DAMAGE SEVERITY	ATTRIBUTE REDUCTION
1-5	Severe	1 point
6	Critical	2 points

Table 31.5: Decay Table for a Diagnostic Medical Bot (I)

AWE	CHA	CON (I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
9	11	8	21	18	0	12	16		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
9	11	8	21	18	0	12	16	—	16
9	11	8	19	18	0	11	14	Locomotion	30
9	11	8	19	17	0	11	12	Brain	42
7	11	8	19	16	0	11	10	Sensors	52
6	10	7	18	15	0	9	9	Control unit	61
6	10	7	17	15	0	8	7	Locomotion	69
5	10	7	15	15	0	8	7	Articulation	76
4	10	7	15	13	0	8	6	Sensors	82
3	10	7	15	12	0	8	5	Sensors	87
3	10	7	14	12	0	7	4	Locomotion	92
1	10	7	14	11	0	7	3	Sensors	96
1	10	7	14	11	0	7	2	Peripheral	98
0			13				1	Articulation	99




NELSON

Chapter 32
Alien Combat

Aliens are non-anthropomorphic life forms. They are the blobs, the 5 legged scuttlers, and the ferocious amphibious snake elephants of **EXP**. Aliens will find that they have to fight a lot. Whether it is referee aliens slugging it out with xenophobic anthropomorphs, or some indigenous persona making a last ditch effort to escape her place in the food chain, the referee will find that aliens spend a lot of time in combat. Alien combat is essentially no different than any other persona combat. The important elements of combat are covered in chapters 26 and 27. This brief discussion about alien combat is to highlight the similarities and differences that alien and anthropomorph personas have in combat.

Combat Table

The alien combat table is much simpler than the one for anthropomorph personas. Aliens which have classes should use the regular combat table that is described in chapter 9, Combat Tables. The combat table here is for the alien's natural attack type. If the alien only has a type A, type B, or type C natural attack then the combat table need only include those attack types. Educated, tool using aliens should use the combat table in chapter 9.

The combat table for alien natural attacks is very brief. There is no bonus non-proficient (BNP) column, because an alien can't be unskilled with its own attack. There is also no damage adjustment (DA) because the damage inflicted by natural attacks is already moderated by PSTR. For example, an alien should not get a PSTR bonus on a Type A natural attack. This only applies to natural attacks, and tool using aliens would benefit from the DA as would any other persona using the tactical combat table.

Type A: Thrusting and striking weapons for aliens include their naturally endowed thrusting and striking attacks (bite, punch, claw, beak, gore, stab, rake, slice, gouge, tear, trample). Aliens using Type A weapons are intelligent enough to warrant using a regular combat table for those weapons.

Type B: This attack type is designated for those aliens that fling objects, shoot quills, or spit in an attempt to inflict their natural damage (spit, breath, blast, arc, spray). Any alien using a Type B weapon should use the regular combat table for that weapons.

Type C: Again this is directed at those creatures with natural, powered attacks (lazers, sonics, electric arcs, radiation doses). Aliens with natural powered attacks are very rare, and extremely dangerous. They have specially evolved organs that allow them to attack naturally, but with the effects of a gun from chapter 46. The natural powered attack type will inflict the damage of, and have the attack type of the weapon rolled. Any creature using powered weapons should use a regular combat table for those weapons.

Aliens roll to hit like all other participants in combat. They wait their turn, roll the appropriate dice, and add their bonus proficient. The result must be higher than the target's armour rating before damage can be inflicted. Aliens, the same as players, also earn experience for descriptive attacks.

Damage

Aliens with natural attacks do not get PSTR damage bonuses. The damage of their attack is determined by their size, and PSTR. Since PSTR helps determine how much damage a hit will inflict, PSTR damage adjustments are not applied. Damage can only be inflicted if the alien makes a successful roll to hit, and like all other damage it is subtracted from the opponent's HPS.

Armour Rating

An alien's armour rating (AR) is dependant on its outer layer composition, internal body structure, dexterity, and natural combat skills. When an opponent attempts to hit an alien, it must penetrate the alien's armour. This is done by rolling over the AR. The better the alien's armour rating, is the harder she will be to hit. The alien's AR may be due to a combination of the factors described previously, or may be due to one outstanding feature. AR bonuses such as cover, and concealment can make an alien harder to hit, whereas to hit bonuses such as flanking can make an alien easier to hit.

Hit Points

Alien hit points, like all other participants in combat, are lost whenever they take damage. A HPS of damage to an alien is the same as a HPS of damage to any other persona. The size of the alien makes no difference, if an attack scores a hit then it will inflict whatever damage the weapon designates. There are no damage adjustments for size, this is taken into account when the alien's hit points are generated. A hit point is a hit point, but when an alien reaches 0 HPS it is *dead*. This is the single most important difference that aliens have in combat.

Alien Zero Hit Points: Aliens are irrevocably dead once they reach 0 HPS. Unlike robots and anthropomorphs, an alien cannot survive a negative HPS total. Aliens need not make a DSS roll regardless of how much damage they take in one blow. All aliens can essentially fight to the death. The reasoning for both these peculiarities is rather simple, maybe even specious. Animals generally engage in combat to avoid getting eaten. If they're knocked unconscious they are going to get eaten anyway, so they might as well fight to the death.

Table 32.1: Alien Combat Table (Natural Attacks)

	BP	BNP	MR	DA
A	10 x PSTR	Zero	700 + BP	Zero
B	10 x INT	Zero	750 + BP	Zero
C	10 x DEX	Zero	800 + BP	Zero

Chapter 33
Initiative

Initiative is the manner in which the order of play is decided during combat. Any combat undertaken is likely to dissolve into chaos, and real combat, if no turn sequence is adopted.

Every game has some way of deciding the order of play, and combat in **EXP** is no exception. What the ref must decide is the level of realism that is desired for the initiative system. An initiative system for combat in a role-playing game must decide the order of action for the players. These systems can vary from the simple to the complex. Three levels of initiative are described in this chapter: None, theatrical, and tactical. They are arranged in order of both complexity and realism.

Winning initiative should not be confused with ambushing a persona. Initiative is an in combat roll, and the personas that have won initiative are simply acting before other personas in the same unit, and they have no element of surprise what so ever.

None

This initiative system is identical to those employed by most board games. All play is carried out in a clockwise direction around the table, room, or whatever. The play moves from one person to the next, treating the referee as another player—with more than one persona to keep track of each unit. Each player receives one move and one attack during her turn. Players must complete all actions during their turn, and cannot act until it is their turn again, or until combat is completed. The referee may get one move and one attack for every persona that she is responsible for. This is a good initiative system for players and refs still mastering the combat system. Experienced players will quickly tire of this initiative method, unless the role-playing is particularly spectacular.

Theatrical

Theatrical initiative is the most common form of initiative found in role-playing combat. The turn sequence of theatrical initiative can vary depending on the roll of a d10. One player from the expedition makes a die roll representing the entire expedition, and the ref makes a die roll representing the opponents. Initiative die rolls can also made by other groups involved in combat (police forces, or terrified civilians). Whoever has the higher d10 roll gets to move and attack first.

If the referee rolled 7 on her d10 roll, and the player rolled 3 on her d10 roll then the personas run by the referee get to act first. This is called winning the initiative, and the referee won the initiative, and all her personas get to move and attack the personas of the expedition. It is generally considered advantageous to win the initiative in this system because any targets that are killed, knocked unconscious or stunned cannot attack in that unit.

The order of action by the expedition is decided by their dexterities—the persona with the highest DEX acts first, and the persona with the lowest DEX acts last. Each persona may move/attack, attack/move, or attack while moving. The initiative roll also determines when personas can carry out non-combat activities, like changing equipment, class skills and mutations.

For example, and expedition of 3 personas (called A, B, and C) has gotten into a scuffle with 5 aliens. The expedition members have dexterities of 12, 14, and 9, respectively. The aliens all have the same dexterity value. In the first unit of combat the ref rolls 6 on her d10, and one of the expedition members rolls an 8 on her d10. The order of play is persona B, then persona A, then persona C, and then all the aliens. Aliens disabled when the personas attacked cannot attack during their turn. In the next unit the ref rolls 9, and the expedition rolls 3. The order of play is all the aliens,

persona B, persona A, and persona C. Any personas knocked unconscious or killed cannot attack during their turn. The last possible variation is if the ref and the player were to roll the same value. They would either re-roll to decide an initiative winner, or they would move around the table with everything happening on the combat field simultaneously. Simultaneous initiative indicates all attacks are simultaneous, and any paths of movement that have crossed are assumed to have collided at their intersection.

All movement and attack sequences are the same for the referee as they are for the players. The referee may play homogeneous groups (opponents with all the same DEXs) in any order that she sees fit.

There is a possibility of the player, or ref, exploitating this initiative system. The ref must watch for players that repeatedly miss their turns, and demand action after the rest of the expedition has acted. The ref's best defense against this problem is her ruthlessness. It is most likely that the player honestly missed her turn, but this is no excuse. Players should pay attention, and those players that miss their turn during combat are subject to having their persona stand hopelessly confused on the battlefield.

The players must watch for referees that overlook them. If the player feels that she has been absent mindedly overlooked she should protest loudly. If such protest is to no avail she should protest even more loudly both to the referee and the player receiving all the attention. This is certain to happen to every player at least once in a while. The players must remember that the referee has at least 10 times as many things to keep track of as they do. Gaming, especially combat, is more fun for everyone if the players (and ref) pay attention and try to help each other as much as possible.

Tactical

Tactical initiative can become very complex. This initiative system should probably not be tried by anyone who has not yet mastered the tactical combat system completely. The ref, and all players, must have total understanding of their weapons, weapon types, and the nature of movement. The benefit of this initiative system is its realism. Personas with high DEXs are at an advantage over their less dextrous opponents. Not only do they have a greater chance of acting first, they are also able to act out of order at any time.

Initiative Roll: The system already sounds complex, and it can be. All combatants must make an individual initiative roll on a d10, adding their DEX to the result. The ref can make one initiative roll for large homogeneous groups to speed up combat. All ties must be resolved with unadjusted d10 rolls: there is no simultaneous combat. So if a player were to make an initiative roll of 5 with a d10, and her persona's DEX was 12 her initiative roll would be 17. Her initiative priority would be higher than those personas with an initiative roll less than 17, and lower than those with an initiative greater than 17. Once initiative rolls have been generated for all combatants, the order of highest to lowest values must be determined. This order doesn't designate the order of action, but the order of initiative priority.

Order of Actions: The order of play starts with the persona that has the highest priority. This persona may either move and attack immediately, or wait until later in the unit to act. If the persona opts for the latter it is called 'waiting' her attack, or 'waiting' her movement. The persona can wait her movement, her attack or both. Waited actions are generally left until the end of the unit, but the waiting persona may intercede at any time and act if she feels it is necessary.

Waited Actions: This is the key difference between tactical and theatrical combat: the initiative winners are given highest priority, and not first movement. Sometimes it is beneficial to be able to move after the opposition. Knowing what they are trying to do can be very important, and the initiative priority can be used to make the opposition force their hand as well being able to beat them to the punch. Hence the idea of highest priority, as opposed to first move.

When a high priority player chooses to intercede, she must make an d20 AWE roll before



she is able to. If she fails the roll, she must wait until the next combatant is about to act. There can be some risk when one waits their combat actions.

Any persona, except the one with the lowest priority may wait their action until the end of the unit. If several personas have waited their actions, they will be forced to act from lowest to highest priority. *All personas must act before the end of the unit*, unless they have chosen not to act.

Example of Initiative: A very simple example of a unit of combat involving four personas is given here. The four personas are: persona A, an initiative (init) roll of 26; persona B, an init roll of 21; persona C, an init roll of 13; and persona D, an init roll of 9. 'Init' is shortened form of the word 'initiative,' and it is pronounced 'in-ish'.

Unit one, first run through
Persona A: waits both move and attack.
Persona B: moves and attacks; ends unit.
Persona C: waits both move and attack.
Persona D: must move and attack (lowest priority).
Unit one, second run through
Persona C: must both move and attack (lowest priority remaining).
Persona A: must both move and attack (last persona).
end of unit one, all combatants have acted.

Further Complications: The referee's personas act the same as any other persona. For example, persona C could have represented 2 robotic referee personas, and the other 3 could have been expedition personas.

Actions are also dependant on the weapon types used by the personas. Persona A could only attack while moving, with a *type C weapon*, and no persona can attack with a *type A weapon* on any target that has waited its movement.

The reader must now feel the options and restriction of the tactical initiative system closing in around playability. Never fear; the system can be run smoothly if everyone pays attention to their waited movements, and attacks. The biggest threat to administrating the tactical initiative system is distraction. A colorful description, or hot local gossip, can send the initiative order into an irretrievable tailspin. This of course will *always* happen, so the referee must be prepared to only use those parts of the tactical initiative system that suit her.

Since type A weapons cannot attack a target that has waited its movement, they are allowed to attack any target within range after all movement is completed. If more than one type A attack is being made they will proceed in order of highest to lowest priority.

Combat Options Tables: The combat option tables can help initiative organization by presenting possible actions, and potential subsequent actions that personas can make. On the first run down the priority list (from highest to lowest), the combatant's options are listed under Table 33.1, *Primary Combat Options*. This table lists the various combinations of moving and attacking, including those that involve waiting actions. For the successive actions of those personas that waited their actions, consult Table 33.2, *Secondary Combat Options*.

When a high priority persona wishes to intercede, she must make a difficult (d20) AWE roll before she is able to. If she fails the roll, she must wait until the next combatant is about to act. Thus there is some risk when one waits their combat actions.

The *Secondary Combat Options* table gives a list of further options. Remember that one persona must end her unit each run down the priority list. The remaining lowest priority combatant is forced to act each run down the list. So a combatant with a 23 init roll will be forced to act if the only other remaining combatant has a 24 init roll. Type A weapons are an exception.

Points About Attacks

A persona can only attack if her weapon is ready, loaded, strung, or whatever. No persona can engage in a non-combat action and be able to attack. Only powered weapons (type C) can be used while moving, and non-powered thrusting and striking weapons (type A) can only be used against targets that have completed their movement. No persona can exceed a weapon type's maximum number of attacks per unit regardless of how the initiative system presents things. Any waited attacks are lost if the attacker is killed, knocked unconscious, stunned, paralyzed, etc. A persona with a waited attack may attack before another combatant if she successfully makes a d20 AWE roll.

If personas with multiple attacks are in a toe to paw fire fight the referee and players may modify the initiative to compare each of the personas attacks. Some system like this may become desirable if the players feel that it is unfair that a nothing can empty her full-automatic lazer rifle before the 6th level mercenary can use any of her multiple attacks. However, it is recommended that this be treated as tough luck, and that the mercenary should be treating a persona with such a weapon with respect.

Spie martial artists can precede other personas that have beaten them in initiative. This is described in chapter 8, Classes.

Points About Movement

Personas are allowed up to their entire movement rate for the unit. Moving a fraction of one's movement rate is considered the persona's entire movement for the unit. Personas waiting their movement are also subject to attacks form powered, and non-powered missile weapons (weapon types C, and B). Waited movement is lost if the persona is killed, stunned, knocked down, etc. Personas

with waited movement may move before another combatant if a d20 AWE roll is successful.

Points of Order

All personas that have ended their unit should shut up, or leave the room. The tactical initiative system can become quit confusing, and interruptions can become fatal.

Generally psionic attacks will precede anything that involves physical action. If initiative between mental mutations must be compared then an init roll using MSTRS should be made.

Ways to avoid complications are: ensure that the lowest priority combatant moves, and attacks as soon as possible; to not allow personas to split waited attacks and moves (if a persona wants to wait for her opposition to act then she must wait both her attack and movement); and to have all the referee's personas act at once, regardless of their varied DEXS.

Winning initiative is not like surprising one's opponent, and there is no element of disguise in one's actions. If a persona has some action, ability or skill that could precede an attacker's action then it should be carried out. For instance a knite can always deflect projectile attacks, regardless of whether she won initiative or not. A spie's martial arts can precede any type A attack on her. A mutant can initiate a defensive or offensive mutation whenever she needs to, regardless of where she is in the initiative list.

Table 33.1: Primary Combat Options

COMBAT OPTIONS	REMAINING ACTIONS
1) Attack(types B, C)[a], and move.	None, end unit.
2) Attack (type C only) while moving.	None, end unit.
3) Attack (types B, C)[a], and wait move.	Move.
4) Move and wait attack.	Attack.
5) Wait both move and attack.	Move, and Attack

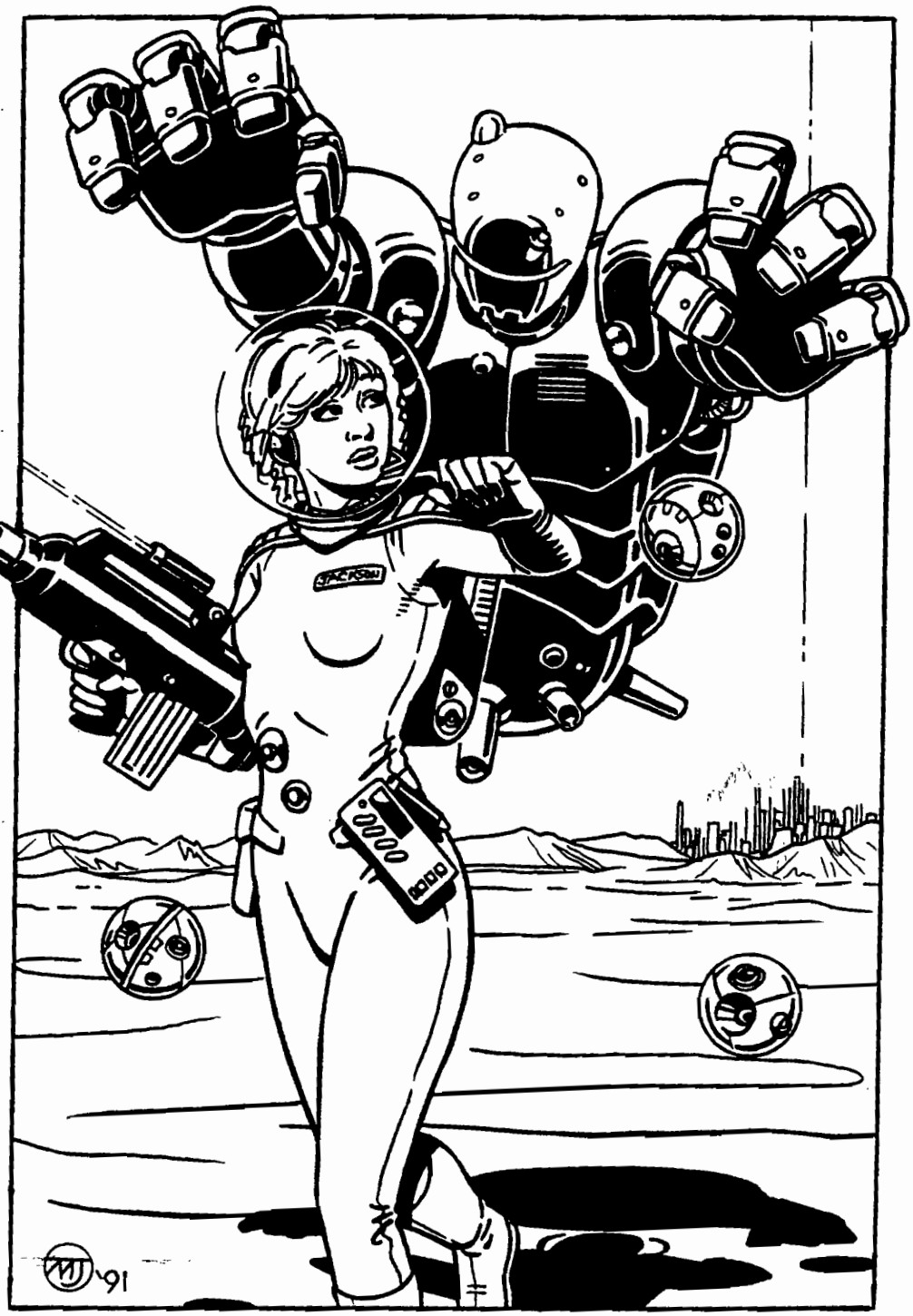
Go through priority list from highest to lowest.
Lowest priority persona must choose 1, 2, or 4.
[a]Type A weapons can attack any target finished moving.

Table 33.2: Secondary Combat Options

WAITED ACTIONS	CHOSEN OPTION	REMAINING ACTIONS
1) Move	move	None, end unit
2) Move	wait move	Move
3) Attack	Attack (B, C)[a]	end unit
4) Attack	Wait attack.	Attack
5) Move, Attack	Choose from TABLE ONE.	

Lowest priority persona must choose 1 or 2, and end unit.
[a]Type A weapons can attack any target finished moving.

III


91

Chapter 34
Ambush

The entire point of ambush is to gain surprise on an opponent, and during the confusion inflict as much damage, or get as much done as possible. There are two phases to an ambush: **ambush detection**, and **ambush effects**.

Detecting an Ambush

Ambush detection begins long before the victims are even suspicious of an ambush. It begins when the ambush itself is being prepared. Poorly devised ambushes are easier to detect because of either poor choice of location, and/or poor personnel, spoiling the ruse. The most difficult to detect ambushes are those devised by aliens with natural ambush ability.



Some anthropomroph races, felines and avarians in particular, are better at detecting ambushes than others. Detecting an ambush does not allow a counter ambush to be prepared. The ambushing expedition is considered combat ready, and waiting for the targets to appear. Hidden movement can be used to outmaneuver the ambushing expedition, but this is considered "combat movement", and not the preparation of an ambush.

The chance of personas detecting an ambush is dependant on a series of AWE rolls. The **difficulty** of the AWE roll required is determined on Table 34, *Ambush Detection*. The more complex the ambush the more difficult the AWE roll required. The order in which personas get to attempt to detect an ambush can be chosen by the referee, or decided by initiative rolls.

When the expedition gets a chance to detect the ambush can be of great importance. If only one persona detects the ambush, she may be able to divert the course of the hapless expedition—on the other hand she may only have enough time to get herself some cover. How forewarned an ambush detector is depends directly on the ambush. If the ambush is poorly organized, or involves large vehicles or large animals the personas may detect it very far away. If the ambush is fast, from the air, or has some other such feature, the personas may only have a few moments. The amount of warning given for a detected ambush is decided by the referee.

Effect of Ambush

The effect of an ambush is to create confusion within the ambushed expedition. An ambush is considered completely successful if every member of the target expedition fails their AWE roll. Members of the expedition that have made their

AWE roll cannot be surprised, but those who have failed are subject to the effects of ambush. Thus the AWE roll to detect ambush is made by every persona in the expedition, and those that make the AWE roll are not subject to ambush effects. The ambushing expedition, usually a referee's expedition, automatically enjoys one whole unit of action while those ambushed expedition members (the ones that failed their AWE roll) are standing around dumbfounded.

End of Ambush: An ambush is considered ended 3 units (including the first free unit) after it began. After 3 units, surviving members of the ambushed expedition may act as normal.

Let's consider a rather intelligent herd of indigenous life forms that have prepared an ambush for an unsuspecting expedition. They are well organized, and indigenous. So the target expedition must make an "improbable" AWE roll on a d100.

The persona with the highest chance of success is the feline, and she makes her AWE roll. The next expedition member happens to be a feline, and she also makes her AWE roll. The only benefit that the remaining personas can get is an "artificial" extra two points of AWE. This bonus is awarded because preceding personas have detected the impending ambush, and can attempt to point it out to the other personas. Regardless of the +2 bonus aiding the remaining personas, they all fail to notice the ambush.

The aliens attack the expedition. In the first unit, the only combatants that can act are the aliens and the two personas that made their AWE rolls (the two felines). Initiative is rolled normally, but those ambushed personas that failed to detect the trap cannot act. In the next unit (unit two), any of the "ambushed" personas may act if they make difficult (d20) AWE and DEX rolls. All combat is considered normal in the 3rd unit of an ambush.

If a persona takes damage, or is subject to a type A attack, she is automatically able to act in that unit—but she cannot act ahead of her attacker.

Table 34.1: Ambush Detection

AWE ROLL	DIE USED	NATURE OF AMBUSH
Easy	d10	Poorly organized
Difficult d20		Poorly org.; Indigenous life forms average org.
Tough	d50	Trained; well org. (prepared terrain)
Improbable	d100	Indigenous well organized
Bizarre	d1000	Natural ambush abilities; Mechanical ambush
Feline double AWE		
Avarians triple AWE		
+1 AWE per expedition member helping		
Plus +1 AWE per experience level		

Table 34. 2: Effects of Ambush

UNIT of AMBUSH	REQUIREMENTS FOR ACTION
1st	None allowed—unless detected ambush
2nd	AWE; DEX
3rd	End of ambush
Can act if damaged by any weapon	
Can act if attacked by type A weapon	

Chapter 35
Combat Adjustments

The combat adjustments represent variable components that occasionally affect combat. This includes things like: terrain, cover, concealment, weather conditions, and even stranger things. Combat adjustments affect the player's to hit rolls, and they are either added or subtracted from the kilodie roll. **Bonuses** are those conditions that make it easier for the persona to hit her target, and these combat adjustments are added to the player's to hit roll. **Penalties** are those conditions that make it harder for the persona to hit her target, and these combat adjustments are subtracted from the player's to hit roll.

There is no difference between the tactical and theatrical combat systems in regards to combat adjustments. The theatrical system would be expected to have less combat adjustments simply because it is a streamlined version of combat. Often modifications to to hit rolls will be absolutely essential in either system, and this is the chapter where they are outlined. As in any decent combat system: if there is some feature bogging down the system, then simply eliminate it. The referee must strike the comfortable balance between playability and realism, and if combat adjustments must suffer to ensure that everyone has fun there should be no question about dumping them.

To Hit Adjustments

To-hit adjustments have two basic forms: **bulk** adjustments and **rate** adjustments. The bulk adjustments are values simply added to the player's kilo-die roll. The rate adjustments are also added to the player's kilo-die roll, but they are dependent upon the *range of the attack.* Rate adjustments only affect Type B and C weapons. Remember that **maximum weapon ranges** are also rate adjustments.

Penalties: A persona using a ranged weapon, 10 hexes from her target, in a heavy rain (-15 per hex) would have a total rate adjustment of -150. Tactical to-hit penalties adjust the raw kilo-die roll. They do not affect the player's bonuses or maximum roll. If our soaking wet sniper were to generate an unadjusted roll of 953, it would be reduced to 803. This (803) would be the value that is compared to the player's combat table (Maximum Roll etc).

Bonuses: To hit bonuses are added to the player's "final" roll. Thus a rear attack (+90) with a club could allow the player to surpass her persona's MR (Maximum Roll) and possibly hit a previously impervious target.

Consider the following scenario of a persona (MR 763) attacking a target (AR 793) from the rear). Under normal circumstances, the persona could not hit, but the rear attack adjusts the "final" roll upwards by 90 (to 853) allowing her to score a hit. This includes all bonuses (scopes, skills, targeting computers, etc). This method of administrating to hit bonuses is blatantly biased towards the players. There is no justifiable reason for players to be excluded from combat because their persona has an inadequate MR. To hit bonuses allow the player to gain a chance to hit a target through ingenious, or experienced, tactics.

Meteorological Conditions

Most to hit adjustments described are penalties, and these mostly arise from inclement meteorological conditions. Since most referees will not bother to quantify the intensity of a rainfall the classifications are grouped so that the actual intensity can be randomly determined. Any undecided weather condition can be rolled on a die. The intensity of snowfall for example, light (1), normal (2), heavy (3), blizzard (4), can easily be determined with the roll of a d4.

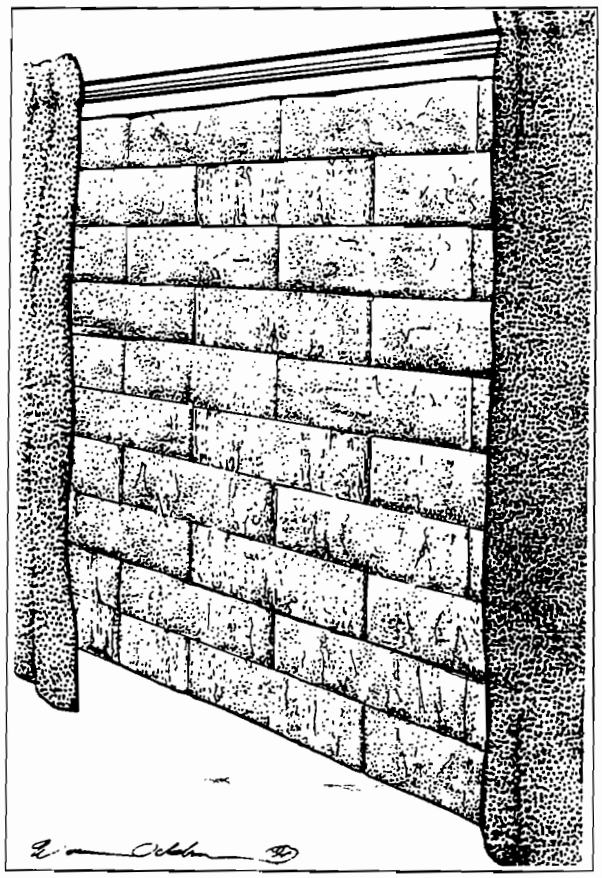
If the rate adjustment system is too cumbersome, it can be converted into a bulk penalty system. This is achieved by multiplying the intensity level of the adverse condition by 50. With

this system the penalty would be the same regardless of the range of the attack. Heavy snow (3), would be -150 to hit, moonlight darkness(2) would be -100 to hit, and dense smoke (5) would be -250 to hit.

Cover and concealment

Cover and **concealment** are to hit roll penalties that are attributed to cover taken by the target. They are different from other to hit adjustments in that cover and concealment are dependent on the actions of the target. Cover and concealment penalties apply to weapon types B and C only.

Table 35.1, *Cover/Concealment Armour Rating Adjustments* is based on the percentage of the target that is hidden by the cover/concealment. The table is based on the premise that there is some portion of the target is still visible some time during the unit. If the target is completely hidden then, and the attacker is still attacking then Firing Blind, in this chapter, should be consulted.



If a persona with an AR of 536 were enjoying 90% cover, then her effective AR would be 536 + 450 = 986. If the attacker were to switch to a weapon that was not stopped by the cover, it would turn to concealment, and her effective AR would drop to 616 (90% concealment provides +80 AR). Cover and concealment cannot give cummulative armour rating bonuses; the persona may have only one or the other.

Cover: Cover is any solid or otherwise impenetrable barrier that the persona places between her body and the attacker's weapon. Typical covers are rocks, tree trunks, hills, and corners of buildings. The more cover that a target has, the more difficult it is to hit. Cover is represented by an increase in the persona's armour rating, forcing the attacking player to roll higher than normal to score a successful hit. Cover adjustments could be represented as to hit penalties as easily as AR bonuses.

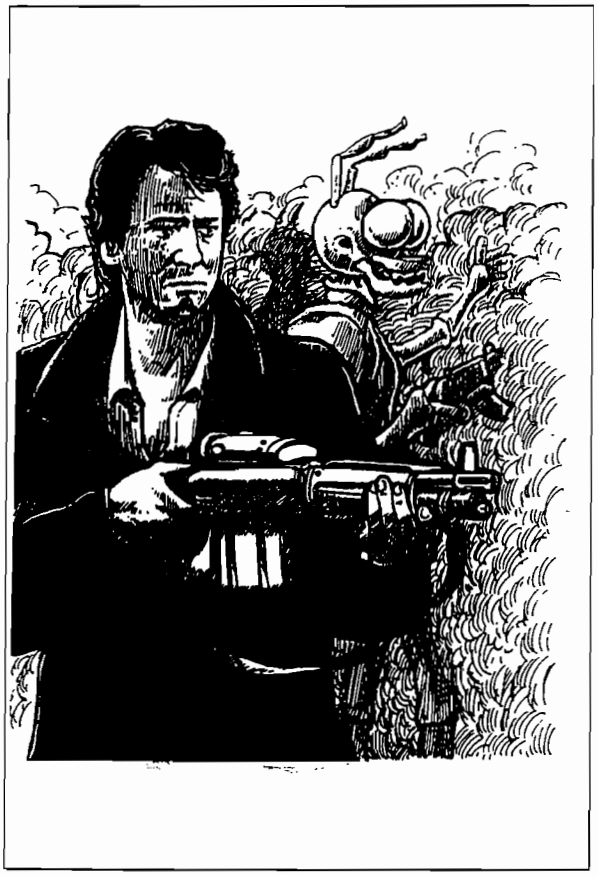
Concealment: Concealment is when a persona places some non-solid obscuring or distracting barrier between herself and the attacker's weapon. The major difference between cover and concealment is that cover will stop the attack when it comes in, acting as impenetrable armour for the persona, but concealment does not stop the opponent's attacks, and merely hides the persona from the attacker. The key difference is that cover is impenetrable to the attacking weapon, while concealment is not. Thus a persona may find her previous cover downgraded to concealment if the attacker starts using a more powerful weapon.

Firing Blind

Firing blind refers to attacks made against targets which are not visible, ones that have 100% cover or concealment. Blind firing is also employed when the attacker cannot see her target due to smoke, blindness, invisibility, tear gas, etc. Firing blind is based on the principle that before the attacker can

even try her to hit roll, she must first make a percentage roll to determine whether her attack will even warrant one. The chance of getting a to hit roll depends on the target's size, and what information the attacker has about it.

If the attacker knows the target is beyond a certain wall, can hear footsteps above, or if the target is just plain noisy, each attack has a percentage chance of warranting a roll to hit. This means that if a persona can hear an alien crunching through the bush outside her tent, she may fire a burst of automatic gunfire through the tent wall. The ref, knowing the alien's size (say, Large), would give each burst a 16% chance to be near enough to allow the player a to hit roll. If the roll is successful, the player may roll kilo-dice to make her regular to hit roll against the alien's AR.



This system is identical for type A, B and C weapons. The referee must remember that a target with complete cover still cannot be hit; weapon ranges still apply; and attacks that do not even get a chance to hit still cost the persona ammunition. Grenades, aerosols and bombs damage everything in their area of effect and so exact aim may not be necessary (see chapter 30, Grenades and Aerosol combat).

Range Adjustments

The range is the distance that the target is from the attacker. It is determined by either a subjective estimate from the ref (such as in the theatrical combat system), table top measurement, or a count of the number of hexes from the attacker to the target (such as in the tactical combat system). When counting hexes, the first hex is the one immediately in front of the attacker, and the last hex is the one containing the target. Thus a target on an adjacent hex would be one hex away.

There are essentially no range penalties unless the target is further away than the maximum range of the weapon. The maximum range of a weapon is determined by its construction. Type A weapons (clubs, swords, etc) are virtually useless when the opponent is out of reach. Type B, and C weapons lose accuracy beyond a certain distance. The tactical combat system has a rate effect that makes weapons cumulatively less accurate for each hex beyond their efficient range.

The **Range** of type B, and C weapons indicate the number of hexes the target can be from the attacker before penalties are issued. If the target of a throwing axe is within 14 hexes there is no range penalty. The **Decay** (-300 for the axe) of a weapon indicates how inaccurate the attack is once it is beyond the weapon's effective range. The **Decay** is subtracted from the roll to hit for every hex beyond the weapon's range. So if the axe attack just mentioned were 16 hexes from its target the to hit penalty would be -600. The farther the effective range of the weapon, the greater its **Range**, and the lower its **Decay**. If the target is within the weapon's range then there is no penalty

to speak of. There are no bonuses awarded for close range combat.

Type A weapons can be used within the same hex as the attacker, and can reach out into any adjacent hex. Thus any persona passing within one hex of an opponent wielding a Type A weapon could be subject to an attack. The referee may limit very long weapons (such as double handed swords, morning stars, and large flails) to use outside of the attacker's hex, and on occasion perhaps within a two hex radius of attack (halberds and pole arms). Combatants using very short weapons may find themselves limited to in hex combat. More information about type A weapons can be found in chapter 28, Weapons.

Type B weapons cannot be used within the same hex as the attacker. Their efficient range is listed on the *Type B Weapon Data* table, in chapter 28. In the tactical combat system, this is the number of hexes free of decay penalties. If a player wanted to hit a target that was 16 hexes away, with an axe, she would have a -600 penalty. Note that several weapons which are not Type B weapons have given ranges on the table. A more in depth discussion of type B weapon ranges is found in chapter 28.

Type C weapons include powered weapons, those which do not require physical action to inflict damage. Any rifle, lazer, crossbow, or bizarre energy weapon is included in this category. Type C weapons have no minimum range, and their ranges are much longer than type B weapons, and their decays are much lower. Guns are artifacts and are detailed in chapter 46, Guns.

Adjustments Due To Movement

To-hit adjustments based on movement apply only when the attacker and target have a difference in movement greater than 12 h/u. Any attacks made at differential velocities above 12 h/u are penalized at the rate of -10 for each differential h/u. A persona firing on a creature flying 15 h/u faster than her would be penalized -150 on her roll to-hit. Likewise, a persona attacking a stationary target from a vehicle moving 22 h/u (80 km/h) would have a -220 to hit penalty. Robots and aliens that naturally attack at speeds where the velocity difference is greater than 12 h/u are not affected by this penalty if they are engaged in what could be considered a normal combat situation.for that persona.

Movement combat adjustments can become very cumbersome to calculate if the terrain is in any way varied. The most efficient system is to allow movement to proceed essentially unhindered until combat becomes touch and go, and then apply those movement adjustments that seem necessary.

Crawling: A persona can crawl at 1/4 her movement rate. A persona cannot act while crawling, however crawling does offer protection from type B, and C attacks. Crawling accounts as 50% cover from ranged attacks, this is a bonus of +125 on the crawler's AR. If a type A attack is launched against a crawling target, the attack will earn a to hit bonus of +165 (considered prone).

Crouching: A persona can move in a crouched position at 3/4 her present movement rate. Crouching personas can act normally except that type A weapons cannot be used, type B weapons have a -200 to hit penalty, and type C weapons have a -75 to hit penalty. Crouching is generally used for cover from type B and C ranged attacks. Crouching offers 33% cover, which converts to an AR bonus of +80.

Rolling: Personas can roll at 1 h/u. A persona who is encumbered can only roll by completing successive difficult (d20) PSTR rolls. An encumbered persona cannot act while rolling, whereas an unencumbered persona can attack with a type C weapon at -210 to hit. It also should be noted that some substances cannot be rolled through.

Climbing: Any target engaged in careful vertical climbing is considered a prone target, and the to hit bonus is +666 to hit. There are several modes of frantic combat climbing that are not near as efficient as regular climbing, but offer better cover. These are discussed in chapter 12, Time and Movement. If the target is free climbing, climbing a rope, or climbing a ladder then there is a +165 to hit roll bonus.

Dekes and Dodges: Players will often attempt to have their personas dodge, deke or avoid particular attacks. The referee's interpretation of this is entirely personal. Mercenaries can bolster their armour rating by carrying out such maneuvers; but other classes are not combat trained, and therefore cannot dodge attacks. It is assumed that they will be taking every reasonable action that will keep themselves from getting hit. If they don't want to engage in combat then they should run away.

Non-moving Attacks (Prone): Prone is an immobile, tactically-minded, face down position. Generally the persona is restricted to attacking with Type C weapons, but she is awarded 90% concealment from type C attacks. Seated, squatting or reclining personas can attack normally with all type C weapons, but will suffer a -100 to hit penalty with type A and B weapons.

Further Points: The to hit roll adjustments listed should cover any eventuality that the expedition may encounter. There is, of course, always the exception. This is when the ref must improvise, and create her own to hit adjustments. This should not be done haphazardly. The emotion of the moment will always affect the final decision. Before announcing a bizarre to hit adjustment, ask yourself why?, and be prepared to defend it. Once the decision is made, it is final. No roll can be re-rolled, and the ref must be prepared to live with that decision for all eternity.

Essay: Combat Complexities

No matter how well prepared the referee is for combat, and no matter how conservative the players are acting, there will always be situations that are not covered by the combat system being used. This is when the ref's second most important skill (next to role-playing)—improvisation—is put to the test. The referee must be able to come up with some dice and figure representation of what the persona is up to. Often a player will attempt something truly absurd—"I'll push the warbot, yes the two tonne one, off the ramp". Occasionally, they will attempt to do too much in one unit—"Okay, I throw two grenades in each door, change to my rifle, check for radiation, tell Mikilich about the secret code, while calling in the air strike".

The first step in improvising combat situations is to determine if the planned course of action is either absurd or excessive. Absurd actions can be patiently explained to the player—"The Warbot is composed of what appears to be hull metal; its massive tracks are shaking the sagging ferrocrete ramp, tearing out great chunks of the indestructible stuff and rotating its steaming energy cannon towards you". If such a picture is insufficient to deter the foolish persona, then let her face the consequences of his potentially lethal action. There is less fun to be had with the player who has no concept of the two-second playing unit. They must simply be told that all they can reasonably expect to do in one unit is throw one grenade.

These are the simplest complexities that the referee will have to face. The seemingly endless array of bizarre things players will want their personas to do may not be so bizarre at all. The ref must be sure that she is not merely dismissing trickier (and often very clever) maneuvers to avoid having to improvise rules. Many players are better than the ref at combat and she must swallow her pride and improvise for anything she is not ready for.

Often the ref will have difficulty deciding how to simulate what the player wants to do. At this point she should not be afraid to call on her third most important resource (next to role-playing and improvising)—the players. Ask the player to clarify exactly what she wants to do; it may be covered by one of the combat complexities given in this text. Ask other players if they understand the situation; they may have tried something similar in some other campaign. Hopefully this will not have to be done often, because it can interrupt the flow of the game.

The action should fit into one of three categories: to-hit adjustments, AR adjustments and movement, or class skills. These are the categories for the combat complexities listed in this book. The ref must determine: how difficult the action is, what stats apply for attribute rolls, what skills apply, and what external factors can affect the action.

III

Table 35.1: Cover / Concealment Armour Rating Adjustment

PERCENT HIDDEN	COVER BONUS	CONCEAL BONUS	COVER DESCRIPTION
90	450	80	Looking through slit, crack
75	220	60	Looking around corner, over hill
66	175	40	Firing pistol, using binox, around corner
50	125	20	Firing rifle around corner
33	80	—	Type A or B weapons around corner

Table 35.2: Percent-Chance-To-Have-A-Chance-To-Roll-To-Hit-Dependant-On-Relative-Size-Of-Target-If-Concealed-So-Not-Visible

SIZE	T	S	M	L	G
Chance (%)	2	4	8	16	32

Table 35.3; Rain To Hit Adjustments

DEGREE OF RAIN (d4)	PENALTY per HEX
Light (1)	-03
normal (2)	-08
heavy (3)	-15
monsoon (4)	-22

Table 35.4: Size To Hit Adjustments

TARGET SIZE	TO HIT ADJUSTMENT
Tiny	-70
Small	-45
Medium	—
Large	+85
Gigantic	+115

Applies to weapon types A, B, and C

Table 35.5: Flanking To Hit Adjustments

DESCRIPTION OF FLANKING	TO HIT ADJUSTMENT
Rear attack	+90
From above	+45
None shield flank	+65
Prone target	+165
Immobilized target	+666

Type A weapons only.

Table 35.6: Darkness To Hit Adjustments

DEGREE OF DARKNESS (d4)	PENALTY per hex
Twilight (1)	-10
moonlight (2)	-20
starlight (3)	-35
void (4)	-40

Table 35.7: Snow To Hit Adjustments

DEGREE OF SNOW (d4)	PENALTY per HEX
light (1)	-03
normal (2)	-12
heavy (3)	-19
blizzard (4)	-26

Table 35.8: Hail To Hit Adjustments

DEGREE OF HAIL	PENALTY per HEX
Light (1)	-06
Heavy (2)	-15

Table 35.9: Sandstorm To Hit Adjustments

DEGREE OF STORM (d4)	PENALTY per HEX
Light (1)	-29
normal (2)	-39
heavy (3)	-49
blizzard (4)	-69

Table 35.10: Wind To Hit Adjustments

DEGREE OF WIND (d4)	PENALTY per HEX
Normal (1)	—
Strong (2)	-15
Fierce (3)	-30
Gale (4)	-45

Table 35.11: Fog, Smoke To Hit Adjustments

DEGREE OF FOG, SMOKE (D6)	PENALTY per HEX
trace (1)	-02
thin (2)	-05
normal (3)	-15
thick (4)	-60
dense (5)	-115
opaque (6)	-230

Table 35.12: Hi Gravity To Hit Adjustments

ENCUMBRANCE LEVEL	TO HIT PENALTY
Free	-50
Unencumbered	-100
Encumbered	-200
Over encumbered	-300
Lift only	Lift only

III

Chapter 36
Hit Locations

Hit location charts *can* be haphazardly used to determine the location of damage from a combat hit. In actuality the hit location table is more suitable for determining erogenous zones than it is for determining hit locations. It is accepted that most weapons have to hit to do damage, and hitting means contact with some part of the target's body. Using a hit location table to determine where the target is hit is as unrealistic as it is complex.

A separate hit location table would be required for every possible position that the target could be in: leaning, kneeling, running, lying down, etc., etc. Still more tables would be required for snake-like things, spider-like things, amoeba-like things, robots, etc. Each of these body shapes would require a whole host of tables for different target positions.

The concept of being able to generate a specific hit location on any possible target would require a system even more elaborate than tactical combat; the idea is pure fantasy. Fantasy, of course, is a key aspect of role-playing games, and there definitely are instances where hit location information may be necessary. E.g., throwing a paint bomb (does it hit the eyes?); flinging a bolo at an escaping prisoner (does it tangle her legs?); or does the last ditch shot stop the evil professor before she pulls the switch? (does it hit her hand?).

The hit location charts will be used mostly as a descriptive aid. If the referee feels that she would like to add a bit of randomness to her descriptions without stopping for the detailed hit location tables, there is a Quick Roll Table provided. The quick roll table is not very accurate, and is not recommended for important hit location rolls.

Aliens and Robots

Hit location tables obviously can serve some purpose, but even the most rudimentary ones get into trouble with aliens and robots. These two types of targets have no pre-defined shapes, and may even be lacking hit location parts designated on Table 36.1, *Anthropomorph Hit Location*. Because of this, there are two tables in addition to the anthropomorph one. They are Tables 36.2 and 36.3, *Alien Hit Location*, and *Robotic Hit Location*. Instead of indicating which body part of the target received the damage, the *Alien Hit Location* table indicates what purpose the hit body part has. E.g., if an alien is hit in the locomotion, it has been hit on whatever body part was designated for locomotion (fins, legs, wings, etc.).

The *Robotic Hit Location* table is offered only as a descriptive aid. Robots have a very unique way of taking damage, and regardless of where the robotic target is hit, the Robotic Damage table in chapter 31 will determine where the target has been damaged. The attack may hit the robot's locomotion, but it may be the engine that is damaged. Robotic damage is covered in more detail in chapters 5 and 31, Robots, and Robotic Combat.

Hit Location and To Hit Rolls

EXP's to-hit roll damage-type system is designed to be simple and fast in play. The personas can move and attack in every combat unit, and when they attack they are firing on or swinging at their target with no consideration for hit locations. Having hit locations creates an additional layer of combat bureaucracy that **EXP** probably cannot support. When a player insists on having her persona attack a target's specific body part remind her that the damage will be the same regardless of where she hits. This will usually negate the desire to hit a target in the head, or whatever.

Conditions warranting select hit locations can certainly occur. There may be a target wearing various armour types, and the persona may wish to hit one of the weaker parts. The hit location is generated on the appropriate hit location table, and the to hit roll is made against the armour type

on that body part. It is expected that if the persona is trying to hit a weakness on the target, the target is trying to defend against the weakness just as much, and the random hit location roll represents this.

If hit locations are still desired, and the players are demanding more control over what they hit then consider this simple system. The player makes a roll on the *Hit Location* table, and can then adjust the roll on the table by her BP. So roll of 241 would be the target's groin; if the attacker's BP were 141 she could adjust the hit to any body part from 100 to 382. This means that she can now choose to hit the knee, thigh, hip, groin, or abdomen. This will not affect the damage generated at all, but it may allow her *to hit the target*. If the target has no armour on her legs, but heavy armour on her stomach then she could choose to make a to hit roll against the lower AR increasing her chance to inflict damage, but *not* the amount of damage inflicted.

Hit Location and Damage

There are no damage adjustments for hit locations. All that is indicated by the hit location tables is that a majority of the damage was sustained by that body part. Hit locations are not part of the combat system. They do not affect damage in any way. A hit to the head, as determined by the hit location tables will be nothing more than a hit to the head. A HPS damage rolled will be the damage inflicted the fact that it was delivered to the head makes no difference. If the combat system has determined that 11 HPS of damage has been taken by the target then the target will take 11 HPS of damage regardless of the location of the hit. Hits that do extra damage are called critical hits, these are discussed in chapter 16, Special Rolls.

Table 36.1: Anthropomorph Hit Location (kilodie)

DIE ROLL	HIT LOCATION FRONT/BACK	FORMAT TYPE
001-030	Foot / Heel	A
031-040	Ankle	A
041-090	Shin / Calf	A
091-100	Knee	A
101-150	Thigh / Hamstrings	A
151-200	Hip	A
201-250	Groin / buttock	B
251-450	Abdomen / Lower back	B
451-650	Pectorals / Upper back	B
651-725	Hand	A
726-800	Forearm	A
801-875	Biceps	A
876-950	Shoulder	B
951-965	Neck	-
966-979	Mouth / Head	-
980-988	Eye / Head	B
989-000	Forehead	B

A is format 1-5 = Left; 6-0 Rite
B is format 1-4 = Left; 5-6 = Center; 7-0 = Rite

Table 36.2: Alien Hit Location

DIE ROLL	HIT LOCATION	PART DESCRIPTION
01-20	Articulation	Arm, tentacle, tendril.
21-35	Body mass	Torso, shell, body.
36-40	Brain center	Head, skull.
41-55	Control unit	Spine, nervous system.
56-75	Locomotion	Leg, wing, body.
76-90	Peripheral	External mutation.
91-95	Sensors	Eye, antennae, ear, antennae, tongue.
96-00	Other	

Table 36.3: Robot Hit Location

DIE ROLL	HIT LOCATION
01-15	Locomotion
16-30	Articulations
31-45	Sensors
46-60	Power plant
61-70	Brain
71-85	Control unit
86-99	Peripheral
00	Other

Quick Hit Location Table

DIE ROLL(d10)	HIT LOCATION FRONT / BACK
1	Left leg
2	Rite leg
3	Groin / Buttocks
4-5	Stomach / Lower back
6	Left arm
7	Rite arm
8-9	Chest / Upper back
0	Face / Head

III

III

Chapter 37
Non-Lethal Combat

Non-lethal combat is punch pulling, shin kicking, chair swinging, brawling. The primary goal of non-lethal combat is not to kill the opponent, but to subdue her. The attack still inflicts damage, but the primary goal of each attack is to knock the opponent unconscious. Only a fraction of the rolled damage is actually subtracted from the target's HPS, while the total damage challenges her ability to keep conscious. The result can be long drawn out, TV-like brawls, with occasional one-punch haymakers thrown in for effect.

Non-lethal combat is an optional chapter. The system is fully integrated with regular combat. It is assumed that the reader is very familiar with chapter 27, Tactical Combat System; chapter 29, Armour Rating; and Damage System Shock (DSS), found under CON in chapter 3, Attributes.

Non-Lethal Combat Restrictions

Non-lethal combat can only be engaged in with fists or blunt type A weapons. Only anthropomorphs, and intelligent aliens, can be affected by non-lethal combat simply because they can grasp the idea of surrender. Indigenous aliens only fight to protect their own life, and always fight to the death. Such aliens cannot be knocked unconscious and they are usually impossible to subdue. Robots cannot be knocked unconscious, and have no concept of pain (except possibly androids). Therefore robots are unaffected by non-lethal combat.

To Hit Rolls

Non-lethal combat is no different from regular combat. Armour rating works the same, to hit rolls must be made, and the attacker's BNP is used if there is no skill (brawling, martial arts) present. The key difference is in how the damage is delivered. Attackers using non-lethal combat are not going to eye gouge, throat punch, or break limbs. They attack non-lethal, but painful, body locations. Because non-lethal combat only differs from lethal personal combat in how the attack is delivered both systems can be easily integrated into the same fight. To hit rolls are identical, and do not affect the calculation of damage. A persona attacking with a fist or foot (d4-2) would still add her DA to the type A attack.

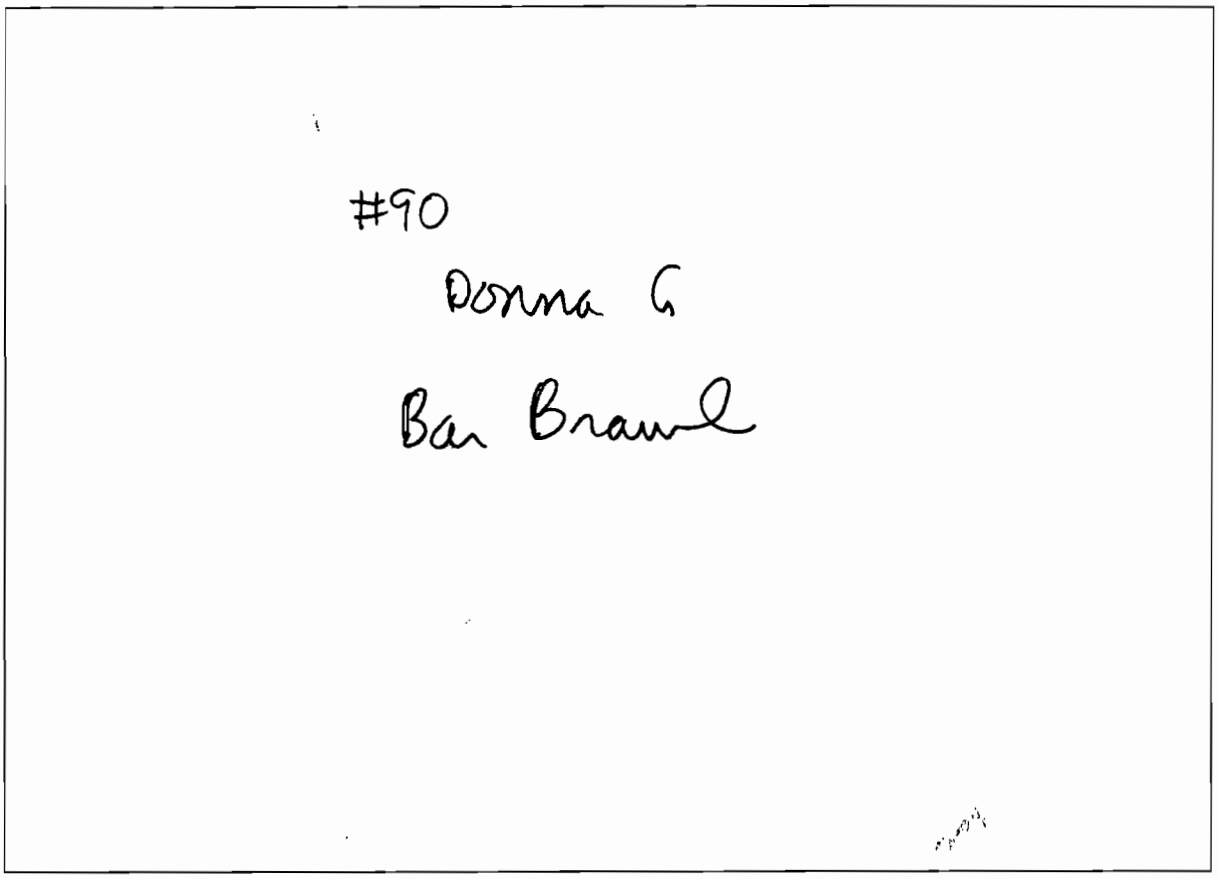
Damage

The difference between lethal personal combat damage and non-lethal damage is how the damage is subtracted from the target's HPS total. In non-lethal combat only 10% of the damage is subtracted from the target's HPS total, but the total damage is used against the target's HPS total to check for a damage system shock roll. If a DSS roll is required, the target may be knocked unconscious by the attack.

The purpose of non-lethal combat may seem senseless, yet situations will arise where lethal combat wouldn't be appropriate. Fights can arise amongst expedition members, and a slug out would definitely be better than a shoot out. Prisoners are no good dead, and non-lethal combat allows them to be taken alive. Fights in taverns, and school yards, are usually only lethal by accident.

Example Non-Lethal Combat

For example, a persona with a 10 PSTR punches a persona with a HPS total of 23. The swing lands a hit, and the attacker rolls 1 point of damage (d4-2) plus her PSTR bonus of 10 gives her 11 HPS of damage. If this were a lethal attack, her target would take 11 HPS of damage, leaving the target with 12 HPS. For whatever reasons the attack is not a lethal one, and the target will only take 1 HPS damage (10% of 11 is 1), reducing the target's HPS to 22. The 11 HPS of non-lethal damage is then compared to the persona's HPS total, and if it is



greater than half the remaining HPS total the target must make a DSS roll or be stunned. Comparing 11 HPS damage to a 22 HPS total is not greater than half the target's remaining HPS, and thus she does not have to check for DSS.

In the next unit the attacker scores another hit, and her non-lethal damage is 12 HPS. Since 12 HPS is more than half the target's remaining HPS (22 HPS), the target must make a DSS roll or be stunned. Even though the target only takes 1 HPS of damage (10% of 12 is 1), she may be knocked unconscious if she fails her DSS roll. If the target keeps making her DSS rolls she will remain conscious until all her HPS are exhausted. If the target were to make all her DSS rolls she could sustain 23 non-lethal punches before she went unconscious from having a 0 HPS total.

Accidental Lethal Attacks

Non-lethal attacks are not as easy as they seem. If the persona is very unskilled in non-lethal combat, the persona may not be capable of non-lethal blows. The persona is certainly capable of landing a punch, but she may not be skilled enough to hold it back. Personas such as this may be required to make a DEX roll on each attack to ensure that it is non-lethal. Even hardened mercenaries may accidentally use overkill if they are intoxicated, or particularly enraged.

If the attacker fails the DEX roll or the referee decides that the attack should be lethal there is a 1% chance per hit point of damage that the attack will be lethal. Thus an attack that inflicts 15 HPS of non-lethal damage will have a 15% chance of

being a lethal attack. Occasionally a persona may wish to make a lethal attack followed up with non-lethal attacks, this procedure softens up a target, and makes her easier to subdue.

Grapples, Pins and Holds

Grappling is any non-lethal hand to hand attack that is designed to hold the target in one place. Tackles, head locks, full nelsons, pins, and wrap arounds are all considered grapples. Like any attack, a grapple requires a to hit roll against the target's armour rating. The attacking player can add what ever adjustments are appropriate to her to hit roll. If she scores a hit the target is grappled.

A grappled target can try to break free, or try to attack while grappled. Weapons like daggers and pistols can be used while grappled if the grappled persona makes a DEX roll. The grappled persona can break free if she makes a PSTR roll. The PSTR roll should be adjusted depending on the PSTR of the grappler, something along the lines of a saving throw comparing PSTRS may be appropriate. If the grappled persona manages to damage her grappler then she automatically breaks free. The advantage of grappling is that other personas in the expedition can get a bonus to hit the immobilized target. Grappling personas cannot attack, but may use mental or physical mutations.

Weapon Snatching

Another situation that involves personal combat, but is not lethal is weapon snatching. Often personas will attempt to snatch an opponent's weapon, either to avoid a dangerous situation, or to use it themselves.

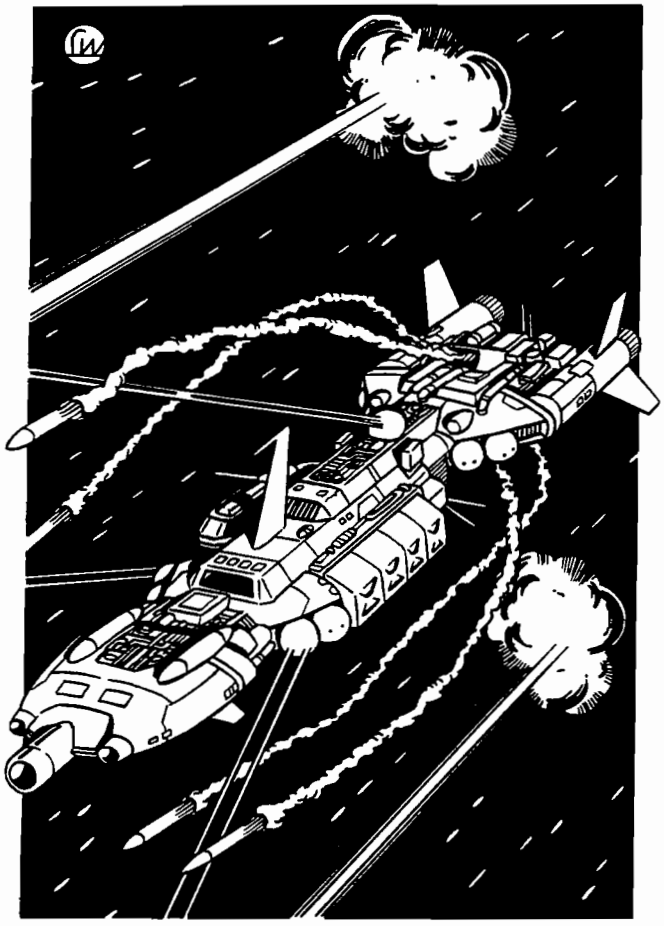
Grappling someone's weapon is impossible in many situations, and difficult in those situations where it is possible. The grab is considered a type A attack. There is no proficiency in weapon grabbing (although it could exist), so the attacker must use her BNP to grab the weapon. If she makes a successful to hit roll against the target's AR then she has grabbed the weapon. To wrestle it free she must make a PSTR roll, and the target must fail her PSTR roll. If the persona hits the weapon but cannot wrestle it free then the two personas are considered struggling for the weapon. Depending on the weapon type, and the situation the persona holding the weapon may still be able to attack.

Tripping

This is another non-lethal attack. It requires a to hit roll, using BNP, and a PSTR roll before it is successful. The target can also get an attribute roll to avoid the trip being attempted. If a persona were trying to trip a target then the target would get a DEX roll to avoid falling if the persona had scored a hit and made her PSTR roll. As always these rules are just guidelines, and the referee must be prepared to have common sense invade the rules of **EXP**. Things to consider when improvising strange combat maneuvers are size differences, risk to attacker, PSTR differences, experience levels, and movement rates.

III

Chapter 38
Spacevehicle Combat



A spacecraft is a rare and expensive piece of technology, and outer space combat is very deadly. The speeds are incredible, and the threat to organic life is total. Whenever a space-vehicle is destroyed, its contents, including personas, are destroyed also. The space-vehicle combat system found here involves small scale skirmishes in which solitary battling star-vehicles tend to wound each other into submission. There is nothing stopping a referee from subjecting her personas to battling imperial armadas, which instantly vaporize kilometer wide star-vehicles, however, expeditions are easily destroyed by a button push in such epic battles. The referee will find it safest to keep fragile expeditions on the periphery of such campaign shaking events.

Ultimately space-faring expeditions will get into combat with some other space-faring group. Such an encounter will undoubtedly be instigated by the expedition; however, they will still be upset when they find fragments of their favourite persona orbiting the local star. When space-vehicle combat does occur, the ref will find that this system only works well for small skirmishes. If you feel that the system lacks detail, because it certainly lacks realism, remember that this is a role-playing game, and not a starfleet battle game.

Before players can expect to play out an encounter of space-vehicle combat they must first be very familiar with space-vehicles. Chapter 52 is devoted entirely to generating random space-vehicles.

Combat

The procedure for space-vehicle combat is identical to that of any other combat. The space-vehicle computers make the maneuver decisions, generate ECM signals, and direct missiles. The organics onboard merely wait while the ship spins to put as much hull between its integral components, and incoming attacks. If there is some desire to decide who is attacking first then an initiative roll can be made. The roll is made by combining a d10 initiative roll with the space-vehicle's computer level. The initiative winner could attack first, or allow the opponent to go first. Space combat initiative is the same as initiative in lethal personal combat, chapter 33.

Options Per Turn: There are lots of things that each space combatant can do during each combat unit. The order of their action is listed on Table 38.1, *Space-vehicle Attack Order*. This table is mostly for the convenience of keeping track of attacks, and they are arranged in order of potential

damage to the target space-vehicle. Not all space-vehicles will have every attack listed. Initiative should be rolled for every attack. For instance one ship may get to use its grenade missiles first, while the other may get to use its artillery first.

Each round of combat is one minute in length regardless of how much is done each round. A space-vehicle turn of combat is 30 units in length.

Escape and Ranges: The ranges of space-vehicle combat are quite variable. It is expected that they will be within 10s of kilometers, which is an insignificant distance at exatmo drive speeds. Unless otherwise described any attack can be used against an engaged ship. There are no penalties for disengaging an attacking ship. Escape is immediately available to most space vehicles, and combat is more of an accepted decision for both ships involved.

Victory Conditions

The victory conditions of lethal personal combat are very simple. If the opponent is unconscious, or dead, you've won. With space-vehicles though the decision of victory is far more complicated. Starships don't die, and in combat they tend not to get vaporized into nothingness. When a spaceship has lost a battle it usually just stops, its crew and cargo are intact, but the ship ceases to engage in combat.

There are 4 victory conditions which can arise where the ship ceases to fight before the life support is destroyed: out of fuel, gravity system destroyed, exatmo drive destroyed, or loss of control of bridge. If the life support system is destroyed, the crew is dead, the computers are ruined, and the ship is useless.

Out of Fuel: Out of fuel may seem to be the least graceful way to lose a battle, but once a ship is out of fuel it can no longer maintain combat maneuvers. When a ship is out of fuel, it stops spinning, and goes hurtling off into space (or into the nearest sun), and is a sitting target for any further attacks. Loss of fuel is no threat to life support or gravity, it just indicates that there isn't enough fuel to operate the drives. When a ship is out of fuel it is subject to the desires of its opponent—automatic boarding, or automatic hits. The empty space-vehicle may not be controlled by the opposition yet, but the exatmo battle is certainly over.

Loss of Gravity: The gravity system cannot support combat movement if it is functioning at less than 30% of its full capacity. Even using the exatmo drives will be dangerous if the ship's gravity is less than 10%. If the space-vehicle cannot engage in combat movement, it is at the mercy of its opponents. The ship may move normally, and unless it can use its special drives to outrun its opponent, the spacecraft is essentially a sitting duck. Both gravity and fuel system damage can cripple a ship, but the ship isn't truly taken over until its crew no longer commands the bridge. Taking over the ship's command centers is determined by boarding, and personal combat.

Making Attacks

There are two kinds of attacks in space-vehicle combat, those that require a to hit roll, and those that have a percentage chance of success.

Any defensive rolls which may stop the attack, such as active defenses or ECM, are rolled by the defender at the same time. Specialized defences are listed in this chapter under DEFENCES.

To Hit Roll Attacks: When attacks require a to hit roll the attacker makes a kilodie roll, and attempts to roll higher than the target's armour rating. Any bonuses to hit are added to the die roll, and any defensive bonuses (ECM, etc.) are added to the armour rating of the target. This is in all respects identical to lethal personal combat in that a to hit roll higher than the target's AR damages the opponent, and a to hit roll less than the target's armour rating has no effect.

Percentage Chance Attacks: Attacks that have a percentage chance of success are rolled by the attacking player. A deci-die (d100) roll less than the percentage chance indicates that the attack was successful and has damaged the target space-vehicle. The types of attacks are detailed in this chapter under ATTACKS.

Spacevehicle Damage

When an attack is successful, either by rolling over the target ship's AR, or rolling under a designated percentage, the target ship has been damaged. Although the space-vehicles do not have HPs, the HPs rolled for the damage of the attack are important.

Whenever a ship is damaged, the attacker rolls hit location, and extent of damage. The hit location determines where the ship has been damaged; see Table 38.2, *Space-vehicle Damage Location*. The hit location is determined randomly, just like persona hit location.

Table 38.3, *Extent of Damage* indicates how severely the spaceship part was damaged. Space-vehicle weapons inflict damage in HPs and the more damage the weapon inflicts the more severe the part is damaged.

Nature of Space-vehicle Damage: Damage to a component within the interior of a ship does not necessarily mean that the hull has been punctured. Damage can be conducted directly through the hull, and power surges originating from another part of the ship can have the same effect. During combat the space ship is also constantly spinning, missiles come in from random directions, and the hit location is hardly predictable. The armour rating of the hull enlists all such properties into its value. Only when the hull itself is damaged (destroyed) are its contents exposed to decompression.

Damage to Personas: Ship to ship combat is very lethal. Players must be aware that personas can be killed at any instant during space-vehicle combat. If a hit is delivered to any part of the ship where personas are found, they can be sure to take damage. If the attack generates damage, the personas will take damage according to the following equation: DAMAGE - AR/10. If the number of hit points in damage is less than the hull's armour rating divided by ten then they will take no damage, although the ship could still be damaged. For most bomb attacks this means certain death for any of the crew. Personas are also killed if they are exposed to explosive decompression.

Assessing Damage: If the ship has no assessment program, the crew will be unaware as to the location of damage on their ship, except by word of mouth. When damaging a target ship the players cannot know what they have damaged without disengaging their ECM unit (if they have one), and setting it onto information retrieval for 1 to 3 turns.

Damage Location

Damage location for starships is very similar to hit location for combat, except that the damage location must be rolled for every attack. Before damage location can be fully understood, a certain aspect of combat movement should be emphasized, this is that the ships in combat are *spinning*.

Combat Movement: When starships go into combat they spin precariously, end over end, around and around, or any other combination necessary. The ship's computer is attempting to deflect attacks, reduce exposed surface area, and put as much hull as possible between attacks and integral components. The ship's gravity system must be properly functioning, or the occupants will certainly be killed.

The combat movement prevents attackers from aiming at specific components of the ship, and like other combat systems in **EXP** the hit location in determined randomly. When the ship is in 'combat movement' misses will have no effect, and hits will be on random locations. Use the Space-vehicle Damage Location Table to determine where a hit has landed. If a target ship is not in combat movement it is essentially a sitting duck. An attacker's successful to hit roll will be a hit on any desired component, and a miss will be a random hit. These are two victory conditions: disabled combat movement (exatmo drive), or disabled ship's gravity.

Missing Damage Locations: If the damage location roll has indicated a spacevehicle part that the ship doesn't have then the attacker rolls again. For instance if the player rolls 22, indicating damage to the ship's special drives, but the ship has no special drives then the attacker rolls again.

If the damage location is one that the attacker has already destroyed (functioning at less than 1% capacity) then the hit has landed on an ineffectual area. The exact effects of hitting certain locations is discussed under Extent of Damage.

Extent of Damage

Table 38.3, *Extent of Damage* is used to determine how badly equipment has been damaged by a successful attack. The extent of damage roll is increased by 1 percentage point for every HPs of damage. So an attack inflicting 30 HPs of damage would add 30 to its extent of damage roll. Because of this many space weapons, if not all, will destroy whatever they hit.

The extent of damage roll usually reduces the performance levels of onboard equipment, however, accuracies, control factors (bots) and cargo can be damaged also. The *Extent of Damage* table yields the severity of damage inflicted by an attack. If components are repeatedly damaged they may cease to function without being completely destroyed. A complete explanation of equipment damage in chapter 21may clear up any confusion that still exists about extent of damage.

Effect of Damage: Whenever an onboard system is damaged anything can happen. The component may be trivially damaged, where there is no reduction in efficiency, or the component may be critically damaged where there is a reduction to 30% of previous performance. If a ship with a level 6 exatmo drive were to have its exatmo drive critically damaged it would be reduced to a level 2 drive until repaired. If the drive were destroyed, it would cease to function completely, and the ship would be stranded in space.

Destroying Systems: Space vehicle equipment is considered destroyed once it is functioning at 10% of its original performance. From a practical standpoint the mechanism may become useless long before it reaches 10%. The effects of a disabled, or destroyed mechanism are detailed under 'effects of space vehicle damage' in this chapter.

Cumulative destruction: The damaging effects of successful attacks are cumulative, and a system can be destroyed over several attacks. If a device were to take major damage (60% performance), and then major damage again its effective level of function would be 36%. Critical damage (30% performance) would reduce the part to 11% of its previous performance. At this point even trivial damage (90% performance) would disable the mechanism.

Instantaneous destruction: If something is destroyed (0% previous performance) by a single attack the device is considered damaged beyond repair. The effects of instantaneous destruction are cataclysmic. A destroyed hull will explosively decompress, a destroyed drive will melt down, fuel will explode, etc. There is no chance for repair, and replacement parts will be essential.

Adjusting Extent of Damage: If the players find that this extent of damage adjustment is destroying their space vehicles too quickly.then it could be modified by the ship's AR, or a maximum damage adjustment might be applied. Regardless of what the referee uses to reduce the effects of the attack it should be done only to keep the game fun for everyone. If a rule gets in the way of having fun then change it.

Effects of Spacevehicle Damage

Hull: Damaging the hull does not reduce its AR, but does lead to a loss of atmosphere. This is the classic hull puncture. The amount of atmosphere lost will depend on the extent of damage. If the hull is at 60% efficiency there will be 60% pressure. The effects of reduced atmosphere are discussed in chapter 19, Special Terrain. Explosion decompression is when the hull is destroyed with one attack. Anything not protected from or hardened to exatmo will be destroyed. Airlocks, gantries and other hull attached things are subject to damage with this attack.

Drives, inatmo: Simply reduce the drive level of the in atmosphere drive by the percentage indicated. A ship with a destroyed inatmo drive cannot enter the atmosphere of a planet.

Drives, exatmo: A damaged exatmo drive will

have its drive level reduced by the percentage indicated. This will affect defence shields, and the ability to evade boarding. These are the ship's combat drives, and without them it cannot maintain combat spin. If the drive is destroyed this is a victory condition. The ship will be able to maintain combat spin until the drive is destroyed. If the exatmo drives are destroyed, even instantly, the ship will simply stop spinning and start floating towards the nearest star.

Drives, special: Simply reduce the drive level of the in special drive by the percentage indicated. A destroyed special drive will keep the space vehicle from making any long voyages. Space combat cannot occur during special travel, so it is unlikely that they will be damaged at that time. If the special drives are injured while traveling in the special mode, the referee can do what ever she wants.

Fuel, all drives: Damage to drive fuel means that the fuel storage has been damaged, and fuel is floating in space. The fuel level for the particular drive has been reduced by the indicated percentage. So if the inatmo fuel (10 months storage) takes major damage, then it is reduced to 6 months storage. The inatmo drive can draw fuel from the main storage tanks even if its storage is reduced to zero. If a ship has lost all its fuel from this damage format see fuel, amount below.

Fuel, amount: The space-vehicle's total fuel storage is damaged. The total amount of fuel is reduced by the indicated amount. Destruction of fuel is a victory condition as the target ship can no longer maintain its combat spin.

Fuel, consumption: Has the same effect as destroying fuel storage, but this is damage to the mechanism that distributes the fuel. The amount of fuel that the space-vehicle has access to is reduced by the designated percentage. Destroying fuel consumption is a victory condition, unless the device can be repaired.

Computer, level: The hit damaged the ship's computer, and the computer's level is reduced accordingly. This damage is not necessarily a direct hit, and it can be delivered to computer via a power surge from elsewhere on the ship.

Computer, bot control: Lose control of robots by percentage indicated. This damage could be expressed by increasing the bot's control factors by the opposite of the percentage indicated. E.g., a minor damage would give the bot a control factor of 10%. Instantly destroying bot control could send a command surge to the robots destroying them also.

Computer, software: Lose software amount indicated by percentage damage. This does not affect computer level or ECM, only extra software packages that come in addition to the ship's computer. The software packages could be reduced in effectiveness by the given percentage. Which software packages, and how many, should be randomly determined.

Cargo: Cargo storage area, cargo locks, and carried cargo are damaged by the indicated percentage. This could affect the value of cargo, the effectiveness of cargo openings, or the amount of cargo. In passenger liners this could be the passenger area.

Crew: Crew's quarters, and all crew presently within it. This is the expedition killer of space vehicle combat.

Defences, life support: Cannot be damaged unless the hull and gravity have been destroyed. If these have been destroyed the atmosphere of the entire ship will be reduced the given percentage. This will destroy the ship's computer and anything else exposed to atmosphere. See life support under DEFENCES in this chapter. Destroying life support is not considered a victory condition since gravity must be destroyed first.

Defences, gravity: Gravity cannot be damaged unless he ship's armour is destroyed. If the hull is destroyed then gravity cannot be affected. Damaging gravity is a victory condition. For further information see gravity under DEFENCES in this chapter.

Defences, armour: The armour rating of the ship is reduced by the amount indicated (cannot be less than 400). The damage involves both structural damage to the hull, and interface damage with the computer. Damaging armour does not involve depressurization, but it does involve reduced ability to avoid hits (external combat sensors, retro rockets,

deflecting surfaces). Destroyed armour is reduced to an armour rating of 400. See armour under DEFENCES in this chapter.

Defences, ECM: Electronic counter measures are reduced by the percentage indicated when damaged. Can be replaced by attack ECM.

Defences, shields: The shields are reduced by the percentage indicated, but there is no damage bonus on the extent of damage roll. For instance an extent of damage roll of 57 could not be adjusted by HPS to a higher value.

Defences, guns: This is the airlock defence gun, and it is damaged by the amount indicated on the extent of damage table.

Defences, active: The active defences will get one attempt to stop this incoming attack regardless of how much they have been used in the attacking turn. Depleted active defences cannot do this. If the defence fails then the active defences are damaged the same as any other equipment. This can be either in number of defences, or in the ability of the remaining defences to absorb attacks

Attacks, boarding: The chance of boarding is reduced by the percentage indicated. This does not affect ramming.

Attacks, ramming: The chance of ramming is reduced by the percentage indicated. This does not affect boarding.

Attacks, ECM: Electronic counter measures are reduced by the percentage indicated when damaged. Can be replaced by defensive ECM.

Attacks, grenades: Reduces the number that can be delivered per combat turn by the indicated percentage.

Attacks, bombs: Reduces the percent chance of success by amount indicated on *Extent of Damage* table. Bombs destroyed with a natural roll of 100 on the extent of damage table will explode and damage a random system within the ship.

Attacks, naval artillery: To hit bonus is reduced by the percentage indicated by the damage table. A single hit cannot destroy naval artillery. Destroyed naval artillery will have no to hit bonus until it is hit again, destroying it.

Other: If the ship has any device that it acquired through an 'other' roll will be hit by the attack, or the attacker can choose the equipment damaged.

Attacks

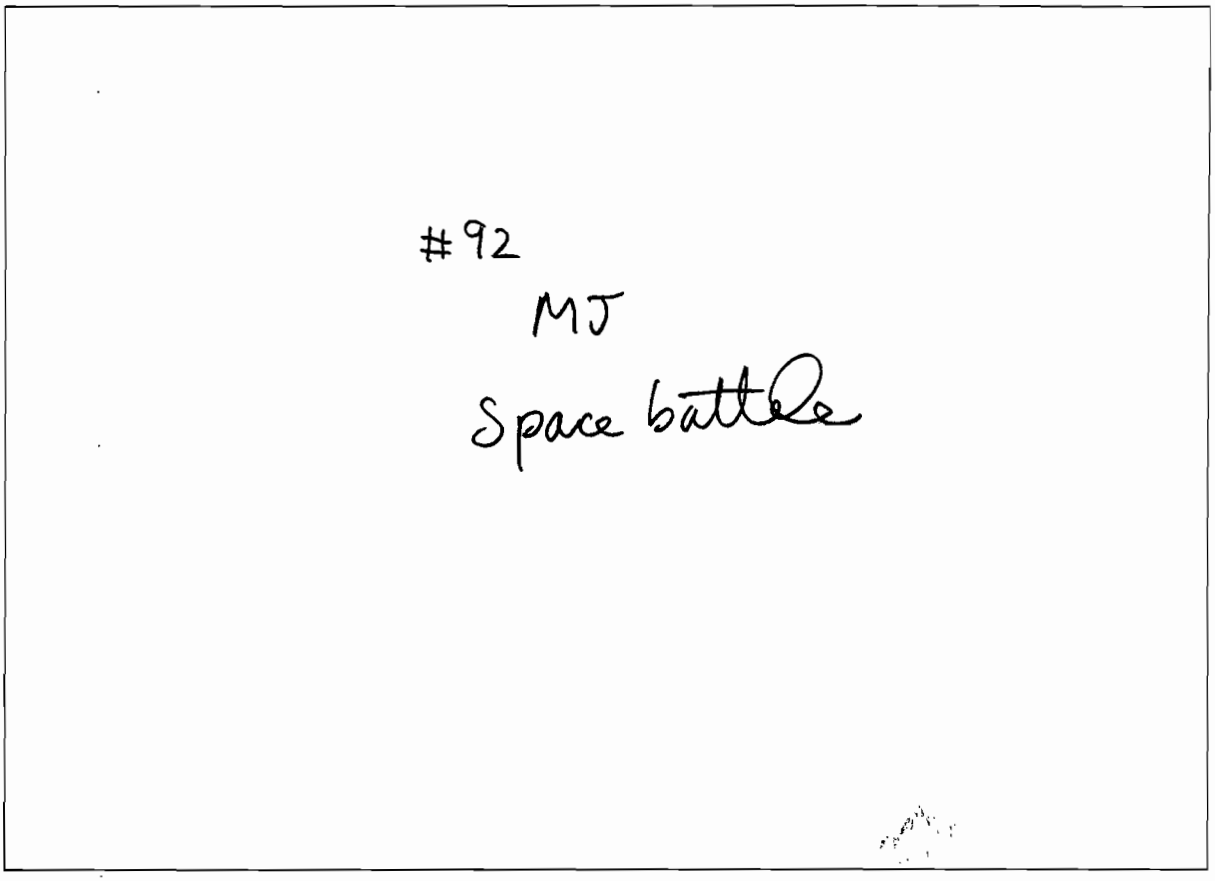
Combat just wouldn't be combat without the use of attacks. Each attack type is controlled by the ship's computer, as are most other aspects of space travel. It will become obvious that some of the attack types were designed not with realism in mind, but the with the fun of the players in mind. These unrealistic attacks are included to ensure that space-vehicle combat doesn't become a dice rolling duel between RPC micro chips.

1) Boarding: Boarding is performed identically to congenial airlock attachment, except that in combat, boarding will result in the connection of undesired airlocks. Boarding is used to connect airlocks while exatmo (exterior to atmosphere). Once connected the attacking crew will breech the airlock of the target ship and then board. This method of attack is used because it preserves hostages, cargo, and is a lot more fun.

Success: Even though boarding requires manual breaching of the airlock, and good old personal combat, the lining up of the two airlocks requires tactical maneuvering (exatmo on combat spin) by the ship's computer. There is a 4% chance per level of computer of successfully docking with another ship. Decidice are rolled against this chance by the player whose persona is the pilot. A ship may attempt to board once each turn (30 units).

Boarding Attempts
Number of attempts:
Attacker's (drive + computer) less Defender's drives
Chance for success per attempt:
4% per computer level of attacker

Evasion: The only way to avoid being boarded is to outrun your attacker. When a slower ship is being boarded by a faster ship the faster ship may attempt to board at leisure, until its target either



makes a special drive jump, or manages to get inatmo (in atmosphere). Boarding cannot be attempted while inatmo.

A slower starship trying to board a faster spaceship will only get a limited number of attempts before the faster ship uses its special drives, drops into atmosphere, or merely takes off. The number of boarding attempts the slower ship may make depends on both its computer, and its exatmo drives. The ship will get one attempt at boarding per level of exatmo drive and computer combined. This sum is reduced by one boarding attempt per level of the target ship's exatmo drives. If the target ship's exatmo drive level is higher than the sum of the attacking ship's computer and exatmo drive levels then no boarding can take place.

If a spaceship with level 4 exatmo drives, and level 3 computer, were trying to board a craft with level 3 exatmo drives the boarding ship may continue to attempt boarding for as long as it wishes. There is a 12% chance of success at each attempt.

Let's assume the same aggressive spaceship (computer 3 and exatmo drives 4) were trying to board a target spaceship with level 5 exatmo drives. Since the target ship is faster it will eventually outrun its attacker, but the combination of the attacking ship's exatmo drives, and its computers still give it a chance of boarding. According to the equation the ship would get only 2 chances (3+4-5) to board before the target ship simply outruns it.

Once boarded: If boarding is successful, combat fuel consumption must be maintained if the target ship is still attempting to dislodge the

attacker. However, combat fuel consumption is the only requirement to remain attached. Once a ship has been boarded, it cannot forcefully detach from its attacker. The only recourse that the target ship has is to continue maneuvering at combat fuel consumption, and hope that the boarding ship runs out of fuel. They would most likely give up long before that occurs.

Usually a boarded ship will be resigned to its fate, and will open the airlock to avoid damage. If the victim is being impolite, the the airlock may need to be breached. Airlock breaching is left for the referee to run with her players. It is recommended that mechanics and spies be more proficient at airlock opening than dumb old mercenaries.

2) Ramming: Ramming is very similar to boarding except that ramming has thrown all caution to the solar wind. A spacecruiser capable of ramming will have a specialized airlock which can attach to any part of the target ship's hull. Once attached the invading party may breech the hull, airlock, or whatever to gain entry into the ship.

In procedure, ramming is identical to boarding except that ramming is accompanied with lots of crunching and scraping noises. Ramming, because it requires less class and skill, is more likely to succeed. There is a 12% chance per computer level that a ramming ship will attach to a target ship. The formula for determining the number of ramming attempts is identical to that of boarding.

Ramming Attempts
Number of attempts:
Attacker's (drive + computer) less Defender's drives
Chance for success per attempt:
12% per computer level of attacker

Once attached the crew must breech the airlock, or hull of the target ship. Ramming will also damage the target ship. Each time the attacking ship rams, the target ship will receive damage to a random location. The extent of this damage roll cannot exceed major damage. This damage roll can also indicate where the attacking ship is going to breech the hull.

3) Electronic Counter Measures: ECM is the abbreviation for electronic counter-measures, which is the battle for control over the electro-magnetic spectrum. In space-vehicle combat ECM is the battle for control over electronic components. An ECM unit is capable of many defensive maneuvers, however only the offensive capacities are discussed here. Attack ECM can be used to confuse the ship's defences with false data, or to weaken the target ship by controlling its onboard systems.

ECM aiding attacks: When ECM is being used to aid its own ship's attacks it will attempt to deceive the target. This can be done by making single attacks appear as multiple attacks, altering the apparent course of incoming attacks, or by confusing the estimated time of arrival of an attack. All such falsified data will increase the chance of success of a ship's attack.

A bonus of +150 to hit per computer level is awarded when a to hit roll attack is used in conjunction with ECM. Thus a player rolling to hit for a spaceship with ECM, and a level 2 computer would get +300 on the to hit roll. ECM can also be used to increase the effectiveness of percent chance attacks. Such attacks, like boarding, are increased by +3% per computer level when used in conjunction with ECM. ECM can only aid ECM if there is more than one ECM unit on board.

ECM control: Using ECM to confuse a ship's defences is very computer controlled, and boring. When ECM is used to manipulate a ship's onboard systems, play is far more interesting because player input is required. The chance of successfully controlling another ship's systems is 8% per level of the attacking spacecraft's computer. If an attempt at control ECM should fail, it cannot be re-attempted.

At first glance control ECM may appear to be a hopeless attack, however the number of targets is virtually limitless. If an attempt to reduce drive effectiveness fails, the attacking computer can then try to alter the ship's gravity, fuel storage or even on board robots. This can be continued until

something clicks.

If control ECM is successful the targeted component is reduced in capacity. This effect will last until the targeted ship's own ECM breaks the attack ECM, the target ship uses its special drives, or the attacking ship ceases its attack. An ECM unit is completely occupied while controlling another ship's components.

Some of the most common ECM controls are described here, however, the referee should be prepared to improvise. When improvising the ref should remember that a successful ECM attack does not destroy a ship, it merely reduces a particular component's effectiveness, and increases the ship's vulnerability to other attacks.

Example Attack ECM Controls

ATTACK	EFFECT	DESCRIPTION
Computer	Drop 0-3 levels	Minimum is 1
Drives	Drop d4 levels	Minimum is 1
Fuel	Reduce d4 months access	
Gravity	Change g only	Only within normal range
Robots	Order bot about	Persona bots get a save

4) Grenades: Grenade attacks are the first of the truly lethal ship to ship weapons. The type and number of grenades is determined in chapter 52, Spacevehicles. The intent of the grenade is to explode against the hull in an attempt to damage the internal mechanisms of the ship. Grenade attacks in space-vehicle combat, unlike grenade attacks in personal combat, must penetrate the ship's armour before any damage can be inflicted. If a grenade doesn't penetrate the ship's armour it will explode harmlessly on the ship's hull.

Any persona caught on the outside of the hull, but within the area of effect of the grenade will be affected normally. The grenade attacks are not thrown by paw from the ship's airlock, they are delivered by one of two different methods: mini-missiles, or mini-mines. The two delivery systems are given the diminutive titles because their full-fledged counterparts missiles, and mines contain bombs as opposed to grenades.

Hitting with grenades: The grenade must hit the ship. A grenade has contacted the ship if a kilodie roll is 500 or higher, however the roll must be higher than the ship's armour rating to inflict damage. Grenades that only contact the ship's hull are of interest because they will damage targets caught outside the ship's hull, and they also count as damage which lowers the spaceship's defence shields.

When a grenade has penetrated the ship's armour, the attacker rolls extent of damage to determine the effectiveness of the attack, and the ref rolls the hit location. It is worth noting that starships with certain combinations of defences may be immune to grenade attacks.

Grenade missiles: Mini-missiles are the more frequent of the two delivery types. Mini-missiles are ineffective when they are fired at a fleeing spaceship whose exatmo drives are 3 or more levels higher than the exatmo drives of the attacking ship. Even though a faster ship can outrun mini-missiles they receive a chance to hit if the faster ship is trying to board or ram the missile firing ship. A ship can control 3 mini-missiles per level of computer at one time. When used inatmo the mini-missiles cannot be outrun, and they can be used against any surface or atmospheric target. Although the mini-missiles function excellently inatmo they cannot survive the hazards of entering an atmosphere.

Grenade mines: Mini-mines are grenades which are dumped in the path of starships in the hope that they will explode for damage. Grenades can be dumped in the path of a ship's orbit, dumped in the path of a pursuing ship, or jettisoned against the hull of a boarding or ramming ship. Mini-mines are inactive mini-missiles, they do not chase targets, and they can only be dumped. The mini-mines are still useful because ECM cannot affect them in any way, they move too slow to be affected by shields, and they cannot be avoided unless they are visually detected. The ability to detect the tiny camouflaged weapon requires a bizarre AWE (kilodie) roll. Mini mines can be dumped at a rate of 5 mines per unit per level of computer. Mini-mines, like mini-missiles, cannot survive the rigors

of entry into an atmosphere.

5) Bombs: Bombs are very lethal attack weapons. Bombs need only explode near the ship's hull to inflict damage to the contents within. The number and type of bomb is determined in chapter 52, Spacevehicles. Bombs are delivered by either missiles or mines.

Hitting with bombs: Bombs have to make a roll to hit against the armour rating of the target starship. If this attack fails the bomb still has a 20% chance per level of the attacking ship's computer of a successful attack. If the to hit roll attack is successful then the ship's shields cannot absorb the attack. If the bomb is damaging the ship by its secondary, percentage roll attack, then the target's shields can be used. The effectiveness of a bomb should be immediately obvious.

If a bomb scores a successful first run hit, the hit location will be randomly determined, and the extent of damage rolled. Usually the damage adjustor of a bomb will destroy the location hit. If a bomb is used against a boarding or ramming target, the attacking ship will suffer a secondary attack from their own weapon (20% chance per level of ship's computer of inflicting damage).

Bomb missiles: Missiles can be used against any detectable target, and no ship can outrun a missile. A missile will take 1 unit of time per level difference between the two ship's exatmo drives before it arrives. So if a faster ship fires on a slower ship the missile will hit the unit it is fired, but if a ship with a level 4 exatmo drive were firing on a starcruiser with a level 8 exatmo drive, the missile would arrive in 4 units. This gives the target ship 4 units to buckle down. Missiles cannot function inatmo. An attacking ship can only control one missile per level of ship's computer.

Bomb mines: A ship may dump one mine per level of ship's computer per unit. The mines have no drive components, and are discarded into the flight paths of target starships. Such mines may only be used against orbiting, pursuing, boarding, ramming, or unaware targets. This bomb delivery type does have some advantages to its missile counterpart. First the mines are virtually undetectable, and defensive ECM cannot be used against them. A mine can be visually detected by an improbable (d100) AWE roll. Second the mines can be deployed in atmosphere, or while in orbit to be used as fierce surface attack weapons.

6) Artillery: The purpose of ship artillery is to damage the target ship so that it ceases to function. This goal is achieved by penetrating the hull, and delivering the artillery's destructive force to the internal components of the ship. The amount and type of artillery is determined in chapter 52, Spacevehicles.

Although artillery cannot be fired into an atmosphere it can be used freely within an atmosphere. Ship artillery has the same ranges, damages, and effects as the artillery it is modelled after. The difference is in the amount of ammunition the fixed gun has access to. Energy based weapons can fire as long as the ship has fuel to maneuver with, and artillery requiring ammo will have 100 times the regular supply.

Hitting with artillery: The artillery weapon must score a hit against the target spaceship's armour rating. This means that the attacker must make a kilodie roll higher than her target's AR. The target ship's armour rating which includes hull strength and ECM may prove impenetrable to many artillery attacks.

The artillery's to hit roll is adjusted by the attacking ship's computer level. A gunnery program will fire the artillery automatically, with a bonus of +50 per level of ship's computer. If the artillery is being fired by a skilled gunner persona, there is a bonus of +100 to hit per level of ship's computer. The organic firing bonus is mostly due to the unpredictability of an organic life form firing a weapon. This bonus only applies to skilled personas, because a ship's artillery cannot be fired without gunnery skill.

7) Naval Artillery: Naval artillery has only one purpose in mind, to destroy the target ship. The destruction is accomplished by the sheer force of the weapon. One use of naval artillery exhausts a whole day's worth of fuel. The naval artillery cannot be idly used, it requires a gunnery program, and two gunners. Without this complement, the ship cannot fire its naval artillery.

Naval artillery is different from regular artillery in several respects, it inflicts 3 times more damage, and has 100 times the range. Naval artillery can only be fired exatmo.

Hitting with naval artillery: When the naval artillery fires, it receives +200 to hit per level of ship's computer. If a hit is successful the naval artillery will inflict 2 damage rolls. If the attack roll misses, there is a 5% chance per level of computer of still scoring a hit (only 1 damage roll though). If the naval artillery hits with its to hit roll the attack cannot be absorbed by the target's shields. Only the near miss attack, a percentage roll, can be absorbed by the shields.

Defences

Defences are not solely devised for combat. A space-vehicle's defences both defend against attacks, and the hostile environment of outer space. How the defences operate, and what happens when they breakdown is detailed in the following paragraphs.

1) Life Support: The purpose of life support is to maintain a safe environment for the organic, and delicate inorganic, contents of the ship. Life support is entirely self contained, and is virtually impossible to tamper with. The life support system will function completely unknown to the players, until something goes wrong.

Life support will not malfunction unless it is subject to a direct attack. ECM cannot manipulate life support, and the life support system itself cannot be damaged until all other defences are destroyed (less than 10% of full capacity). Combat will usually be decided long before the life support system is damaged.

If the life support system should be destroyed the ship will suffer complete decompression. Decompression will kill all organic materials (personas), and destroy all delicate inorganic devices (computers, robots, toys). A partially damaged life support system will maintain a fraction of atmosphere proportional to its amount of damage. For a full explanation on damage see EXTENT OF DAMAGE this chapter.

A fully operational life support system taking major damage (60% of previous performance) would only have 60% of the atmosphere that it regularly has. This thin atmosphere will make it more difficult to work, and stay conscious. Frequent damage system shock rolls should be required in thin atmospheres. The effect of vacuum, and thin atmosphere, on personas is detailed in chapter 19, Special Terrain.

2) Gravity: A starship's gravity usually maintains a constant attraction of 1 gravity throughout the entire ship. This includes walkways, workspaces, cargo holds, cabins, etc. The gravity can be adjusted between 0 and 1.5 gravities. This is controlled by the ship's computer, and is uniform throughout the whole ship. The most important point about the gravity is that it is constantly maintained, whether the ship is making combat maneuvers near light speed, or banking inatmo at mach 8.

Starship gravity can be controlled by attack ECM. The gravity cannot be incapacitated, crushing the crew inside the ship, but it can be adjusted to anywhere within the normal range of the gravity system. Remember that 0 gravity means weightlessness, and not destruction of the gravity system.

If the gravity system should be damaged, the ship will almost surely be incapacitated. Because of the lethal high gravity combat spin maneuvers that all battling starships must make, a ship with a disabled gravity system would immediately have to drop out of combat. Gravity is disabled if the system is functioning at less than 30% of its full capacity. When a starship cannot do combat maneuvers it cannot avoid boarding, and attacks automatically hit.

If a ship's gravity is damaged to less than 30% full capacity, the ship cannot maneuver inatmo. The ship can lift off, and land, but it cannot undertake atmospheric travel.

3) Armour: The armour is the spaceship's hull. The hull is the containment and physical defence system of the ship. The hull contains the essential components of the ship, plays an important role in ship gravity, and helps contain the

atmosphere created by the life support system. The hull also defends against both hostile environments and attacks. It is primarily attacks which the hull must defend against in combat.

The starcruiser's hull is the last line of defence. When an attack evades ECM, shields, and active defences the personas must hope that the hull will absorb, or deflect the incoming attack. Because of the spins and flips that the spaceship makes in combat movement, it is most likely that an unsuccessful attack has been deflected.

When in combat the ship's exatmo drives set it into combat maneuvers which consist of violent spinning, and direction changing. Such actions are intended to help armour deflect physical attacks. It is this motion which primarily causes a hit to be in a random location. Power surges, from one point to another, can also account for random damage locations.

Damage to the interior of the ship does not indicate hull damage. Only when 'hull' is rolled on the *Spacevehicle Damage Location* table is the hull harmed. The bulkhead where the damage is found is determined by rolling on the table again. If 'computers' were rolled, the hull near the computer has been damaged. The roll on the *Extent of Damage* table will indicate the loss of atmosphere suffered by that section of the ship. The effect may vary from no noticeable loss of atmosphere (trivial) to explosive decompression (destroyed).

4) Electronic Counter Measures: Defensive electronic countermeasures (ECM) deceptively manipulate the electromagnetic spectrum to defend the ship.

When ECM is damaged its effectiveness is reduced by the percentage indicated on the *Extent of Damage* table. For example, ECM at 50% efficiency could only offer +100 per computer level to the ship's AR.

Defensive ECM can be used as attack ECM with all the same abilities as described for attack ECM, however a single ECM unit cannot be used simultaneously for attack and defence.

Armour rating: Most often defensive ECM will be used to make the ship harder to hit. This is done by creating false images of velocity, trajectory, rotation, size, etc. All of this electronic tom-foolery results in a +200 bonus to the ship's armour rating per level of computer. So when defensive ECM is being employed, all attack rolls are less likely to hit.

Breaking control: Defensive ECM is especially important when the ship is under attack from control ECM. Defensive ECM can identify whether a ship's component is actually malfunctioning, or whether it is malfunc-tioning due to control ECM. Defensive ECM will use the ship's computer to re-route communications channels, and alter security, to defend against control ECM attacks.

For example, if a control ECM attack had reduced the effectiveness of the ship's drives defensive ECM could be used to break off this control. This would restore the drives to their normal power level. The chance of success is 15% per computer level. ECM defense attempts cannot be reattempted if they should fail.

ECM Camouflage: Lastly, defensive ECM can be used to hide the ship electromagnetically. ECM will make the ship blend in with the background, or appear as some anomaly other than a spaceship. This aspect of ECM will not hide the ship from a visual inspection, but it will deceive another ship's sensors. This deception has a 9% chance per computer level of being successful.

5) Shields: The defence shields protect the hull from energy and kinetic attacks. They do so by distributing the attacking force across the entire hull, which effectively dampers the damage. The shields are ready to go at all times but every unit that they are used the fuel consumption is doubled. It requires at least one unit of use to stop an attack.

The defence shields will defend the ship against inhospitable atmospheres and attacks, however they have no effect against boarding, ramming, ECM, or contact mines. The shields can absorb 100 Hps of damage for every level of exatmo drive. Therefore a ship with a level 4 drive could absorb 400 Hps of damage from missiles, artillery, and naval artillery attacks. So an energy attack that should inflict 429 Hps of damage attack against such a ship would only inflict 29 Hps if the shields

were up. Note that the shields render many weapons ineffectual.

When a ship's exatmo drives are damaged, the shields are immediately affected. Direct damage to the shields will reduce their effectiveness by the percentage indicated on the *Extent of Damage* table.

6) Guns: A gun does not sound like an entirely defensive device, but occasionally the best defence is a good offence. In the perspective of ship to ship combat a mere gun would be an ineffectual weapon, however when defending the ship against intruders a gun mounted in the ship's airlock can be most effective. If the player has rolled 'guns' for her ship each airlock will be mounted with a gun rolled from chapter 46, Guns. The guns can be fired both outside of, or inside of, the airlock whether inatmo, or exatmo. The gun cannot fire both inside of and outside of the airlock simultaneously.

The gun can be fired remotely, via visual link from the bridge, or it can be left to the control of a gun program in the software of the computer. A particularly effective gun could be used on an attacking ship if it were in the process of boarding or ramming.

The gun has an unlimited supply of ammo. The to hit rolls are adjusted with a BNP (if fired manually from the bridge), or no adjustment at all (if fired by a program). The gun can be knocked out by scoring damage rolls. The gun's AR is the same as the AR of the hull. Manipulation of the gun by mechanics should be, at least, a DD 20 maneuver.

7) Active: Active defences are used against incoming weapons. They fire missiles, waves of shrapnel, energy blasts, lazer matrices, or crystalline discharges in an attempt to dissipate, prematurely detonate, or destroy incoming attacks. Active defences can be used against grenades, bombs, or artillery, but they have no effect against boarding, ramming, ECM, or naval artillery. Active defences cannot be used unless there is a definite incoming attack.

Regardless of the active defence chosen, all will function equally; lazer arrays are as effective as anti-missiles which are as effective as energy blasts. Whenever an incoming attack is identified, the active defence has an 8% chance per level of computer of stopping the attack cold. An attack intercepted by active defences does no damage what-so-ever. A ship can attempt to thwart 1 attack per level of computer per unit.

So a level 3 computer, combined with active defences would have a 24% chance of stopping, at most, 3 missile attacks per unit. The same ship could make 3 active defence attempts against 1 missile. A ship will have 10 disposable charges for every 50 tonnes of ship. When these supplies are exhausted no further active defences can be made.

If a ship's computer is damaged the deployment of active defences becomes less efficient, and the active defences will reflect this. Direct damage of the active defences will reduce the efficiency in proportion to the extent of damage roll. Active defences will automatically get an attempt to stop an attack directed at them unless their charges are depleted.

Active defences are not fooled by deceptive attack ECM, however, the active defences can be affected by control ECM, and their efficiency reduced accordingly.

Summary of Spacevehicle Combat

There are many spacevehicle weapons, and many defences that can be used against them. Since proper use of these devices can mean survival, or not, in exatmo combat the most probable choices are listed on Table 38.4.

Table 38.1: Spacevehicle Attacks Order

1)	Boarding
2)	Ramming
3)	Electronic Counter Measures
4)	Grenade missiles/mines
5)	Bomb missiles/mines
6)	Artillery
7)	Naval artillery



Table 38.2: Spacevehicle Damage Location

DIE ROLL	DAMAGE LOCATION
01-11	**Hull**[a]
12-15	**Drives** -inatmo
16-19	-exatmo
20-23	-special
24-28	**Fuel** -inatmo
29-33	-exatmo
34-38	-special
39-43	-amount
44-48	-consumption
49	**Computer**-level
50-51	-bot control
52-53	-software
54-60	**Cargo**
61-64	**Crew**
—	**Defence**-1) Life support[b]
65	2) Gravity[c]
66-67	3) Armour
68-71	4) ECM
72-75	5) Shields
76-79	6) Guns
80-81	7) Active
82-83	**Attacks** -1) Boarding
84-86	2) Ramming
87-89	3) ECM
90-92	4) Grenades
93-95	5) Bombs
96-98	6) Artillery
99	7) Naval artillery
00	**Other**

[a] Severity of puncture equals amount of atmosphere lost.
[b] Life support cannot be damaged before gravity is destroyed (less than 10%).
[c] Gravity cannot be damaged before armour is destroyed (less than 10%).

Table 38.3: Extent of Damage

DIE ROLL	DAMAGE DESCRIPTION	% OF PREVIOUS PERFORMANCE
01-10	Trivial	100
11-60	Minor	90
61-90	Major	60
91-99	Critical	30
>00	Destroyed	0

Add hit points to deci-dice roll.

Table 38.4: Spacevehicle Combat Summary

ATTACK TYPE	ATTACK BONUSES	ATTACK DEFENCES
1) Boarding	ECM 4% @ comp. level reduce drives, computers	ECM-control 3% @ comp. level Mines
2) Ramming	ECM 12% @ comp. level reduce drives, computers	ECM-control 3% @ comp. level Mines
3) ECM	Mechanic level 8% @ comp. level	ECM 15% @ comp. level to break
4a) Grenade-missiles	ECM to hit roll +150 @ comp. level	ECM +200 AR @ comp. level Active 8% @ comp. level block Shields 100 HPS @ drive level
4b) Grenade-mines	ECM to hit roll +150 @ comp. level	ECM none Active 8% @ comp. level block Shields None
5a) Bomb-missile	ECM to hit roll +150 @ comp. level (secondary) 20% @ comp. level +3% @ comp. level	ECM reduce att. comp level Active 8% @ comp. level block Shields 100 HPS @ drive level
5b) Bomb-mines	ECM 20% @ comp. level +3% @ comp. level	ECM None Active 8% @ comp. level block Shields 100 HPS @ drive level
6) Artillery	ECM to hit roll +150 @ comp. level Gunnery +100 @ comp. level	ECM +200 AR @ comp. level Active 8% @ comp. level block Shields 100 HPS @ drive level
7) Naval Artillery	ECM to hit roll +150 @ comp. level (secondary) Gunnery 5% @ comp. level	ECM +200 AR @ comp. level Active 0% @ comp. level block Shields 100 HPS @ drive level

III

III

Chapter 39
Other Vehicle Combat



This chapter on vehicular combat should help the referee through the complexities that vehicles add to combat. Vehicles that are just transporting the expedition from one place to another are not considered involved in vehicular combat. For instance an aircar chase that involves no combat would require nothing more than vehicular movement, and even this may not have to be too detailed. The challenges of reckless vehicular movement is detailed in chapter 17, Driving.

This chapter deals with those instances of lethal personal combat where the vehicles are included in combat as targets. Before vehicular combat becomes important destruction or damage of the vehicle must be the intention of those in combat. Understanding chapter 54, Vehicles will greatly improve the clarity of this chapter.

The complications of vehicle combat will definitely require many judgement calls on the part of the referee. Is my lazer affected by wind resistance? I've hunted high velocity birds all my life, why are vehicles a problem? Can our supersonic vehicle outrun a sonic pistol attack? The rules presented here are just guidelines, as all rules are, and common sense should try and prevail. Most players will be quite adamant in their beliefs about vehicular combat because most of us are so familiar with *cars*.

Hitting the Vehicle

Damaging a vehicle requires a to hit roll against the vehicle's AR. If the player rolls higher than the target vehicle's armour rating then her persona has damaged the vehicle. A vehicle's armour rating depends on its structure and its speed. Unless the vehicle has been given a special AR when it was randomly generated, its base armour rating is 500.

Vehicle Armour Rating: 500 would be the AR of a parked non-military vehicle. A parked vehicle offers nothing more than cover to the personas. The vehicle's AR increases by 5 for every h/u of speed that it has. This AR adjustment for speed is not relative. If a car is travelling at 50 h/u then its armour rating is 750 regardless of whether it is being fired on from another vehicle travelling 50 h/u, or from a stationary attacker.

VEHICLE ARMOUR RATING
500 plus 5 per h/u of speed

The armour rating of many high speed vehicles will make them impossible to hit with most personal weapons. The armour rating adjustment

will also make it impossible for combat between vehicles if they are travelling too fast. This may not be as much fun, but it is intuitively logical that inter-vehicle combat cannot be possible at higher speeds. If a vehicle is specifically designed for high speed combat it will have weapons that compensate for the added velocity.

Driving skill is rare, but it can increase the AR of the vehicle by 1 point of AR per h/u per point of skill. So if a vehicle were being driven at 50 h/u by someone with driving 1, the car's AR would be 800.

Weapon Restrictions: There are also weapon type restrictions depending on the speed of the target vehicle. A type A weapon is ineffectual against a vehicle moving more than 20 h/u. Personas that still try to attack a moving car with a club will risk personal injury. Type B attacks can be used against vehicles at the referee's discretion. Any powered attack that scores a hit on a vehicle can damage it.

Flanking Attacks: A vehicle's AR is determined by its velocity; the armour rating is unaffected by the location of the attacker relative to the target. Regardless whether the attacker is attacking from directly in front of the vehicle, from the side of the vehicle, or even from above the vehicle the attacker is still subject to the displacement effects which create the vehicle's armour rating. The anthropomorph eye simply cannot compensate for the rapid change in position regardless of its vantage point. When an attacker is so distant from a vehicle that movement is imperceptible, the attacker must remember the movement is still there, and for high velocity vehicles most personal attacks would be out of range.

Location of Vehicle Damage

A successful hit on a vehicle will damage it in a random location. This is done the same as hit location for space-vehicles. The player makes a roll on Table 39.1, *Location of Vehicle Damage* to determine which part of the vehicle has been hit. The attacker cannot choose which part of the vehicle she is going to hit, and every hit will be on a random location. Random hit locations are used because the vehicles are randomly generated and are remarkably varied externally. The architecture of the component systems in vehicles is unknown also, and a random location for hitting is the easiest way.

Aimed Attacks: Quite often attackers will want to choose their targets on vehicles. They may focus their attack on a car's wheels, or the undercarriage of an antigrav vehicle. Remember that there is no evidence that the construction of any such vehicle is the same as our present day cars. Engines won't always be in the front, the fuel won't always be in the back, and the tires might be just for landing, and not locomotion. Not only will the construction of the vehicle be alien, so will its components. A hit in one spot might be deflected, conducted, or absorbed in another spot, damaging an entirely unexpected component.

Targeting passengers: One exception to the ineffectiveness of targeting is when the attacker is attempting to hit the passengers. Passengers are usually easy to identify inside an unsealed vehicle, and directing an attack against them is acceptable.

Passengers, including the driver, are difficult to hit in a moving vehicle. In fact the attacker must first hit the vehicle before an attempt can even be made to hit the passengers. If the hit location rolled indicated that the passenger cabin has been damaged, then the attacker can make a to hit roll on one of the passengers in the vehicle. The passenger is usually determined randomly. If the attacker wishes to direct fire at a passenger, usually the driver, the passenger's armour rating is adjusted upwards the same as the vehicle's, and any cover offered by the vehicle should be considered. Area of effect weapons that sneak into a passenger's cabin will have their usual effect on personas. Personas that miss a specific passenger target yet have still hit the vehicle will still damage the vehicle.

Adjusting hit location: Personas that are skilled in vehicular combat, and are very familiar with the vehicle that they are attacking may be allowed to adjust their hit location on the *Location*

of Vehicle Damage table. The adjustment should equal their BP with the weapon being used divided by 50. Thus a persona attacking a vehicle with a BP of 295 could adjust her hit location up 6 points or down 6 points on the *Location of Vehicle Damage* table. She can also add her vehicle combat skill to the adjustment. Thus a decidie roll of 62 (acceleration) could be adjusted up to 68 (still acceleration), or down to 56 (speed).

Extent of Damage

Whenever a vehicle has been hit, it has been damaged. The extent of damage must be determined if the hit has connected with an important component of the vehicle. Table 39.2, *Extent of Damage* determines how badly the component has been affected by the hit. The component may only sustain trivial damage, which doesn't affect performance at all; the hit may result in critical damage where it is reduced to 30% of its previous performance; or the component may even be destroyed completely.

The percentile roll made on the *Extent of Damage* table is increased with the severity of the attack by adding the damage to the die roll. If an attack were to do 15 HPS of damage to the locomotion, maybe the anti-grav plates, the decidie extent of damage roll would be increased by 15.

There are no adjustments for velocity of the vehicle affecting the damage of the attack. A random die roll on the *Extent of Damage* table decides how dangerous the attack was. A high velocity vehicle may take more damage from an attack because of the increased relative velocity of the projectile. This effect is determined by the extent of damage roll, and nothing else. High speed air currents can cushion blows, and ricochets can deflect attacks just as easily (well maybe) as a the high velocity could increase damage.

There are simply too many parameters and possibilities to include, so a random table must suffice to cover such eventualities. For a detailed explanation of extent of damage refer to chapter 21, Equipment Damage.

Big Damages, Small Vehicles: Attacks that inflict enormous amounts of damage should justifiably inflict more damage than those attacks that inflict small amounts of damage. This is reflected in the HPS adjustment to the *Extent of Damage* table. If this adjustment isn't enough, use of the table can be adjusted to include multiple hit locations for a single attack. For instance a fusion attack could legitimately damage every component on the vehicle, and not just destroy a single component.

A single attack can roll once on the table for every 75 hit points in damage, adding no more than 75 to the die roll. Large vehicles, and damage hardened vehicles (military ones) may be exempt from this type of vehicle damage.

Thus a single attack that inflicts 230 HPS in damage to the vehicle would make 3 rolls at +75 and one roll at +5. So much for that vehicle.

III

Vehicle to Vehicle Combat

Vehicle to vehicle attacks require the most concentration of all. The persona is not only attacking a moving vehicle, but she is firing from one. Previously the rules have included at least one ground target (a non-moving one) in their equations. An attacker is not subject to both displacement penalties—the to hit penalty, and the vehicle AR—but the target will receive whichever offers less protection.

Even though vehicles moving at the same speed have a relative velocity of 0, the vehicle's AR should still include its velocity adjustment. The velocity adjustment still applies because there are complications that arise when making a to hit roll. For example, wind resistance will deflect type B attacks, evasive maneuvers are amplified at high speeds, vehicle vibrations irritate aiming, and the ever present problem of displacement all make inter-vehicular combat more complex.

Area of effect weapons

Area of effect attacks must first roll to hit the vehicle against its AR. This roll ensures that the

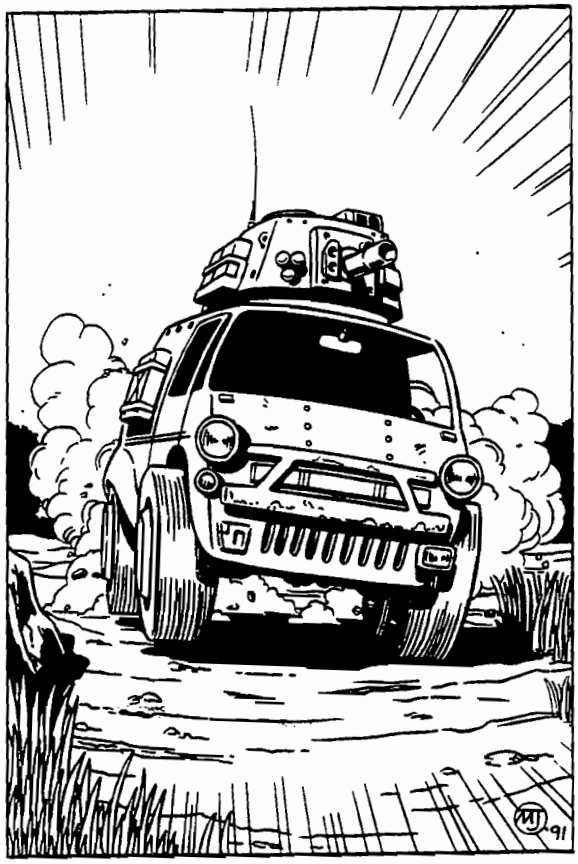
attacker has correctly compensated for the displacement of the moving vehicle. If the to hit roll misses, the area of effect weapon cannot damage the target vehicle, and the resultant detonation must be determined by the referee. A hit on the vehicle will allow the attacker to roll for a regular area of effect attack as in chapter 30, Grenades and Aerosols. Hits on the target hex have damaged the vehicle, and all passengers within it. If the attacker misses the target hex, but includes the vehicle within the area of effect, a roll on the *Location of Vehicle Damage* table should be made.

Driving PT Check

When a car is damaged the driver may be required to make a driving performance table roll (DPT). The driver must maintain control of the vehicle after it has been damaged. Any vehicle damage that affects the performance of the vehicle will require a PT check. The player must roll against whatever maneuver her persona is doing, plus an adjustment for the severity of the damage. Use Table 39.3, *DPT Adjustment* to determine the final DD on the driving performance table. The *Driving Performance Table* can be found in chapter 17, Driving.

If a driver were executing a two facet (90°) turn, and her vehicle took major damage to the locomotion she would have to make a DD 12 performance table roll. The higher the degree of difficulty the more likely the persona will lose control of the vehicle. The driving performance table, and driving in general are detailed in chapter 17.

III



Attacking From A Vehicle

Vehicle to ground attacks have much the same displacement problems that high speed targets have. An attack from a moving vehicle will suffer a to hit roll penalty of -3 per h/u if the vehicle is travelling faster than 20 h/u. Thus an attack from a vehicle travelling 25 h/u would suffer a penalty of -75 to hit. Often there will be several penalties applying at once, and the referee should offer the player a reasonable chance to score a hit, thus making the game fun for everyone involved. However this reasonable chance to hit should only be allowed under reasonable circumstances.

Vehicular weapons

Vehicle weapons are those weapons built into vehicles, or weapons specifically designed to be used against vehicles. Vehicle weapons do not suffer the vehicle to ground attack penalty, and the vehicular AR is reduced by 4 points per h/u, this will make it 1 point per h/u for most vehicles (instead of the regular 5). When attacking with a vehicular weapon the AR of a vehicle moving 50 h/u would be 550 as opposed to the regular 750 AR. Vehicle weapons are an obvious advantage when used in vehicular combat.

Ramming

Surprisingly ramming has little or nothing to do with vehicular combat rules, but a lot to do with driving rules. Ramming occurs when vehicle paths cross while moving simultaneously. The movement of vehicles is detailed in chapter 17. When vehicles are trying to ram, the ref must remember to use the initiative system, chapter 33. Initiative rolls are very important if the personas are trying to ram, or trying to avoid being rammed, because the order of play will decide movement.

If a persona successfully rams a vehicle the hit will result in a collision between the two vehicles. The effects of a collision are detailed in chapter 17. If a vehicle has successfully hit a target persona the persona will take damage as though she were a passenger involved in a collision at the speed which the attacker was moving. This shows that a vehicle is indeed a very deadly weapon. The details of passenger damage are found in chapter 17.

Table 39.1: Location of Vehicle Damage

DIE ROLL	DAMAGE LOCATION	EFFECT OF DAMAGE
01-12	Locomotion	-DPT check, reduce speed, handling level
13-24	Cargo	-Damage passengers, cargo, reduce space
25-36	Engine	-DPT check, reduce acceleration, speed
37-48	Fuel	-Reduce range
49-60	Speed system	-DPT check, reduce speed
61-72	Acceleration system	-DPT check, reduce acceleration
73-84	Steering system	-DPT check, reduce handling level
85-96	Accessory	-Hit on random accessory
97-00	Other	-Hit on passenger cabin, or worse

Table 39.2: Extent of Damage

Die Roll	Description of Damage	% of Previous Performan ce
01-10	Trivial	100
11-60	Minor	90
61-90	Major	60
91-99	Critieal	30
>00	Destroyed	0

Add damage to the die roll.

Table 39.3: DPT Adjustment

EXTENT OF DAMAGE	DEGREE OF DIFFICULTY ADJUSTMENT
Trivial	0
Minor	+3
Major	+6
Critical	+9
Destroyed	+12

III

Chapter 40
Technology Basics

A very large portion of this game is devoted to the workings of technological devices. This isn't entirely true since most of the technology is described in a black box nature. This allows the referee to escape the requirement of having an interdisciplinary PhD in physics, biology and engineering. Instead a good aptitude for 'rational fabrication' should suffice. The technology in this part of the book is nearly magical in nature.

The referee will find that technology can drastically alter the course of a campaign, and this does not always have to be an obviously powerful item. For instance a life ray could change the way that the personas act in their world, and would obviously have a definite effect on the game that the referee is running. However a control baton (a device that manipulates powered armour) may not seem a useful device, but months later it may become critically useful.

How To Use This Part

The technology tables, whether they be for mutations, guns, or medical equipment are designed to be used for persona generation. This means that the artifacts can all be found listed on tables that allow for random die rolls to generate them. This in no way means that the equipment cannot be purchased by the personas, chosen be the referee, or restricted from the campaign.

Think of the equipment lists as dual purpose tables. The referee and players can use the lists to generate random artifacts, or they can use them as catalogues to choose what they need. The referee always has complete control over the equipment lists, restricting items that do not suit her milieu, altering items so that they suit her campaign better, or adding items that she thinks are essential.

Finding Things: When looking for specific items refer to the chapter in which they *should* be found. For instance a derringer would be found in chapter 46, Guns. If it isn't in the gun chapter then check chapter 49, Miscellaneous Weapons.

If the device is still eluding you then check the index. The index in **EXP** is extensive, even including generic names of things that do not appear in the game. It is recommended when looking for anything, not just equipment, that you refer to the index.

Nature of The Equipment

Since the technology in this book covers a wide range of items there are even variations in the tone of the equipment. There is deadly stuff, useless stuff, and silly stuff. The point is that this game is intended for use in many different styles of refereeing. Style can vary with different referees and sometimes with the same referee in different moods.

The main goal of technology is to meet all the essential needs, to accommodate nearly any role-playing situation possible (as if I believe this for a minute). The creation of the toys was quite systematic. For instance **cold**, **heat**, **time**, **force fields**, **gravity**, etc. were all subjects that had blank spaces for weapons, manipulation devices, etc. The blanks were simply filled in to create a nearly all enompassing catalogue of equipment and mutations.

This is not to say that all the equipment is predictable, since each device has its quirk. For every powerful device there is another device that can overcome it. For every weak device there is a situation in which it is extremely important. Every device has its own inherent strengths and weaknesses, and through this series of checks and balances artifacts should remain unpredictable.

There is also some equipment that has no place in the scheme of things and may be simply weird. These items are often there for fun. For instance rocket assisted roller skates, or an antigrav belt are somewhat anomalous devices, but they add fun to the campaign. Other equipment has

found its way into the technology catalogue from a historical perspective. These are devices like Little Golden Books, slug throwers, and the arm of ephro. Such items are meaningful to those of us who wrote the game, and it simply wouldn't be **EXP** without them. You will quickly find that your campaigns are littered with campy little devices that no one else knows anything about. This is what makes a game personal and attractive to the people that play it.

When To Use It

This is a technology game, and players will come to expect their campaigns to revolve around the mysteries of varying technological levels. The degree of technological involvement will be determined by the referee. The personas start with a certain allotment of equipment.

The referee can add equipment to the campaign in any fashion that she sees fit. There may be little bits of stuff hidden around in a ruin, there may be the infrequent space travelling salesperson that arrives on their planet, they may rent their equipment from a corporation, they may have their equipment assigned by the government, or they may steal it from their captors. The possibilities are endless, and the referee is responsible for creative introduction of new toys.

Toys should be included in a campaign whenever it would be fun. The ref must remember at all times that the game should be fun, and that should be the determinant of what she does. The referee must also consider balance in her campaign. Not allowing personas to become too powerful is important, and she must consider that combinations of equipment can quickly produce an all powerful persona. Again the employment of this should be moderated by what is fun for the players (referee is included as a player). Being all powerful is quickly boring, and being all wimpy is quickly boring, as well as fatal, also.

The referee must find that entertaining balance where the personas know their place in the food chain. Something tougher than them should be beatable if they use their smarts, and something weaker than them should be dangerous if they make a mistake.

Keep Track of Toys

The referee must keep track of toys that the personas have. She must have some sort of a permanent book in which she records the essential information about each toy that is generated in her campaign. The reason that this is the referee's responsibility is because she is a constant in her campaign. Personas will come and go, but their equipment will remain long after them. Cryptically recorded persona record sheets will not relinquish useful information about artifacts all that often. It is important that the referee record, in her own cryptic records, at least the essential information about each persona's toys.

Otherwise, fission rifles turn into fusion rifles, grenades have variable area of effects, vehicles change accelerations, etc., etc. In no way is this malicious cheating on the part of anyone involved. It is just simple fact that as data is transcribed from one page to another it always suffers a little bit of accidental alteration.

Causing Problems

If keeping track of mutations, weapons, computers, robots, and other stuff is starting to bog down the game simply decrease the amount of information that is important in the game. Do you really need to know the battery type of a particular device? Is the range of a detector so important that it should be included for every detector? You will find that the amount of information kept track of will be the amount of information that the game will carry. Some players will be able to handle more information than others, and they will gravitate towards highly equipped personas. Other players will keep their personas as simple and as uncluttered as possible. Each player will rise to their level of complexity.

Chapter 41
Outline of Toys

A toy is any item which originates from the **Technological Object Yield System**—TOYS for short. These items are predominantly equipment such as: sensors, grenades, batteries, computers, robots, bandages, pharmaceuticals, vehicles, and spare parts. The toys range from the completely useless (items that do no more than go whiz and click), to the seemingly all powerful (warbots and droids). The equipment is usually inanimate, and subject to the persona's whims, however it can also be slightly more sentient, giving its owner the odd disciplinary problem.

History

Every item delivered into the persona's hands must come with some brief story to justify its arrival. The toy may only warrant a quick excuse, one to be forgotten amid the details of an ongoing campaign, or the item may have such an elaborate story woven around it that it becomes the campaign.

Rolled toys only have two historical categories: they either start out with new personas, or they are given out as treasure. Those toys which start out with newly created personas were either found, stolen, or are heirlooms. Treasure can be found while scrounging, or it can be awarded by referee personas as payment for special tasks. These are just some of the more obvious, and less exciting, stories that can accompany pieces of equipment.

Why Give Out Toys?

Some of the more sadistic, or stingy, refs cringe at the thought of giving personas unearned equipment. Some of the reasons for giving the personas start up toys are given here, in the hopes of converting such refs.

Firstly, this is a technological role-playing game, and starting the personas off with random equipment can spice things up considerably.

Secondly, equipment is desperately needed to enhance expedition strength (although not all equipment does this). **EXP**'s combat system is reasonably realistic, and it is equally ruthless to both personas and their opposition. Without medical equipment, weapons, or other special devices, the players will spend more time creating new personas than developing interesting ones. Note that if the players find their personas completely unequipped at some time in the campaign, THAT IS TOUGH—it is up to them to play themselves out of whatever situation they played themselves into.

Thirdly, technology is fun. The TOY system can generate very bizarre, and often humorous, pieces of equipment.

Nature of Toys Rolled

The equipment lists are very random, and they include some items that cannot be classified as equipment, like Treasure and Random Junque, chapters 53 and 51. The toys range from the very useful to the very useless, from the complex to the facile; from the fail-safe to the deadly. If the players never know what to expect from a piece of equipment, the TOY system is being run expertly.

The technological object yield system can generate excellent pieces of equipment as well as items designated for the more industrious players (read junk). Personas can also collect equipment completely unrelated to their class. E.g., a veterinarian could roll indiscriminate killing devices such as bombs (chapter 44), and Spinning Wheels of Death (Miscellaneous. Weapon #18, in chapter 49). Mercenaries may find themselves in possession of junk such as biological computers, or cloning tanks.

To further add to the unlikelihood of players getting several pieces of class-related equipment is the ruling that whenever a player rolls an item related to her persona's class, she must stop rolling for toys. If a mercenary gets a gun on the first roll

the player stops rolling for toys; if a veterinarian gets some pharmaceuticals on the second roll the player stops rolling for toys; if a mechanic gets a vehicle, it is automatically the player's last roll.

The problem that will develop should be obvious—personas will tend to collect equipment unrelated to their profession. The benefit this has is that it forces the expedition to work together from the very beginning. Weapons will have to be distributed to the combat classes, medical equipment to the vets, and unidentified equipment to the mechanics.

Limiting Toys

Those who accept the fact that starting personas should automatically be awarded toys must now ponder the question of how many toys is a reasonable number. After years of referee experience, it has been concluded that a maximum of 3 rolls is the magic number. However, 3 rolls is very different from 3 toys. Each roll granted is made on Table 41.1, *Toy Type*. The *Toy Type* table is located at the end of this chapter.

Class Limits: Those equipment types which end a player's toy acquisition are listed on Table 41.2, *Class Equipment*. There are several points about the table which require explanation. The first is that nothings are only allowed one roll on the *Miscellaneous Equipment* table. The second is that every class must stop rolling if they get a **vehicle**. Vehicles are not related to any specific class, but because of the effect they can have on a campaign they indicate a player's last roll (two or three vehicles per player would definitely be a drain on the ref's resources). For convenience this table is located at the end of this chapter near the *Toy Type* table.

Damaged Artifacts: If the ref decides to pass out defunct, or partially broken, equipment the sadist should roll on the *Extent of Damage* table found in chapter 21 Equipment Damage.

Tech Levels in **EXP**

The confusion that arises from countless cycles of technological advance and collapse has supposedly resulted in a tech level madhouse (see chapter 56, Tech Level). For example, a biological supercomputer is powered by a malfunctioning steam engine, but the lousy power supply's effects on the computer go unnoticed because the computer is only being used to play TV pong.

If this randomness doesn't suit your scenario, and your equipment is 'traveler-like' (read boring) simply allow players unlimited access to the tech book, and make adjustments to suit your tech level.

If you intend to deal with the tech level collage (as in **EXP**), as opposed to the tech level melting pot (as in *Traveler*), you are in for some eccentric, if not bizarre equipment. To protect the sanctity of the toy system, it is recommended that the players, ref included, accept whatever device the system produces. It is not as though bizarre equipment does not abound in a mundane world: there are at least 300 different patents for dog poop scoops on boring old earth.

Figuring Out Toys

As previously stated, the randomness of the equipment and the variations in the tech level make for an incredibly diverse array of items. This not only accounts for the more bizarre items, but it also accounts for the ignorance of the personas.

Figuring out equipment use and operation should be done via role-playing whenever possible. At times, however, equipment identification may be impossible to role-play, such as when: the device is beyond description (a vehicle's instrument panel); the item is totally imaginary (a psionic helmet); the toy is so dangerous that subjective descriptions are too risky for the personas (a fusion bomb). When equipment identification cannot be role-played, use either the mechanic's Performance Table (see chapter 14, Performance Tables), or the Artifact Identification System, chapter 20.

In either system of equipment identification the procedure should not be completely reduced to

a dice game. The referee should interject, or add colour, to what is happening. The player should also be using descriptive speech. Remember that a player's interest in the process can aid in her success.

No matter how a player manages to identify a toy—by its surroundings, its description, or just plain luck—that item is considered identified. Refs are allowed to give whatever hints they feel may help the process along. However, these hints should be modified with the knowledge that experience point awards for equipment are based on the equipment identification system, and referee hints may result in unworthy experience point awards.

Awards For Toys

The tactical and survival benefits of toys should be completely obvious. Mercenaries can always do with a bigger gun, biologists can use the help of computers, and spies would appreciate anything which functions without detection.

EXPS Awards: Personas also earn experience points for correctly identifying an object. EXPS are not earned until the toy is properly identified through any of the channels previously outlined. For more information about experience see chapter 15, Experience.

Players who know what an artifact is/does, but whose personas are ignorant cannot collect experience for identifying the artifact. For the protection of the ref, no experience points can be gained through guesswork for any item that has been previously identified by another player in the expedition. All players must roll to identify previously identified items, if the referee deems necessary.

Occasionally players will be forced to formally identify very complicated toys in order to be able to use them. This represents the figuring-out process. Whether or not they earn experience for tertiary identifications is determined by the ref.

Value Awards: The value of the object is listed in eps (electrum pieces, see chapter 23, Money). This value could be converted to the base denomination of your campaign's currency. The value of an item is usually useless trivia until the persona wishes to sell the item. Toy sale is dependent on the campaign in which the personas are set. The campaign should determine demand for the item, market size, and any local laws regarding trade and technologies. The sale of toys should be role-played whenever possible.

Support Equipment

Support equipment is any device which is ineffective on its own, but essential to the function of another toy. Examples of support equipment are: batteries, ammunition, fuel, and spare parts. Less dependent support equipment includes scopes, robot peripherals, and vehicle accessories.

How stingy the ref is with the initial support equipment should depend on how powerful the device is. How easily replacement support equipment can be obtained should also depend on how powerful the device is. Whatever the ref decides should be in the best interest of an ongoing, fun, and challenging campaign for all.

Keeping Toys Records

If the players and/or ref decide to ignore TOY recording procedures disaster is sure to follow. First, much gaming time will be wasted leafing through the technology section—fun, but not gaming. Second, players, yes and even refs, may play equipment incorrectly. E.g., they may incorrectly assume they know what happens when an antimat pistol malfunctions. But when they turn to the book, and the truth is revealed, they wail, "I would have...", "If I had known", "that was my best persona", or "You didn't tell me that...".

For players that are too lazy to record their toy info, a penalty should be meted out each time the game must be interrupted with reference work. An EXPS penalty may do the trick, increasing the artifact's chance of malfunction, or rendering the device functionally inoperative (broken) until its functional parameters are recorded.

Referee's Toy Records: The referee's book of toys should be as important, and as secret, as her campaign book of scenarios. For every relevant piece of equipment the toy type, and toy name should be recorded as well as the wate, experience points, and value. These details should also include an identifying description or serial number, functional information, and rulings that the ref has made about the device's previous function.

This record keeping is not as overwhelming a task as it might seem. Remember that only relevant equipment need be recorded. Relevant equipment includes: powerful devices; devices unknown to the players; devices not completely understood by the players; and those devices which are complex to run.

Example Toy Record

Owner: Gilberne Freyte (canine)
19/Oct/64 #yru12
Name:Gun, #16 full-auto lazer rifle (flotto)
Wate: ~~4.0kg~~ **Exps**: ~~700~~ **Value**: ~~12000~~ (**listed** in the tech book)
TL: 19
Wate: 0.8kg **Exps**: 1120 **Value**: 85000 (**adjusted** to tech level)
Support Eq.: 3 x Liquid batz.
Info: c, f, spec.; 120h 60; 3-30 MP; +50; malf. <30.
Desc: dark blue pipe with button and dial setting.

Player's Toy Records: The player's responsibilities are similar to the ref's, except that only information relevant to role-playing is stored. The item's wate must be deducted from the persona's weight allowance, the item's experience point value added to the player's Exps total, and the value estimated at the time of sale. The player is expected to remember they are carrying equipment, and players designated to carry toys are expected to remember how frail the equipment is.

Generating Startup Toys

Several points should be made during start up that will prevail throughout the remainder of toy generation. The player makes all the dice rolls, and the ref simply tells her which dice to use. Obviously, this does not apply to toys being rolled by the ref for a scenario. The ref records all pertinent information in secret, not revealing or hinting anything about the toy (an alloy-clad poker face must be maintained at all times).

The first step is to record the name of the player's persona, date (real time date), and a fictitious serial number. The serial # gives the ref immediate access to the item in her toy book. A good format for recording toy information is shown above on the *Example Toy Record*.

Toy Generation Checklist

1) Roll the basic toy type (this chapter).
2) Roll the specific toy (from the indicated chapter).
3) Roll TOY support equipment (chapter 55).
4) Roll Tech level of the TOY (chapter 56).

1) Rolling Toy Type: Get out the deci-dice and roll the toy type on the *Toy Type* table. Refer to the *Equipment Limitation* table to see if the player has generated a relevant piece of equipment. The *Equipment Limitation* table is located near the *Toy Type* table for ease of reference.

If the player has rolled Random Junque, it does not count as a roll. It is not usually necessary to record random junk, unless the players have been mislead into believing that it is something useful. Insignificant amounts of treasure need not be recorded, but information treasure, and special substances (whose value the players do not know) should be recorded.

If an artifact type has been rolled, the referee should secretly record it, and proceed to that toy table (guns, medical eq. etc.).

2) Generating the Specific Toy: Once the toy type has been rolled, the player rolls deci-dice to determine which particular item is from that table. E.g., grenades and aerosols could vary from a frag grenade to an antilazer aerosol. Immediately the ref should record the toy number, and the toy name. E.g., #22 Antilazer aerosol.

After the particulars of the device are read,

and understood, the ref should record the item's wate, experience point value, value, description, and other essential information. If everything is recorded correctly the ref should never have to refer to the technology system again for that player's toy.

3) Support Equipment For The Toy: Once all pertinent information about the toy has been recorded it is essentially ready to join in the fracas. Many pieces of equipment have special supplies that are needed before they can function: guns need ammunition; detectors need batteries; vehicles need fuel; and robots need energy.

For every toy generated a die roll should be made on the *Support Equipment* table found in chapter 55, Support Equipment. A weapon that requires both batteries and ammunition should roll once for batteries, and once for ammunition. The results of the *Support Equipment* tables should be ignored if they conflict with any aspect of the scenario.

The ref should record whatever support equipment is available, or needed by the equipment—number of batteries, and battery type; amount of ammo; fuel reserves; etc.

4) Tech Level of Artifact: The ref may wish to have had the item manufactured at a specific tech level(TL). If no tech level is specified for the device, then the TL can be determined by a roll of the deci-dice. Tech level is checked for each device that the persona has. This is done by referring to chapter 56, Tech Level

All technology in the book has been designated tech level 10 (TL10). Thus any device attributed to TL10 will remain unchanged. High tech level devices will weigh less, and can be worth more; low tech level devices can be heavier and worth less. Any changes to wate, experience point value, and eps value should be recorded at this point. Changes in tech level may also warrant a change in the item's description.

Table 41.1: Toy Type

DIE ROLL	TOY TYPE	CHAPTER NUMBER
01-05	Armour	42
06-07	Artillery	43
08	Bombs	44
09-13	Grenades/Aerosols	45
14-26	Guns	46
27-37	Medical Equipment	47
38-45	Miscellaneous Weapons	48
46-65	Miscellaneous Equipment	49
66-75	Pharmaceuticals	50
76-85	Random Junke (roll again)	51
86	Spacevehicle	52
87-95	Treasure	53
96-99	Vehicles	54
00	Other	

Table 41.2 Class Equipment

PERSONA CLASS	RELATED EQUIPMENT
Biologist	Biologist specified; Vehicles.
Knite	Knite specified; Vehicles.
Mechanic	Mech specified; Vehicles.
Mercenary	All weapons; Armour; Vehicles.
Nomad	Vehicles.
Nothing	One Miscellaneous Eq.
Spie	All weapons; Vehicles.
Veterinarian	Medical Eq.; Pharmaceuticals; Vehicles.

IIII

Chapter 42
Armour

This is the special armour section. These armour types not only protect the wearer against general damage, but also have special qualities that vary from thermal protection to computerized, servo-aided joints.

All armour is worn on the body. Unless otherwise stated, the armour will include torso, limb, hand, foot, and head protection. Shields are not included in armour protection.

Each separate armour type has several statistics listed. These are explained in the following paragraphs. For more information about the nature of armour refer to the chapter 29, Armour Rating. All statistics listed are based on the tactical combat system, and tech level 10.

The ref may wish to roll the base race of a suit of armour to see if it fits winged avarians, aliens, or robots. To roll a random base race see chapter 5 in the rule book, Robots. To determine the armour type roll once on Table 42.1, *Armour Type*.

Armour Rating

The higher the armour rating, the better the protection offered to the wearer. Not all the armour in this chapter has a high armour rating, but each offers some unique form of special protection. Those armour types with no armour ratings have a value listed that is added to the AR of regular armour types. These armour types are meant to be worn in conjunction with other armour types.

The base armour rating of an unarmoured target is 500. The armour ratings are related to this base value. For instance a suit of armour that has an armour rating of 725 would give the wearer a base armour rating of 725 instead of 500. This could also be considered an AR bonus of +225. The complexities and confusions of armour rating are discussed in more detail in chapter 29, Armour Rating.

Restrictiveness

The more restrictive a suit of armour is, the more cumbersome, and unyielding it is to normal body movement. This is represented by a higher restrictiveness value. The less restrictive armour is the more that the persona can use her natural DEX to avoid taking damage. This operates the same for special armour as it does for mundane armour. Refer to chapter 29 for more information about restrictiveness.

% Body Wate

% Body WATE represents the wate of the suit of armour. Armour is a form of clothing, and it is usually tailored to a particular wearer. Thus the wate of armour has historically (in gaming terms) been related to the wate of the wearer. Previously there were no set WATEs for armour for the reason that different amounts of material are required for different body sizes. Therefore armour WATE is listed as a percentage of the body wate of the persona that the armour was designed for. A flat wate is included in brackets based on the wate of a 70 kilogram anthropomrph.

The armour's WATE must be recorded and considered part of the persona's encumbrance. Nice referees will conveniently fit found armour to the wate of the persona who found it. If the scenario indicates that found armour has been tailored for a specific race, then such a convention cannot apply.

EXPS/Value

Experience points for armour are earned when the player identifies the armour's special function.

Value of armour will be listed in one of two ways: a single value, or a cost per kilogram. A single value represents the flat cost of the armour. Some armours are composed of material which is

very valuable, and the amount of this material reflects the value of the armour. These armour types are listed as having values like 590 per kilogram or 750 per kilogram. So the value of such armour is directly related to the wate of the armour. If the armour had a wate of 2 kilograms, and it were worth 750 eps per kilogram, it would be worth 1500 eps. For convenience a value based on the wate armour required for a 70 kilogram anthropomrph will be included in brackets.

Table 42.1: Armour Type

DIE ROLL	ARMOUR TYPE
01-09	1. Ablative
10-18	2. Ballistic
19-27	3. Combat armour
28-36	4. Compucrafted
37-45	5. Concussion
46-54	6. Flexion
55-58	7. Force field belt
59-67	8. Helmets
68-77	9. Plastix
78-79	10. Powered
80-86	11. Protex
87-95	12. Shield
96-99	13. Vac suit
00	14. Refs Own Table



IIII

1. Ablative

ARMOUR RATING: 625
RESTRICTIVENESS: 3
% BODY WATE: 2.5 (1.5 kg)
EXPS/VALUE: 200/590 per kg (900)

Ablative armour is designed to negate lazer attacks. When hit by a lazer the ablative material vaporizes, producing an anti-lazer gas that dissipates the lazer bolt, keeping the attack from damaging the wearer. When hit by a lazer, the wearer will take no damage because of the ablative armour. This armour only works against lazers, and cannot affect energy attacks such as fission, fusion, or plasma. The armour rating represents how well the armour is at deflecting all other attacks.

Since the armour vaporizes to disrupt lazers, it has a limited life-span. The armour will lose its ablative effect after disrupting 300 to 1000 (d8+2 times 100) hit points of lazer damage. If a lazer attack scores a hit, damage is rolled as normal, but the damage is subtracted from the armour, not the target. Once the ablative effect is worn out the armour retains its AR of 625, but loses all special defences against lazers.

2. Ballistic

ARMOUR RATING: 625
RESTRICTIVENESS: 3
% BODY WATE: 2.9 (2 kg)
EXPS/VALUE: 200/590 per kg (1200)

Ballistic armour is very similar to ablative armour in its function. A criss-crossing mat of super-dense polymers is woven to absorb high velocity projectile damage (bullets, fragments, etc.). Ballistic armour is capable of absorbing 100-600 (d6 times 100) hit points of "bullet" damage. Once the armour has sustained this maximum damage it will be unable to negate projectile damage, but will still act as regular armour.

Ballistic cloth does not absorb damage from from type A attacks, such as: punches, maces, pipes, flails, etc.

3. Combat Armour

ARMOUR RATING: 725
RESTRICTIVENESS: 2
% BODY WATE: 3.0 (2 kg)
EXPS/VALUE: 100/1000 per kg (2000)

Combat armour is typical futuristic, militaristic body protection designed for infantry dogmeat. It usually composed from such mundane materials as kevlar weaves and ceramic plating.

4. Compucrafted

ARMOUR RATING: Varies
RESTRICTIVENESS: 0 to 3
% BODY WATE: Varies
EXPS/VALUE: 300/Varies

Compucrafted armour is computer designed models of regular armour types. They are designed to handle stress better, deflect blows better, be less restrictive, and require less wate. Compucrafted armour uses special alloys, plastics, and ceramics which are not found in regular armour types.

To generate compucrafted armour first roll the armour type, (on Table 42.2, *Compucrafted Armour Type*), and make the appropriate adjustments. Add 30 to 120 (3d4 times 10) to the armour rating. This is done because of better construction and stronger materials, offering greater protection. The armour has a new restrictiveness between 0-3 (d4-1). Lighter and less cumbersome materials allow for freer body movement. The new restrictiveness cannot exceed the previous one. The materials are stronger, and lighter, so the % body wate is half of the armour's regular value. The flat wate of a suit of armour is listed in brackets in the % Body Wate column. Compucrafted armour is also worth 4 times the armour's regular value per kg. The flat rate for armour is listed in brackets in the Value per Kilogram column.

Table 42.2: Compucrafted Armour Type

DIE ROLL	ARMOUR TYPE	BASE A.R.	% BODY WATE (flat)	VALUE PER KG (flat)
01-06	None (civils)	500	0.0	—
07-12	Furs,skins	550	1.6 (1.5)	4.8 (-)
13-18	Leather	550	2.2 (2.0)	5.8 (-)
19-24	Padded	550	1.5 (1.5)	7.1 (-)
25-30	Studded	575	2.7 (2.5)	13.2 (-)
31-36	Ring	575	3.6 (3.0)	21.2 (-)
37-42	Scale	600	5.7 (4.0)	27.6 (-)
43-48	Cured hide	600	1.3 (1.5)	137.6 (300)
49-54	Plant fibre	600	1.2 (1.5)	400.0 (700)
55-60	Chain	625	4.2 (3.0)	51.4 (250)
61-66	Splint	650	0.8 (1.0)	35.5 (100)
67-72	Banded	650	5.0 (3.5)	85.0 (450)
73-78	Plastix	675	0.8 (1.0)	2000.0 (2000)
79-84	Plate	675	6.3 (4.5)	160.0 (800)
85-90	Plate armour	700	7.1 (5.0)	184.0 (900)
91-00	Ref's own table			

IIII

5. Concussion

ARMOUR RATING: 625
RESTRICTIVENESS: 3
% BODY WATE: 3.0 (2 kg)
EXPS/VALUE: 200/590 per kg (1200)

Concussion armour appears as a bulky, pillowy crash suit. Each of the large fluffy lumps is full of small resilient beads that increase the surface area that concussion force is absorbed over. This design reduces crushing damage from explosions, falls, crashes, blunt weapons, squeezing attacks, etc. Any of these damages types are reduced by 1/2 when wearing concussion armour. Remember that this armour type has a base AR of 625, and all attacks must score a hit before any damage can be taken. Concussion armour is also known as a g-suit.

6. Flexion

ARMOUR RATING: 0, Special
RESTRICTIVENESS: Varies
% BODY WATE: Varies
EXPS/VALUE: 334/Varies

Flexion coverings are designed to increase protection against special attacks. They offer no protection against attacks other than the ones they were manufactured to thwart.

The various flexion coverings appear as beltless, pocketless ponchos, parkas or trenchcoats. The protection is designed to be worn over all external armour and equipment.

The flexion coverings can essentially withstand limitless damage. If the ref desires to have the coverings wear out, flexion should only do so after the persona has sustained 500 hit points in damage. The referee can arbitrarily wear the flexion suit out if it has been continually abused. Roll on Table 42.3, *Flexion Covering Type* to determine the covering type, its restrictiveness, its wate, and its value. Each covering type is explained in detail in the following paragraphs.

Concussion: Concuflect appears as a bulky down parka. Concuflect reduces the chance to be hit by all compression, non-puncture, non-energy, attacks. When wearing concuflect a player's AR is improved by +150 against such attacks.

Electro: Electroflec coverings reduce the chance of taking damage from electrical attacks by grounding the deadly current. When wearing electroflex the persona's AR is improved by +150 against electrical based attacks, and a bonus of 3 on any appropriate saving throws.

Energy: Enerflec reduces the chance to be hit by personal energy weapons (such as fusion, fission and plasma guns). When wearing this shimmering covering the wearer's AR is increased by +150 against energy attacks. Area of effect attacks, especially from fusion immolation, and fusion grenades are reduced to one half by enerflec.

Inertia: Inerflec has a slickery covering that makes low velocity striking and puncturing weapons less likely to hit. The inerflec is especially



Table 42.3: Flexion Covering Type

Die Roll	Cover. Type	Restrict. Incr.	Wate (kg)	Value
01-15	Concussion	+1	1.5	250
16-30	Electro	0	0.6	1000
31-45	Energy	+1	1.2	10000
46-60	Inertia	+2	1.9	100
61-75	Lazer	0	0.2	2000
76-90	Projectile	+2	1.9	500
91-99	Vibro	+1	1.3	2700
00	Ref's own table			

good at hampering Type A and B attacks. There is a bonus of +150 to the wearer's AR against such attacks.

Lazer: Reflec is the most well known of all the flexion coverings. It increases the wearer's armour rating by +150 against lazer attacks. The cloak has a matte colour, with a highly reflective underlay to help misdirect lazers.

Projectile: Proflec is a hardened covering composed of a thin layer of ballistic cloth. This flexion covering aids in the deflection of high velocity projectile attacks, and increases the wearer's AR by +150 against them.

Vibro: Vibroflec is an intricate weave of microscopic, high tensile threads which are designed to make vibro attacks more likely to "skip off" their target without doing damage. Vibro attacks have -150 against vibroflec (increase the AR of the wearer by +150 vs such attacks).

7. Force Field Belt

ARMOUR RATING: 0
RESTRICTIVENESS: 0
% BODY WATE: Special
EXPS/VALUE: 500/Special

IIII

Force field belts generate an invisible defensive shield contoured to the wearer's body. The electronically generated field will dissipate kinetic energy over the whole field. Any object coming in at high speed will have all its kinetic energy absorbed and stop before it hits the belt wearer.

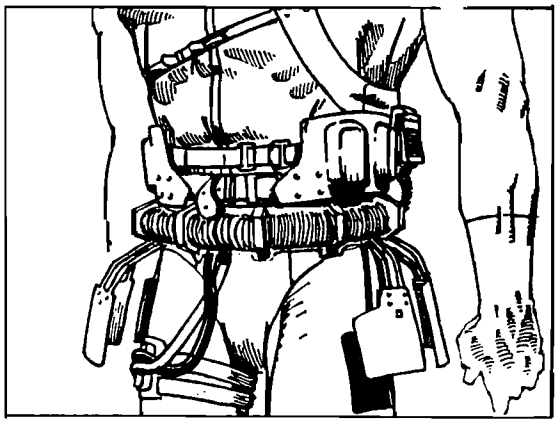
The belt is triggered by anything that indicates a relatively high velocity differential between itself and the persona. Thus the defensive field will absorb damage from high velocity, high energy attacks (lazers, falls, bullets, grenades, rocks), but anything approaching the player in a passive manner will not be hampered by the force field (injections, gases, kisses).

Any damage that would have been taken by the wearer is absorbed by the force field belt. The force field belt requires energy to dissipate the force, and when it has absorbed the maximum amount of damage its batteries are dead. The force field belt cannot be used again until its batteries are replaced. The number and kind of batteries needed are determined in chapter 55, Support Equipment.

Force field belts vary in the number of hit points they absorb, and increase in WATE and value depending on this capacity to absorb damage. Use Table 42.4, *Force Field Belt Type* to determine the protection offered by a force field belt.

Table 42.4: Force Field Belt Type

DIE ROLL	DAMAGE ABSORBED	WATE (kgs)	VALUE
01-40	50 Hps	0.5	75000
41-80	75 Hps	0.75	150000
81-90	100 Hps	1.5	300000
91-97	125 Hps	3.0	600000
98-99	150 Hps	6.0	1200000
00	Other		



8. Helmet

ARMOUR RATING: Special
RESTRICTIVENESS: 0
% BODY WATE: Special
EXPS/VALUE: 50/Special

These are specialized helmets that offer not only head protection, but built in equipment also. The helmet could have a gun, medical equipment, or scope installed into it. The player rolls once on Table 42.5, *Helmet Accessory* to determine what is built into the helmet. The persona will be able to control the device in her helmet with head movements, tongue connections, or facial expressions.

The base helmet type must be determined by the referee. The referee must choose from either a combat armour helmet (armour #3), a compucrafted helmet (armour #4), or a plastix helmet (armour #9). There is no effective difference between the 3 helmet types.

Whichever helmet type is chosen the AR bonus will be +40 if worn without armour, and no bonus if worn with a full suit of armour. The helmet offers no increased restrictiveness, as the artifacts will be ergonomically inserted in the helmet. The wate of the helmet will be equal to the wate of the toy that is built into it. These are the specifications of the helmet, regardless which of the 3 helmet types is chosen.

When using the *Helmet Accessory* table there are some obvious restrictions as to what type of equipment can be placed within the helmet. Very heavy items, such as cloning equipment, or artillery would not only be impractical, but may cause severe neck injury. The table is an abbreviated list of what equipment would be useful in a combat helmet. Each of the accessory types is discussed in the following paragraphs. It is best to record all information about the helmet now, roll its accessory, and not have to refer to this chapter again.

Communication: Any communication type can be rolled from the communications artifacts found in chapter 48, Miscellaneous equipment. The communication device cannot have a wate greater than 4 kg. Helmet communications are common, and this does not count as a roll. Instruct the player to roll on the *Helmet Accessory* table again.

Table 42.5: Helmet Accessory

DIE ROLL	HELMET ACCESSORY
01-25	Communication
26-35	Gun
36-40	Miscellaneous equipment
41-70	Medical equipment
71-85	Scope
86-99	Visual aid
00	Other

Gun: The weapon is rolled in chapter 46 Guns, and is limited to a pistol, or a pistol version of the gun rolled. The gun is part of the helmet, and it is triggered by the wearer's head actions.

Medical Equipment: Medical equipment is rolled in chapter 47, Medical Equipment. The only requirement is that the device rolled be reusable (not a disposable vedi-kit), and it must have a wate less than 4 kg.

Miscellaneous Equipment: Any bizarre device could be rolled in the Miscellaneous Equipment Chapter (chapter 48). Again the maximum wate of the artifact is limited to 4 kg, and the mood of the referee. For instance a plastix helmet with a built in fire log, may be humorous, but cruel. If the device is not reusable, or it has a wate greater than 4 kg, the player should roll another piece of miscellaneous equipment.

Scope: Roll from the list of scopes supplied in chapter 48. There is no limit to the type of scope that is inserted into the helmet. The scope will be useable with any weapon of the appropriate type. For instance, a scope dedicated to rifles could be used with any rifle that the persona is using.

Visual Aid: Roll from the list of visual aids supplied in chapter 48. The mutant will be able to flip the visual aid into and out of place in a visor like fashion.

9. Plastix

ARMOUR RATING: 800
RESTRICTIVENESS: 1
% BODY WATE: 1.0 (700 gm)
EXPS/VALUE: 75/1000 per kg (1000)

Plastix armour is nice, white, ceramic composite plate armour. The armour has a tendency to remain clean and white, and is commonly worn by spacefaring infantry. This armour type's helmet has a closed face plate with a built in, nearly opaque, sun visor. If the visor is worn, the persona will find it difficult to hit. The player receives a penalty of -100 on her to hit rolls when wearing the helmet.

10. Powered Armour

ARMOUR RATING: 750
RESTRICTIVENESS: Special, 15
% BODY WATE: 300% plus accessories (210 kg)
EXPS/VALUE: 1000/10000000 plus accessories

Powered armour is servo aided, and computer enhanced body armour. Typical powered armour is completely sealed, and carries its own power plant that operates the armour and its accessories. Powered armour increases the wearer's attributes by electronically enhancing and amplifying the body's natural abilities. The persona wearing powered armour is neurally wired to give her immediate access to an array of equipment built into her armour.

Suiting Up, Suiting Down

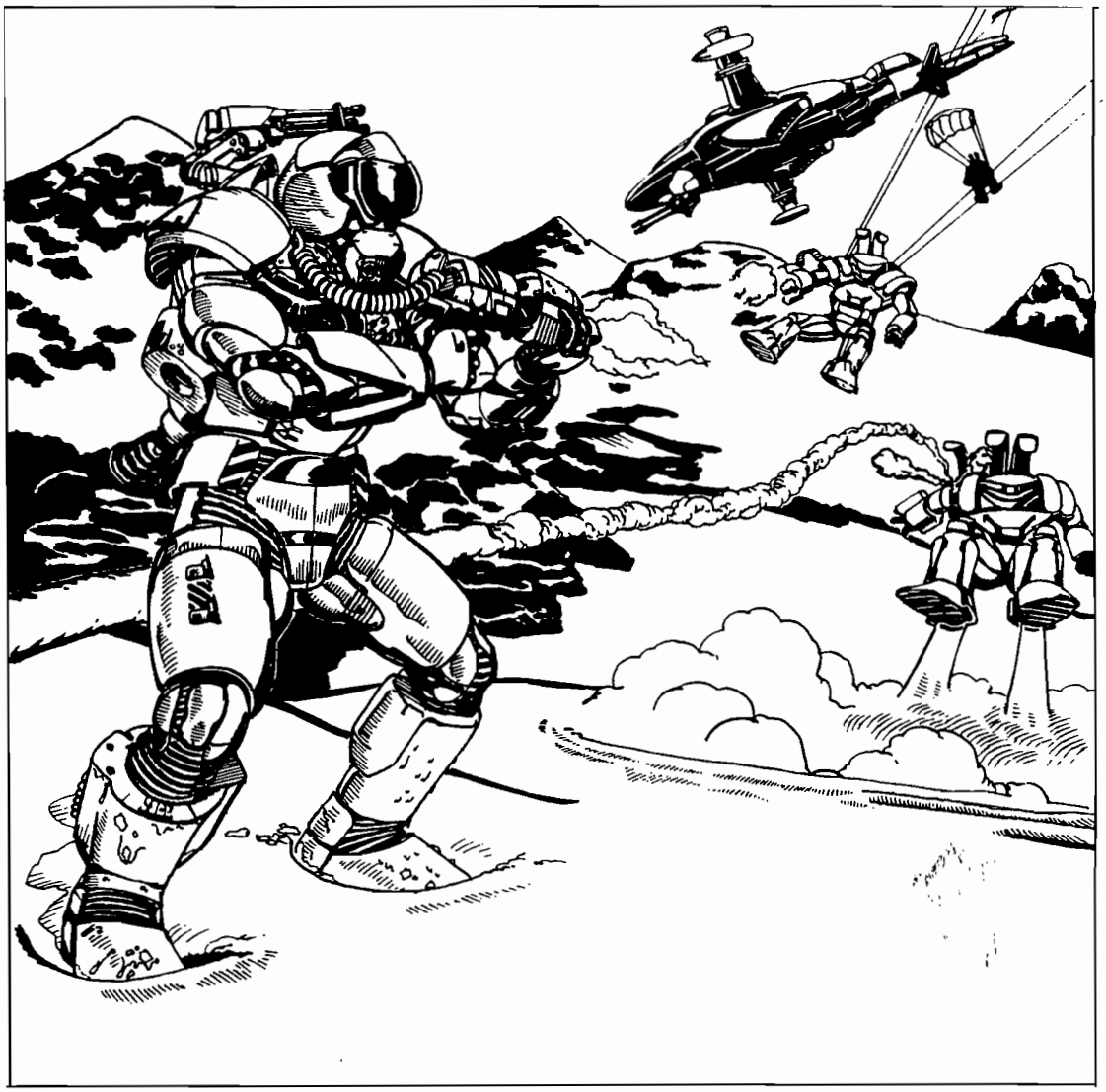
Powered armour is a big deal: any persona or referee persona wearing it is a lethal robo-human killing machine. Since the armour is fully integrated with the persona's nervous system there are some very serious questions to be asked about how one gets into and out of the powered armour.

Powered armour should fit into the referee's campaign. It may be just patiently waiting for someone to step into its half assembled form, ready to activate its own surgical integration programming. The armour may be applied by the medico-military wing of some institute, like a government or corporation. The persona may just have always had the armour on, not remembering life without it.

Leaving powered armour is at the very least a difficult task. If there is no automatic release, the persona is faced with shedding several hundred kilograms of metal, removing direct neural links, and dealing with a body atrophied by the use of powered servos. Suits of powered armour will often have emergency releases where the persona can explode the armour off of her body. This usually destroys the armour, but frees the persona from her personalized tank. The referee should remember that psychological obstacles may prevent the persona from shedding her armoured exterior.

Powered Armour In Combat

Combat is made more complex by powered armour because one persona now has many options open to her per unit. A persona can use all her powered armour devices every unit of combat. This means that she can fire all her weapons, look with her radar, and launch a nuclear missile all in two seconds. Multi-tasking of weapons only applies to those weapons that are integrated parts of her powered armour. This includes items added to peripheral points, but does not include guns being used with armour scopes. The persona cannot fire all her weapons and hope to carry out performance table rolls at the same time. The powered armour requires the wearer's complete attention.



Powering Powered Armour

Since powered armour is expected to be used continuously it is given a sufficient power supply that will allow it to carry out all its possible tasks for a given amount of time. Ten months of continuous use is a reasonable amount of time for a suit of powered armour to run. A suit that is running low on power will give its wearer ample warning since she will certainly suffocate once her air conditioning fails. Deactivated powered armour will assume a restrictiveness of 15. If detailed information on power supplies is required the referee should refer to chapter 5, Robots, which has a detailed account of the kinds and durations of power plants available.

Generating Powered Armour

These exoskeletons are randomly generated in the following paragraphs. The player checks to see what accessories, if any, are attached to the powered

armour. Accessories are recorded in the following order:

Powered Armour Checklist
0) Attribute adjustments
1) Head accessories,
2) Upper limb accessories
3) Torso accessories
4) Lower limb accessories
5) Special suit accessories

To make the creation of powered armour easier to manage it is best to record all the facts relevant to the armour, and then proceed to the other chapters from which information is needed. If the powered armour needs three guns, one piece of medical equipment, and one piece of miscellaneous equipment. It is best to finish the entire suit of powered armour first, and then roll the extra accessories without returning to the powered armour.

0) Attribute Effects

Powered joints amplify the force, and speed of regular body movements. There are standard attribute effects listed in the following paragraph. There are other attribute bonuses that can be earned as other special systems are added to the armour. Note that these increases are only in effect when the powered armour is being worn, and is in working order.

Wearers of powered armour enjoy a PSTR increase of 4-10 points (2d4+2). Not only is the sheer physical force of their movements improved, but the speed of their actions also. The increased power, combined with movement enhancers, increases a powered armour wearer's DEX by 1-6 (d6).

1)Head (Helmet) Accessories

Head accessories are ones built into the helmeted head of the suit of armour. Any guns built into the helmet will fire from there, and communicators will be accessed directly by the persona There areboth standard equipment and random accessories that can be fitted into the helmet of the armour. All of these are explained in the following paragraphs. Every suit of powered armour has the accessories listed under *Head Standard Accessories*. Each suit of armour will also receive 0 to 3 (d4-1) rolls on Table 42.6, *Head Random Accessory*.

Head Standard Accessories
One communication
One visual aid
Plus 0-3 random accessories

Table 42.6: Head Random Accessory

DIE ROLL	HEAD ACCESSORY
01-15	Communication
16-26	Grenade/aerosol
27-37	Gun
38-50	Image intensifier
51-61	Medical system
62-72	Miscellaneous equipment.
73-85	Scope
86-99	Visual aid
00	Other
0-3 rolls per suit of powered armour	

Communication: Head communications have a range of 10 kilometers, and can only be used for communication with other radio receivers. Head communications cannot be used to jam signals or conduct any electronic countermeasures.

Grenade/aerosol: Refer to chapter 45, Grenades and Aerosols to determine what type of grenade, or aerosol, is stored in the helmet. There will be 1-8 grenades launchable from the head. Launched grenades attack as type C weapons, with the range 3 times that of a thrown grenade. Aerosols contained within the helmet will have 1-8 charges, and spray directly from the helmet (nose). More information about grenade/aerosol combat can be found in chapter 30, Grenade and Aerosol Combat.

Gun: Any pistol type can be installed, and fired automatically from the powered armour's helmet. The gun type is determined from chapter 46, Guns. The weapon will have twice the regular magazine capacity, and energy weapons may be given an unlimited power supply from the armour's power plant.

Image Intensifier: The "image" intensifier is an external speaker system that is combined with the special helmet moldings, and computerized actions that enhances the wearer's external "image." A crystal clear synthesized voice, complete with digital overlays, and computerized body language all aid in producing a special image. This special powered armour feature is often found in suits of armour used by commanders. This system benefits the persona's CHA by increasing it 1-6 points.

Medical System: The head medical system is not a specific piece of medical equipment, but a medical computer which prioritizes the head for blood supplies, and protects the neck with special servos. This medical system will increase the wearer's CON by 1-3 points. The increase in CON does not allow for more HPS to be rolled.

Miscellaneous Equipment: Any piece of miscellaneous equipment that does not have an excessive wate (not greater than 10 kg) will be installed into the suit's helmet. Roll on the *Miscellaneous Equipment* table found in chapter 48, Miscellaneous Equipment.

Scope: The helmet now contains a computerized scope of the specifications given on the scope list found in chapter 48. This scope will work with any version of the appropriate weapon that the wearer is using. A scope for pistols would work with any pistol that the wearer uses.

Visual Aid: Commonly called vizauds (a visual auditory enhancer), such units are only found in powered armour, and enhance both hearing and sight. A persona will gain +1-3 on AWE for every vizaud installed into the suit of armour. Some vizuads actually increase touch, taste and smell via pressure, and chemical, detectors outside the suit's shell. A persona must have more than five points of AWE bonus with the suit before all her senses are considered enhanced.

2) Upper Limb Accessories

Upper limb accessories can be located on the hand, arm or shoulder. The precise location of them is not determined by the game, but by the preference of the referee and the player. Standard upper limb accessories are listed below. There is a 30% chance of an upper limb receiving a roll on Table 42.7, *Upper Limb Random Accessory*. The upper limb will receive an additional roll for each time that the player rolls less than 30% on deci dice. Rolls of 21, 16, and 86 would indicate two rolls on the *Upper Limb Random Accessory* table. Standard accessories and random accessory checks are made for both the right and left limb of the armour. For example there are at least 3 peripheral points on each arm.

Standard upper limb accessories
3 peripheral points
1 random accessory per deci die roll less than 30.

Table 42.7: Upper Limb Random Accessory

DIE ROLL	UPPER LIMB ACCESSORY
01-12	Communication
13-32	Detector
33-42	Grenade/aerosol
43-56	Gun
57-66	Medical equipment
67-78	Miscellaneous equipment
79-90	Peripheral point
91-99	Visual aid
00	Other
1 roll per deci-die less than 30%, check both limbs	

Communication: This is another 10 kilometer range communication device. If the armour has more than one communication device operating then the extra devices can be used to jam other channels of communication, or electronically conceal the armour's own signal.

Detector: Rolled on the detector list found in chapter 48, Miscellaneous Equipment. These instruments may have read-outs on the arm, or inside the helmet.

Grenade/aerosol: A roll in chapter 45, Grenades and Aerosols will determine what type of grenade, or aerosol is built into the upper limb. For effect the aerosols can be sprayed from a digit, and the grenades launched from the wrist. The armour will have 1-10 grenades. Launched grenades will attack as type C weapons. Aerosols contained within the upper limb will have 1-10 charges.

Gun: Any pistol, or rifle, can be fired automatically from the wrist, or digit, of the armour. The type of of gun is determined by rolling in chapter 46, Guns. The weapon will have three times the regular magazine capacity, and energy weapons may be directly powered by the suit's power plant.

Medical Equipment: This accessory is rolled in chapter 47, Medical Equipment. The artifact should have multiple uses, for instance a vedi-kit attachment would be useless. The attachment is designed for external use only. This accessory cannot exceed 20 kg in wate.

Miscellaneous Equipment: Any piece of miscellaneous equipment, from chapter 48. The accessory cannot have a wate that exceeds 20 kg.

Peripheral Point: This allows for an extra piece of equipment to be installed in the arm. For instance a mercenary could have her favorite gun inserted into her powered armour via one of the arm peripheral points. An arm peripheral point is not a pocket, and nothing can be stored within it. The wate of the equipment inserted cannot exceed 25 kilograms. There is a 30 % chance a peripheral point will already be filled with an accessory. This would indicate an additional roll on the *Upper Limb Accessory* table.

Visual Aid: Commonly called vizauds (a visual auditory multiplier), such units are only found in powered armour, and enhance both hearing and sight. A persona will gain +1-3 on AWE for every vizaud installed into the suit of armour. Some vizauds actually increase touch, taste and smell via pressure, and chemical, detectors outside the suit's shell. A persona must have more than five points of AWE bonus with the suit before all senses are considered enhanced. A vizaud affixed to the hand would allow the wearer to look around corners.

3) Torso Accessories

Torso accessories are built into the main body of the armour. If a computer were built into the torso the wearer would access it via a keyboard in the chest. There are standard accessories for the torso, and these are included on both the ventral (front) and dorsal (back) aspects of the armour. Apart from the standard accessories are random accessories. There is a 15% chance that the armour will have a random accessory built into the torso. There is one random accessory per roll less than 15. For example rolls of 04, 11, and 29 would indicate 2 random accessories on ventral surface, and the player would now roll for the dorsal surface.

Standard Torso Accessories
4 peripheral points
2 storage compartments
1 random accessory per deci die roll less than 15

Artillery: This mechano-trooper has an artillery piece built into the torso of her powered armour. The weapon will have an ammo supply equivalent to the base gun's magazine size. No suit of powered armour can support more than one artillery piece. If artillery is rolled again the player should make another roll on Table 42.8, *Torso Random Accessories*. The artillery piece is rolled in chapter 43, Artillery.

Bomb: Only one bomb can be built into the torso of the powered armour. If a bomb is rolled again the player should make another roll on the *Torso Random Accessories* table. The bomb will be

Table 42.8: Torso Random Accessory

DIE ROLL	TORSO ACCESSORY
01	Artillery
02-05	Bomb
06-13	Communication
14-21	Computer equipment
22-34	Computer system
35-47	Gun
48-56	Medical equipment
57-68	Medical system
69-76	Miscellaneous equipment
77-84	Peripheral point
85-92	Storage
93-99	Visual aid
00	Other
1 roll per deci-die less than 15%, front and back	

carried via a non-descript all-environments functioning missile to a safe range no greater than 20 kilometers away. If there is no missile to launch the bomb, it has been installed as a self-destruct device, or installed for suicide operations.

Communication: The communication type located in the torso can be quite comprehensive. The range of this communicator is 50 kilometers, or off planet (ship to troop). A torso communicator has 2 to 12 channels and will have the capacity to jam as many signals as it has channels. A deci die roll is made for the communicator to determine if one of the channels is specialized. If the roll is less than 20% computer/robot data can be transmitted, if the roll is less than 10% there will be a lazer communicator that cannot be picked up unless it is directly intercepted.

Computer Equipment: This computer equipment is not linked to the powered armour, and is accessed through some sort of instrumentation on the ventral surface. Roll on the computer list found in chapter 48.

Computer System: The computer system is completely integrated with the wearer. The armour's computer system takes personal memory inputs from the persona, and stores them directly into a cybernetic memory link system. The powered armour computer system also collates all the armour's subsystems into an icon-driven heads up display in the helmet. The computer system will aid the persona's INT by 1-3 points. Computer systems can be located both ventrally and dorsally.

Gun: The gun is determined in chapter 46, Guns. The gun will always be a rifle if the option exists for that particular weapon. It will have ten times the regular ammunition storage, and energy weapons may be powered directly by the powered armour.

Medical Equipment: This accessory is rolled in chapter 47, Medical Equipment. The attachment is designed for both internal, and external use.

Medical System: The medical system is integrated between the armour and the wearer. It has stores of blood products, essential hormones, inoculations, immune system chargers, etc. It can even correct, and maintain, major chest trauma. This benefits the user with a 1-3 point bonus on her CON. The additional constitution points will not affect the persona's HPS max.

Miscellaneous Equipment: Any piece of miscellaneous equipment, from chapter 48.

Peripheral Point: This allows for an extra piece of equipment to be integrated into the persona's armour. The peripheral point is not a pocket, and cannot be used for storage. The device inserted into the peripheral point cannot exceed 100 kg in wate. There is a 15 % chance that this peripheral point will already be filled by an additional roll on the *Torso Accessory* table.

Storage: This is an internally locked storage compartment. The capacity of the compartment is equivalent to twice the persona's in-armour wate allowance. Anything stored in the storage compartment will not be considered part of wate allowance.

Visual Aid: This is a regular vizaud. It will give the wearer a 1-3 point bonus on her AWE. Remember that touch and smell enhancers may be included if the wearer has more than 5 points of AWE increasers. A dorsally located vizaud could allow the wearer to look backwards.

4) Lower Limb Accessories

Lower limb accessories can be located on the thigh, calf or foot. Location of the accessory can be determined by the player or the referee. The lower limb has standard accessories and a series of random accessories. These are generated for both the right and left legs. Each time that the player rolls less than 25% on deci dice there is another roll on Table 42.9, *Lower Limb Random Accessory*.

Standard Lower Limb Accessories
2 Peripheral points
2 Storage compartments
1 random accessory per deci die roll less than 25%.

Table 42.9: Lower Limb Random Accessory

DIE ROLL	LOWER LIMB ACCESSORY
01-14	Detector
15-28	Grenade/aerosol
29-42	Gun
43-56	Peripheral point
57-70	Scope
71-84	Storage
85-98	Visual aid
99-00	Other
1 roll per deci die roll less than 25%, left and right	

Detector: Rolled on the detector list found in chapter 48, Miscellaneous Equipment. The detectors have their read outs and displays inside the helmet, or on some other convenient location.

Grenade/aerosol: A roll in chapter 45, Grenades and Aerosols will determine what type of grenade, or aerosol is built into the lower limb. For effect the aerosols can be sprayed from a toe, and the grenades launched from the knee. The armour will have 1-12 grenades. Launched grenades will attack as type C weapons. Aerosols contained within the upper limb will have 1-12 charges.

Gun: Any pistol, or rifle, can be fired automatically from the foot, or toe, of the armour. The type of of gun is determined by rolling in chapter 46, Guns. The weapon will have twice the regular magazine capacity, and energy weapons may be directly powered by the suit's power plant.

Peripheral Point: This allows for an extra piece of equipment to be installed. For instance a mercenary could have her favorite gun inserted into her powered armour via one of the leg peripheral points. A leg peripheral point is not a pocket, and nothing can be stored in it. The wate of the equipment inserted cannot exceed 30 kilograms. There is a 10% chance a peripheral point will already be filled with an accessory. This would indicate an additional roll on the *Lower Limb Accessory* table.

Scope: The lower limb now contains a computerized scope of the specifications given on the scope list found in chapter 48. This scope will work with any version of the appropriate weapon that the wearer is using. A scope for pistols would work with any pistol that the wearer uses.

Storage: Each leg has an internally locking storage compartment which can store 1/2 the persona's in armour wate allowance. Any equipment stored within a storage compartment does not contribute to the persona's wate allowance.

Visual Aid: Commonly called vizauds (a visual auditory multiplier), such units are only found in powered armour, and enhance both hearing and sight. A persona will gain +1-3 on AWE for every vizaud installed into the suit of armour. Some vizuads actually increase touch, taste, and smell via pressure, and chemical, detectors outside the suit's shell. A persona must have more than five points of AWE bonus with the suit before all senses are considered enhanced. A vizaud affixed to the foot would allow the wearer to look around corners.

Special Limbs

For powered armour wearers that have extra limbs, wings, or tails special armour pieces are available. Tails are rolled as a single leg, wings as upper limbs, and any other extra limbs as extra rolls in their appropriate sections.

5) Suit (Special) Accessories

Suit accessories are those systems which are part of the whole suit. Some of these abilities are standard for all armour, and they are listed under *Standard Suit Accessories*. There are also special suit accessories that are determined on table 42.10, *Special Suit Accessories*. These are special properties that are composed of protective coverings, specialized computers, or unique servo mechanisms. Each suit will have 0 to 3 (d4-1) rolls on the *Special Suit Accessories* table.

Table 42.10: Special Suit Accessories

DIE ROLL	SUIT ACCESSORIES
01-07	Air conditioned
08-14	Alarm
15-21	Anti-personnel
22-33	Compucammo
34-36	Hardened Casing
37-41	Hover
42	Internal system
43-58	Jump
59-65	Preprogrammed
66-72	Radar
73-79	Radiation
80-86	Sealed
87-93	Zero-g maneuver
94-00	Other
0-3 rolls per suit of armour	

Standard Suit Accessories
Air conditioned
Sealed: from vacuum, poisons, elements
Radiation: secure from radiation
Hardened casing: AR 750+d100
0-3 (d4-1) Additional special accessories.

Air Conditioned: Waltz into lethal mechanized combat within the confines of luxuriously air conditioned powered armour. The air conditioning is also essential because it keeps the wearer from overheating due to the armour's internal heat generation.

Alarm: Not all suits of powered armour have enough vizauds to keep the wearer informed of sneak attack, especially while sleeping. The alarm has an AWE of 30, and a 25 hex radius. It will alert the wearer to any ambushes that it detects.

Anti-personnel: To avoid having extremely expensive suits of powered armour overwhelmed by hordes of suicidal natives, some suits are adorned with nasty anti-personnel devices. The 2 hex radius of effect blasts everything with an excruciatingly painful dose of electricity, flame, flash, shrapnel, or sound. Anything holding onto the powered armour must make a save versus mental attack, or let go of the suit. The anti-personnel device will inflict 2 to 12 hit points of damage, and have an attack intensity equal to the damage. The defence can be used once every 2nd unit of combat.

Compucammo: The most exterior layer of this armour is coated with trillions of optical sensors and multi-coloured light emitters. When in the cammo mode, the sensors are used to inform the light emitters, via an integrating computer, of the most beneficial shade of camouflage. The light emitters can also be used to change the colour of the armour to reflect the mood of the wearer. The suit allows the persona to become nearly invisible. AWE rolls must be made to notice the humanoid tank lurking in the shadows. This greatly increases the armour wearer's chance of executing a successful ambush. Once involved in combat the compucammo is of little use against all but the terminally unaware.

Hardened Casing: This is simply a measure of the toughness of the alloy-ceramic hull that makes up the protective part of the powered armour.

Each time hardened casing is rolled a d100 is added to the powered armour's armour rating.

Hover: A limited antigrav generator and retractable fins give the armour the capacity to coast down safely from any height. This may sound trivial, but it is pretty impressive to arrange for a several hundred kilogram lump of metal to glide. Hover allows for limited control, and the persona can change direction to choose the best landing site. The persona can use any attack while hovering.

Internal System: This particular specialty can only be used if the referee permits. It indicates that the powered armour abilities have been surgically implanted within the persona's body, and she appears no more abnormal than any other anthropomroph in **EXP**. The difference is that lazers could leap from her fingers, and she may launch grenades from her skull. The complexities of this biological reinforcing cannot be shrugged off by the referee as magic, and she must be ready to justify all the physical alterations. Much equipment will be lost on a conversion from an exoskeleton to an internal system.

Jump: Biomechanical computers combined with limited anti-grav, and super charged leg servos will launch the mutant a distance up to 3 times her armour adjusted PSTR. The jumps will take 0 to 3 units to complete, covering the desired distance while flying through the air. During the jump the armour wearer will be able to use all weapons and devices at her disposal.

Preprogrammed: With preprogramming the suit's servo system is directly linked to the persona's cerebellum which is in turn linked to a series of neural programs. These neural programs take over the wearer's motor control system, and give her complex mercenary maneuvers as instincts. In certain situations the preprogrammed armour will have acted against a target before the target's existence has reached the armour wearer's consciousness.

How preprogramming effects the persona in play is difficult to determine. Not being ambushable is one benefit. Operating as a mercenary with +50 on all mercenary PT rolls is another benefit. For instance jumping through a wall and discharging all weapons at any available target would get the bonus, but if she wanted to secure the safety of a particular target she could not use her preprogramming. There is also a 1% chance during situations of surprise, like an elevator door opening, or someone going boo!, that preprogramming will take over.

Radar: Radar allows for long range (250 hex radius) sweeps that can identify ground terrain and large bodies in motion. Standing within 2 hexes of active radar is a 1 to 6 intensity radiation attack.

Radiation: Special dense packed waveform absorbing coatings double the wearer's CON vs killing radiation, also ensuring that the personas CON vs radiation cannot be less than 16. If the persona saves, the radiation has no effect. If the suit is radiation hardened more than once or twice, the wearer's CON will be tripled, and quadrupled.

Sealed: Immunity from the effects of all non-combat environmental conditions. Including lack of atmosphere, infected atmospheres, poisonous atmospheres, and extreme temperatures. The seals of the powered armour do not last indefinitely, and will eventually be subject to maintenance damage. There is a 10% chance that the powered armour will have a mini airlock that allows small items to be brought within the powered armour's environment.

Zero-G Maneuvers: Zog maneuver allows the persona to move about normally in the wateless three dimensional terrain of zero gravity. For more information about zero gravity, see chapter 19, special terrain.

Other: Other has a particularly large presence on this list, and some ideas are listed here: tracks, trailer hitches; rock climbing equipment, beacons, food dispensers, internal storage compartment access, etc.

Value of Powered Armour

The base value of a suit of powered armour is 10000000 eps (ten million). The value increases with the addition of various accessories. Common toys used as powered armour accessories are worth ten times their regular amount (due to defence contract budgeting), and added to the cost of the armour. The value of accessories specific to powered armour are listed on the *Accessory Value* Table.

Table 42.11: Accessory Value

RANDOM ACCESSORY	ACCESSORY VALUE
Air conditioning	0
Alarm	500000
Anti-personel	200000
Compucammo	2000000
Computer system	1000000 per INT bonus
Hover	100000
Image intensifier	10000
Internal	10 x value of entire suit
Jump	10000 per hex range
Medical system, head	300000 per CON bonus
Medical system, torso	900000 per CON bonus
Preprogrammed	2 times value of suit
Radar	10000 per hex range
Radiation, hardened	100000
Sealed	0
Storage, legs	0
Storage, torso	42
Visual aid,	500000 per AWE bonus
Zero g maneuver	1000000

11. Protex

ARMOUR RATING: 600
RESTRICTIVENESS: 4
% BODY WATE: 3.5 (3 kg)
EXPS/VALUE: 900/20000 flat rate

Suits of protex are industrial armour. They are suits composed of various materials which are manufactured to defend against damage from specific work place hazards.

The armour-clothing offers complete protection from the hazard described. The problem is that this armour is not designed for the rigors of combat, and combat will destroy it fairly quickly. Protex armour is considered useless once the persona has withstood 100 point of damage while wearing the armour. Roll on Table 42.12, *Protex Type* to determine the type of protection offered. This protection is total, no damage taken, no saves necessary

Table 42.12: Protex Type

DIE ROLL	PROTEX TYPE	EFFECT DESCRIPTION
01-09	Cold	No damage from sub-zero temperatures.
10-18	Corrosives	No damage from acids or bases.
19-36	Dryness	Preserves body moisture.
37-45	Electricity	Grounds all damaging current
46-54	Energy	Safe from non-military fusion, fission flashes.
55-63	Flame	Fames have no effect
64-72	Gases	Poison or nerve gases cannot penetrate.
73-81	Heat	Safe from radiated heat, 1000's of degrees.
82-90	Lazers	No blinding, or damage, from non-military lazers.
91-94	Radiation	Stops all radiation forms except mental attack.
95-99	Viruses	No bacteriological, or viral, entrance to the body.
00	Other	

12. Shield

ARMOUR RATING: Special
RESTRICTIVENESS: Special
% BODY WATE: Special
EXPS/VALUE: 100/Special

Special shields are arm held plates based on the materials, or technologies, of other special armour types. For instance, a plastix shield may be found with a suit of plastix armour. The plastix shield will improve the user's armour rating by decreasing the surface area available for effective attack. The main point of a shield is that it can only protect one flank of the wearer, and does not cover her whole body. A force field wrist band would only place a force field in front of the persona, and attacks from the other flanks would not enjoy the shielding bonus. Further rules for shielding can be found under Shielding in chapter 29, Armour Rating.

The armour rating bonus of shields are listed on Table 42.13, *Shield Type*. All special properties of the armour that apply to the shield are listed on the table. Shields are quite dull, and take some time to roll up since the referee must flip between several parts of this chapter.

Table 42.13: Shield Type

DIE ROLL	SHIELD TYPE	ARMOUR RATING AND SPECIAL NOTES
01-10	1. Ablative	+75 AR, absorbs 10 to 100 HPS of lazer
11-20	2. Ballistic	+75 AR, absorbs 10 to 100 HPS of bullet damage
21-30	3. Combat armour	+125 AR
31-40	4. Compucrafted	+3 to 300 AR
41-50	5. Concussion	+75 AR, absorbs 10 to 100 HPS of force
51-60	6. Flexion	+150 versus specialty
61-70	7. Force field band	Wrist band absorbs 10 to 100 HPS
71-80	9. Plastix	+125 AR
81-90	10. Powered	+100 AR, Same as upper limb, requires peripheral point
91-99	11. Protex	Reduces specific damage type five fold.
00	Other	

13. Vac Suit

	CIVIL	INDUSTRIAL	MILITARY
ARMOUR RATING:	500	600	700
RESTRICTIVENESS:	4	8	6
% BODY WATE:	10 (8 kg)	30 (21 kg)	20 (15 kg)
EXPS/VALUE:	350/100000	350/250000	350/300000

The vacuum resistance suit keeps the persona from being simultaneously asphyxiated, boiled and frozen by the harsh environment of deep space (exatmo). The vac suit, or space suit, is the standard protection worn by anthropomrphs expecting to survive zero atmosphere. There are three separate types of vac suits: **civilian**, **industrial**, and **military**, Each of which has unique statistics and peculiarities. The vac suits are detailed in the following paragraphs.

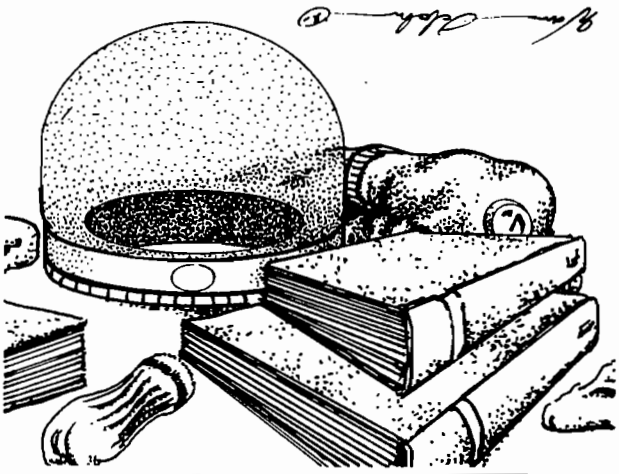
Vac suits will tear only if subject to extreme damaging forces. If a persona wearing a vac suit takes 30 points of damage, there is a 30% chance of vac suit rupture. Vac suit rupture will kill the wearer instantly.

Civilian: The civilian vac suit is the virtual life preserver of outer space. It can be adorned quickly, within 1 to 4 units if a DEX roll is made. The wearer will be able to function normally for 4 days. If the vac suit is worn for greater than 4 days, the wearer will be preserved cryogenically until revived by medical personnel (DD 5). The civilian vac suit has no movement controls to speak of, and the persona must drag herself around in zero gravity. Since the civilian vac suit is only going to be worn in emergency situations is also acts as an all frequency homing device, emitting a locator-distress call to all receivers.

The vac suit can also be worn to protect against toxins inside an atmosphere. The suit will maintain a safe environment for 4 days, and then act as a stasis bag for 4 months.

Industrial: The industrial vac suit was designed to do outside repair work for spacevehicles while exatmo. The suit can be jumped into by a skilled wearer in 1 to 6 units. An industrial vac suit can be flown around by the wearer. It has jets built into the shoes, and gloves, so the wearer can maneuver at 8 h/u. The industrial vac suit has a built in radio, and lots of space for tools, and spare parts. The industrial vac suit has a mini airlock which can transfer small pieces of equipment to the inside of the suit for delicate hands on work. A persona can function normally for 8 days in this vac suit, but beyond this time the wearer will be placed in cryogenic suspension, and an all frequency emergency beacon will begin transmitting.

Military: While exatmo, the military vac suit is virtually undetectable to anything other than direct visual sight. The suits have built in lazer communicators, and line of sight must be maintained to converse between two talkers. Specially articulated gloves allow the wearer to employ triggered weapons. There is also a jet system built into the shoulders and feet of the vac suit. The jets allow the wearer to travel at 10 h/u. The military vac suit is designed for quick removal once in atmosphere, and will explode off the wearer in less than a unit. A military vac suit cannot be adorned in an emergency basis. A military vac suit will last for 6 days in exatmo, after which the wearer is dead.



IIII

Chapter 43
Artillery

Artillery is a specialized subsection of guns. An artillery piece is nothing more than a big rifle with an area of effect. However artillery is an extremely dangerous piece of equipment. Unless the referee enjoys having her players roll up lots of new personas she will limit the presence of artillery in her campaign. The artillery in this chapter uses the basic rifle types found in chapter 46, Guns. In fact, all of the artillery pieces are adapted rifles that have had their statistics altered to imitate big guns. Simply roll on Table 43.1, *Artillery Type* to determine what kind of cannon the artifact will be. For convenience the changes have been made for all the appropriate weapons. How these changes were made are detailed in the following paragraphs.

Type/Range

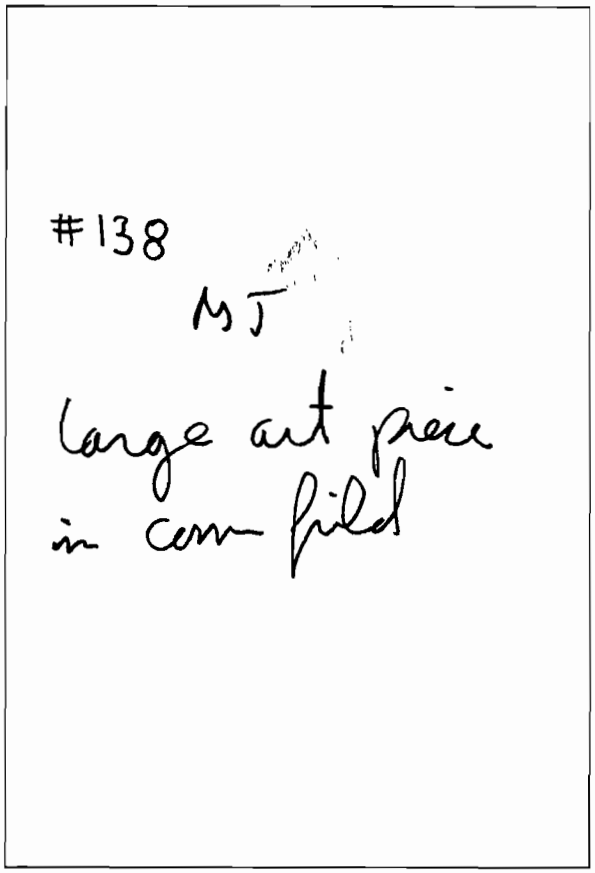
Artillery has the same rate of fire as the basic gun type rolled. Artillery modelled after a type D gun could fire twice a unit. Artillery modelled after type C would fire once a unit. Artillery modelled after 'special' would fire 15 rounds a unit, with the appropriate to hit rolls being made.

Artillery has both a maximum range, and a minimum range. The minimum range of an artillery piece is 1/10 of the maximum range listed for the base gun type. An artillery piece's maximum range is 10 times the maximum range of the base gun type. If the rifle had a range of 80 hexes, it would have a minimum range of 8 hexes and maximum range of 800 hexes.

Minimum range is unique to artillery, and it means that it simply cannot attack anything closer than that. Most artillery would destroy itself, and its firers, if it were used even at the minimum range. Targets at less than minimum range and beyond the maximum range cannot be hit accurately, although the large area of effect may accommodate for the restriction.

Damage/Area of Effect

The damage inflicted by the artillery will be three times that of the rifle that the cannon is modelled after. If only one damage range is shown on the base gun type, the artillery attack will inflict triple that damage. For instance a fission rifle inflicts 6 to 72 (6d12) hit points in damage. Artillery modelled after this weapon would inflict 18 to 216 (18d12) hit points in damage to all targets within the area of effect. If the base gun has several damage types the artillery piece will inflict three times the highest damage type listed. The full automatic rifle's



damage is listed as 4-48, 4-32, 3-30, 3-24, 2-20. These damages are for different calibre guns. Artillery has its own calibre, and it is big. The artillery will inflict three times the largest caliber, or 12 to 144 (12d12) hit points in damage to all targets in the area of effect.

The area of effect will be 3 times the listed area of effect, or a randomly assigned area of effect of 2 to 12 hexes. The value represents a radius of effect taken from the hex that the shell lands in. Those artillery listed with a 'random' area of effect will make a 2d6 dice roll to determine it.

Accuracy

The accuracy statistic of the rifle does not apply to artillery. To be able to operate artillery the persona must make a successful DD roll to understand the device, aim it, and then make a to hit roll. Misses with artillery are left to be decided by the referee. If a quick and dirty system is needed then consult the *Grenade Miss* table in chapter 30, Grenade and Aerosol Combat. The listed table values are multiplied tenfold, of course. Personas without artillery skill cannot attack, other than randomly, with an artillery piece.

Ammo/Malfunction

Artillery has a magazine. The magazine size is equivalent to the highest rate of fire capable by the base gun type. An artillery piece modelled after a type C base gun type would have a 1 round magazine, so it would have to be reloaded after each shot. A fully automatic base weapon would yield an artillery magazine with a capacity of 15 rounds, if it were fired full-auto, it would need to be reloaded each round. Reloading of artillery depends entirely on the skill of the firers, but it can never get faster than 1 to 4 units per reload.

Artillery is 1.5 times more likely to malfunction than the base gun type it is modelled after. Artillery being used by unskilled firers is 4 times more likely to malfunction than the malfunction chance listed for the artillery.

Wate/Ammunition

The artillery piece will have a WATE 75 times greater than the base gun type's WATE. If the base gun type has several wates listed, the largest one will be multiplied by 75.

Base gun types that have a % ammo system use the % ammo value for the WATE of their artillery shells. Artillery shells modelled after gun ammos which have a standard ammo WATE will be 50 times heavier than the base gun ammo.

Energy artillery that requires batteries will employ some power plant source, or use 20 times the number of batteries required by the base weapon type.

EXPS/Value

Artillery weapons are worth the same amount of experience as the base gun type. The value of the artillery is equal to 100 times the value of the gun it was modelled after. The value of the artillery ammo, shells, pellets, or whatever is 25 times the value the base gun type's.

Gun to Artillery Alteration
TYPE/RANGE: TYPE is same/ 1/10 is minimum, 10x is maximum
DAMAGE: 3 times highest value
ACCURACY: None for artillery
AMMO/MALF: magazine size=type/1.5 times (or 4 times)
WATE/AMMO: 75 times heaviest/use % value, or 50 times.
EXPS/VALUE: EXPS is the same/ 100 times value
3 times existing area of effect, or random 2d6 hex area of effect.
4 times the chance of malfunction for an unskilled firer.

Table 43.1: Artillery Type

DIE ROLL	ARTILLERY NAME	BASE GUN REFERENCE
01	1. Annihilator	4. Antimat rifle
02	2. Beehive	5. Beegun
03-10	3. Howitzer	6. Bolt action rifle
11-13	4. Cryocannon	7. Cryo gun
14	5. Disintegration	10. Disintegration gun
15-18	6. Electron cannon	12. Electron rifle
19-22	7. Fission	14. Fission rifle
23-26	8. Howglitzer	16. Full auto lazer rifle
27-30	9. Howblitzer	18. Full auto rifle
31	10. Nuk-o-matic	20. Fusion rifle
32-35	11. Mag cannon	22. Gauss rifle
36-39	12. Whale gun	— Grapple gun (*Misc weap.*)
40-43	13. Grav cannon	25. Gravruptor gun
44-47	14. Garbage Can-on	27. Job rifle
48-55	15. Lazer cannon	29. Lazer rifle
56-59	16. —	*Miscellaneous Weapon Table*
60-63	17. Flame thrower	30. Napalm gun
64-67	18. Plasma	33. Plasma rifle
68-71	19. Plastix	35. Plastix rifle
72	20. Muckmaker	36. Protein disrupter
73-76	21. Rad cannon	37. Radiation gun
77-80	22. Slotto cannon	40. Semi-auto lazer rifle
81-84	23. Sotto cannon	42. Semi-auto rifle
85-88	24. Sonic cannon	45. Sonic rifle
89-92	25. Whale stun	47. Stun rifle
93-96	26. —	49. Variable lazer rifle
97-99	27. Water cannon	50. Watergun.
00	28. Ref's own table	

1) Annihilator (Antimat Rifle #4)

TYPE/RANGE: C/15 hex min., 1500 hex max.
DAMAGE/AREA OF EFFECT: 105-240/75 hexes
AMMO/MALF: 1/60
WATE/AMMO: 375 kg/0.5 kg
EXPS/VALUE: 900/37500000 (1500000)

The annihilator also completely destroys 600 kilograms of matter. Damage is rolled as 15d10 plus 90. The resulting explosion causes the area of effect attack. The artillery requires batteries. For more detailed information see the base rifle type in chapter 46, Guns. A malfunction means this weapon will explode like an antimat rifle in the firing hex.

2) Beehive Cannon (Beegun #5)

TYPE/RANGE: C/ 15 hex min., 1500 hex max.
DAMAGE/AREA OF EFFECT: Death/Random
AMMO/MALF: 1/3
WATE/AMMO: 150 kg/5 kg
EXPS/VALUE: 500/25000000 (3000000)

The beehive cannon fires a hive of ferocious insects at its target. All must save versus poison attack or die. The poison intensity is a ridiculous 57 to 72. This is rolled on 3d6 plus 54. For more detailed information see the base rifle type in chapter 46.

3) Howitzer (bolt action rifle #6)

TYPE/RANGE: C/12 hex min., 1200 hex max.
DAMAGE/AREA OF EFFECT: 12-144/Random
AMMO/MALF: 1/15
WATE/AMMO: 278 kg/4.5 kg (1.5%)
EXPS/VALUE: 400/50000 (100)

For more detailed information see the base rifle type in chapter 46. A malfunction is a weapon jam.

4) Cryocannon (Cryogun #7)

TYPE/RANGE: C/1 hex min., 100 hex max.
DAMAGE/AREA OF EFFECT: 12-72/6 hexes wide
AMMO/MALF: 1/45
WATE/AMMO: 150 kg/batteries only
EXPS/VALUE: 700/600000 (batteries)

The cryocannon freezes everything within its 6 hex by 100 hex area of effect. Each point of damage is a % chance of being entrapped. The glacier melts in 18 to 180 units (18d10). Damage is rolled on 12d6. This weapon is also called a glacier gun. For more detailed information see the base rifle type in chapter 46.

5) Disintegration (Disintegration gun, #10)

TYPE/RANGE: C/10 hex min., 1000 hex max.
DAMAGE/AREA OF EFFECT: 24-192/Random
AMMO/MALF: 15/30
WATE/AMMO: 338 kg/1.5 kg
EXPS/VALUE: 900/50000000 (25)

The disintegration cannon will disintegrate 3 to 300 kilograms of matter. There is a 1% chance per kilogram disintegrates that the attack will fail. Damage is rolled on 24d8, or a d20 per kilogram destroyed. For more detailed information see the base rifle type in chapter 46.

6) Electron cannon (electron rifle, #12)

TYPE/RANGE: D/17 hex min., 1700 hex max.
DAMAGE/AREA OF EFFECT: 15-150/Random
AMMO/MALF: 2/15
WATE/AMMO: 315 kg/Batteries
EXPS/VALUE:750/20000000 (batteries)

An electron cannon can pass through force fields unhindered. For more detailed information see the base rifle type in chapter 46.

7) Fission (Fission rifle #14)

TYPE/RANGE: E/11 hex min., 1100 hex max.
DAMAGE/AREA OF EFFECT: 18-216/Random
AMMO/MALF: 3/30
WATE/AMMO: 319 kg/batteries
EXPS/VALUE: 950/3200000 (Batteries)

The damage is rolled on 18d12. For more detailed information see the base rifle type in chapter 46.

8) HowGlitzer (full auto lazer rifle #16)

TYPE/RANGE: C, F, special/12 hex min., 1200 max.
DAMAGE/AREA OF EFFECT: 15-150/Random
AMMO/MALF: 15/45
WATE/AMMO: 308 kg/batteries
EXPS/VALUE: 700/1200000 (25)

For more detailed information see the base rifle type in chapter 46.

9) Howblitzer (full auto rifle #18)

TYPE/RANGE: C, E, special/ 9 hex min., 900 max.
DAMAGE/AREA OF EFFECT: 12-144/Random
AMMO/MALF: 15/45
WATE/AMMO: 293 kg/4.3 kg (1.5%)
EXPS/VALUE: 700/400000 (25)

Damage is rolled on 12d12. For more detailed information see the base rifle type in chapter 46.

10) Nuk-o-matic (Fusion Rifle, #20)

TYPE/RANGE: C/ 9 hex min., 900 hex max.
DAMAGE/AREA OF EFFECT: Special/9 hex swath
AMMO/MALF: 1/60
WATE/AMMO: 600 kg/1 kg
EXPS/VALUE: 900/80000000 (200000)

The fusion artillery blasts a 9 hex by 900 hex swath of incinerating death. There is a fusion backflash that inflicts 18-180 (18d10) hit points in damage to anything within 3 hexes of the cannon (excluding those armoured or shielded for firing the G.V.M.B). This cannon needs batteries to operate. A malfunction with the expedition eradicator will inflict 24-240 hit points of damage to all within 15 hexes. For more detailed information see the base rifle type in chapter 46.

Nuk-O-Matic Effects (HPS)

TARGET SIZE	HIT DAMAGE	SWATH DAMAGE
Tiny	Destroyed	24-240
Small	Destroyed	24-240
Medium	Destroyed	24-240
Large	54-540	24-240
Gigantic	48-480	24-240

11) Mag cannon (Gauss Rifle #22)

TYPE/RANGE: E/19 hex min., 1900 hex max.
DAMAGE/AREA OF EFFECT: 15-180/Random
AMMO/MALF: 3/3
WATE/AMMO: 281 kg/5.6 kg (1.8%)
EXPS/VALUE: 754/1200000 (500)

This cannon is virtually silent when firing. It is also called a rail gun. The damage is rolled on 15d12. For more detailed information see the base rifle type in chapter 46.

12) Whale gun (Grapple Gun, misc. weapon #11)

TYPE/RANGE: C/2 hex min., 150 hex max.
DAMAGE/AREA OF EFFECT: 12-72/None
AMMO/MALF: 1/45
WATE/AMMO: 225 kg/Special
EXPS/VALUE: 700/400000 (25)

The grapple has a 5% chance per hit point of damage of sticking into its target. Damage is rolled on 12d6. The whale gun will be able to reel in its target at 5 h/u. Maximum wate for reeling in is 10 tonnes. For more detailed information see #11 Grapple Gun, in chapter 49, Miscellaneous Weapons.

13) Grav cannon (Gravruptor gun #25)

TYPE/RANGE: C/3 hex min., 300 hex max.
DAMAGE/AREA OF EFFECT: Special/Random
AMMO/MALF: 15/45
WATE/AMMO: 293 kg/4.3 kg (1.5%)
EXPS/VALUE: 700/400000 (25)

The cannon delivers 3 to 12 (3d4) random gravities to the area of effect. Each gravity will inflict a d12 in damage. The attack will affect anything with a wate less than 1500 kg. There are also directional effects, and special effects in zero gravity. This is a zero gravity weapon designed to send opponents flinging off into space. For more detailed information see the base rifle type in chapter 46, Guns.

14) Garbage Can-on (Job rifle #27)

TYPE/RANGE: C/10 hex min., 1000 hex max.
DAMAGE/AREA OF EFFECT: Special/Random
AMMO/MALF: 1/30
WATE/AMMO: 300 kg/special
EXPS/VALUE: 700/1750000 (None)

The JOB cannon can launch about 10 kg of anything up to its maximum distance. If it is 10 kg of junk the kinetic attack will inflict 9 to 90 HPS in damage. The cannon could also launch 10 kg worth of grenades, or poison gas. For more detailed information see the base rifle type in chapter 46.

15) Lazer cannon (Lazer rifle #29)

TYPE/RANGE: C/15 hex min., 1500 hex max.
DAMAGE/AREA OF EFFECT: 15-150/Random
AMMO/MALF: 1/30
WATE/AMMO: 278 kg/Batteries
EXPS/VALUE: 500/600000 (25)

For more detailed information see the base rifle type in chapter 46.

16) Special (Special)

TYPE/RANGE: Special
DAMAGE/AREA OF EFFECT: Special/Special
AMMO/MALF: Special/Special
WATE/AMMO: ? kg/Varies
EXPS/VALUE: ?/Varies (?)

For more detailed information see the base weapon type in chapter 49, Miscellaneous weapons. This is a very large version of any weapon from the miscellaneous weapons chapter. It could be a huge black hole, a gigantic spinning wheel of death, or a flare cannon (for use when stranded on a planet). The referee should simply roll on the *Miscellaneous Weapon* table until she finds an appropriate weapon. For instance, compucrafted weapons would be inappropriate, but rocket assisted weapons might be appropriate.

17) Flame Thrower (Napalm Gun #30)

TYPE/RANGE: C/2 hex min., 150 hex max.
DAMAGE/AREA OF EFFECT: 30-300/3 hex swath
AMMO/MALF: 1/38
WATE/AMMO: 338 kg/15 kg
EXPS/VALUE: 900/1200000 (20000)

The flame thrower immolates everything in a 3 by 150 hex swath. Damage is rolled on 30d10. For more detailed information see the base rifle type in chapter 46.

18) Plasma (Plasma rifle #33)

TYPE/RANGE: F/16 hex min., 1600 hex max.
DAMAGE/AREA OF EFFECT: 12-144/Random
AMMO/MALF: 4/12
WATE/AMMO: 300 kg/1 kg (plus batteries)
EXPS/VALUE: 700/36000000 (3000000)

This weapon needs batteries as well as ammo. For more detailed information see the base rifle type in chapter 46.

19) Plastix (Plastix rifle #35)

TYPE/RANGE: E/12 hex min., 1200 hex max.
DAMAGE/AREA OF EFFECT: 18-180/Random
AMMO/MALF: 3/18
WATE/AMMO: 315 kg/31 kg
EXPS/VALUE: 600/8500000 (10000)

Plastix attacks do double damage against personas' plastix armour. For more detailed information see the base rifle type in chapter 46.

20) Muckmaker (Protein disrupter #36)

TYPE/RANGE: C/13 hex min., 1250 hex max.
DAMAGE/AREA OF EFFECT: 15-180/Random
AMMO/MALF: 1/15
WATE/AMMO: 315 kg/Batteries
EXPS/VALUE: 700/1100000 (Batteries)

The protein disrupter has no effect on inorganic targets, and is unimpeded by walls, force fields, or spacevehicle hulls. For more detailed information see the base rifle type in chapter 46.

21) Rad cannon (Radiation gun #37)

TYPE/RANGE: E/15 hex min., 1500 hex max.
DAMAGE/AREA OF EFFECT: Special/Random
AMMO/MALF: 3/38
WATE/AMMO: 293 kg/0.5 kg (plus batteries)
EXPS/VALUE: 900/8500000 (25000)

The radiation cannon inflicts 9-72 intensity radiation on everything within the area of effect. For more detailed information see the base rifle type in chapter 46.

22) Slotto cannon (Semi auto lazer rifle #40)

TYPE/RANGE: C, D, E/13 hex min., 1250 max.
DAMAGE/AREA OF EFFECT: 15-150/Random
AMMO/MALF: 3/38
WATE/AMMO: 299 kg/Batteries
EXPS/VALUE: 600/320000 (Batteries)

For more detailed information see the base rifle type in chapter 46.

23) Sotto cannon (Semi auto rifle #42)

TYPE/RANGE: C, D, E/11 hex min., 1100 max.
DAMAGE/AREA OF EFFECT: 12-144/Random
AMMO/MALF: 3/30
WATE/AMMO: 298 kg/4.3 kg (1.5%)
EXPS/VALUE: 600/280000 (2500)

For more detailed information see the base rifle type in chapter 46.

24) Sonic cannon (Sonic rifle #45)

TYPE/RANGE: E/8 hex min., 800 hex max.
DAMAGE/AREA OF EFFECT: 15-120/Random
AMMO/MALF: 3/60
WATE/AMMO: 293 kg/4.3 kg (1.5%)
EXPS/VALUE: 700/800000 (25)

For more detailed information see the base rifle type in chapter 46.

25) Whale stunner (Stun rifle #47)

TYPE/RANGE: D/13 hex min., 1300 hex max.
DAMAGE/AREA OF EFFECT: Stun/Random
AMMO/MALF: 2/8
WATE/AMMO: 293 kg/Batteries
EXPS/VALUE: 700/600000 (Batteries)

The stun is an intensity 12 to 72 (12d6). For more detailed information see the base rifle type in chapter 46.

26) Variable (Variable lazer rifle #49)

TYPE/RANGE: D/13 hex min., 1300 hex max.
DAMAGE/AREA OF EFFECT: 24-192/Random
AMMO/MALF: 2/30
WATE/AMMO: 315 kg/Batteries
EXPS/VALUE: 780/36000000 (Batteries)

The cannon can choose between a stun (intensity 3 to 36), the listed lazer damage attack (24d8 damage), or a huge searchlight. For more detailed information see the base rifle type in chapter 46.

27) Water cannon (Water gun #50)

TYPE/RANGE: C/5 hex min., 500 hex max.
DAMAGE/AREA OF EFFECT: 9-54/Random
AMMO/MALF: 1/15
WATE/AMMO: 56 kg/Batteries
EXPS/VALUE: 500/75000 (Batteries)

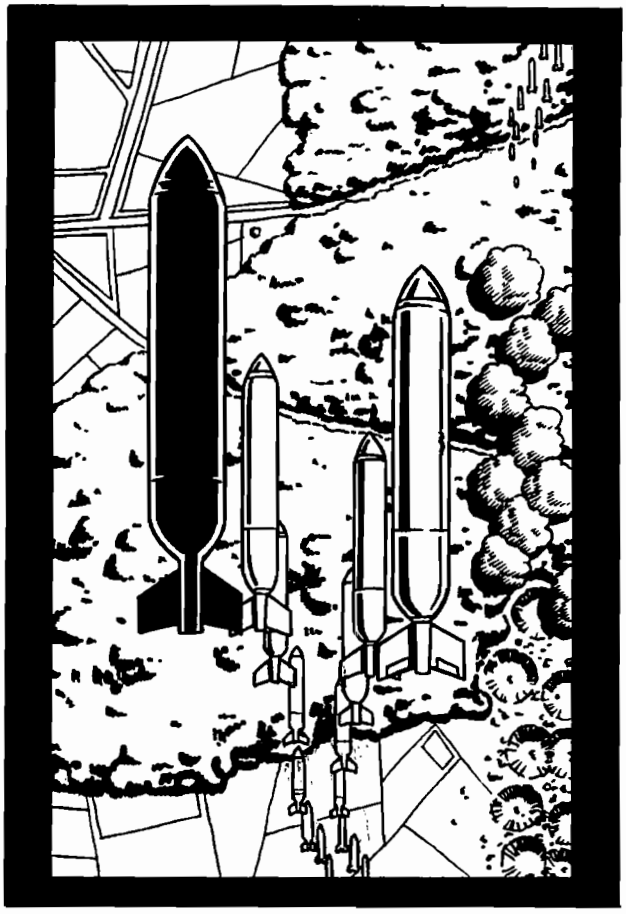
For more detailed information see the base rifle type in chapter 46.

28) Ref's Own Table

TYPE/RANGE: Special/Special
DAMAGE/AREA OF EFFECT: Special
AMMO/MALF: Special
WATE/AMMO: Varies/Varies
EXPS/VALUE: Varies/Varies

Artillery is very dangerous to the livelihood of prolonged persona existence and hence it is dangerous to the survival of campaigns. The referee should think carefully before inserting her own artillery.

Chapter 44
Bombs



Bombs are a subsection of grenades and aerosols (chapter 45). Bombs are nothing more than great big grenades. They have a greater area of effect, inflict more damage, and have longer durations than the grenades, or aerosols, that they are modelled after.

Bombs are very deadly—misuse of a fusion bomb would certainly melt an entire expedition in the flash of a hydrogen atom. Even previously safe aerosols can become dangerous when amplified to the proportions of a bomb—a foam bomb could easily entomb an entire unsuspecting expedition.

There is not a detailed explanation of every deadly bomb. Table 44.3, *Bomb Type* indicates what grenade, or aerosol, type is to be increased to the proportions of which bomb. How to carry out this adaptation is detailed in the following paragraphs.

Many grenades, and aerosols, have special effects which are also increased when they are fashioned into bombs. Clouds, fires, radioactivity, or ice fields will last 10 times longer than the durations listed for aerosols, and grenades.

The intensities of poisons are generated in the same manner as the grenade, or aerosol, type. The intensity of a bomb attack cannot exceed 25, unless the base weapon type already can.

Range

This aerosol statistic does not apply to bombs, even if the bomb is modelled after an aerosol. When a bomb is detonated, it destroys itself, and its area of effect reaches out around it. It also should be obvious that bombs cannot be thrown any great distance.

Area of Effect

The area of effect operates similarly to the area of effect of grenades, and aerosols. The only difference is that a bomb's area of effect radius is 20 times greater than its base type. All incidental area of effect radii are also multiplied by 20. E.g., the fusion bomb has an area of effect that inflicts damage, one that blinds, one that immolates, and one that irradiates. The radius of each of these effects is multiplied by 20. Those bombs modelled after weapons that have a swath attack, will also have a swath attack as a bomb. The dimensions of the swath attack are increased 20 times.

The cover granted to a bomb attack must be much more substantial than that needed to impede a grenade. For instance cover from a grenade attack could be offered by the wall of a house, or the corner of a building. In the case of a bomb, only a

military bunker may be able to protect the target. Bombs are deadly. They are designed to destroy large areas effectively and economically.

Damage

Any damage that the base weapon inflicts is multiplied by 10. This is the factor that makes bombs so incredibly deadly, because even the most trivial damage amounts are multiplied to killer proportions. If the referee feels that a non-lethal base grenade, or aerosol, has been made too deadly by the change in damage, she may feel free to alter it.

Wate

A bomb will have a wate 25 times greater than its grenade, or aerosol counterpart.

EXPS/VALUE

Bombs are worth the same number of EXPS points as the weapons they are modelled after. The value of a bomb is 50 times that of its base aerosol, or grenade type.

Description

Bombs have shapes and colours the same as grenades do. Even if the bomb has an aerosol effect, it will have one of the bomb shapes generated in this section. Use Table 44.1, *Bomb Shape*, and Table 44.2, *Bomb Colour* to determine a random description of the bomb.

Table 44.1: Bomb Shape

DIE ROLL	BOMB SHAPE
01-10	Bag
11-20	Banana
21-30	Cube
31-40	Pear
41-50	Pineapple
51-60	Pyramid
61-85	Sphere
86-00	Other

Table 44.2: Bomb Colour

DIE ROLL(d12)	BOMB COLOUR
1	Black
2	Blue
3	Gold
4	Green
5	Grey
6	Pink
7	Red
8	Silver
9	Tan
10	Yellow
11-12	Striped (use d10 twice)

Detonators

Unlike aerosols, bombs are completely self consuming. When bombs are detonated, they destroy themselves, and attempt to spread their effects over the greatest possible area.

A bomb's detonator is truly the nitty gritty of the device. Unlike grenades and aerosols, none of the bomb's detonators are designed with personal safety in mind. The bombs have radio detonators, fuses, or some other form of long range triggering device which allows for user safety. Once the

detonator is activated, the bomb will explode, spreading death all about itself. It should be fairly obvious that fooling with a bomb's detonator could very easily annihilate an entire expedition.

There is a 75% chance that a bomb's detonator will be unattached. This not just a military safety procedure, but one which will also preserve the lives of button-happy expedition members.

Base Type Alterations
AREA OF EFFECT:20 times dimensions.
DAMAGE:10 times damage.
WATE: 25 times WATE.
EXPS/VALUE: EXPS is same / 50 times value.
10 times the duration of areas of effect.
Intensities cannot exceed 25.

Table 44.3: Bomb Type

DIE ROLL	BOMB NAME	GRENADE/AEROSOL REFERENCE
01-05	1. Grand slam	1. Big bertha
06-08	2. Corrosive	3. Corrosive
09-11	3. Polar	4. Cryoblast
12-14	4. Battery	5. Energy drain
15-17	5. Lazer	6. Energy
18-24	6. Bomb	8. Fragmentation
25-27	7. Nuclear	9. Fusion
28-30	8. Nerve gas	10. Gas
31-33	9. Gravruptor	11. Gravruptor
34-36	10. Attractor	12. Magnetic disrupter
37	11. Disrupter	14. Molecular disrupter
38-40	12. Jumping jack	15. Multiple explosive
41-43	13. Napalm	16. Napalm
44-48	14. Diversion	18. Pyrotechnic
49-51	15. Neutron	19. Radiation
52-55	16. Sky Breaker	20. Sky lighter
56-58	17. Torc	21. Torc
59-62	18. Lazer cover	22. Anti lazer
63	19. Dismodulator	25. Catabolic dismodulator
64-66	20. EMP	26. Demagnetizer
67-69	21. Foam	29. Foam
70-72	22. Tracer	33. Matter detector
73-75	23. Cover	34. Mistor
76-78	24. Diffusion	35. Molecular diffusion
79-82	25. Paint	37. Paint
83-85	26. Toxin	39. Poison
86-90	27. Bug	40. Repellant
91-93	28. Sonic	41. Siren
94-97	29. Smoke	42. Smoke
98-99	30. Web	43. Web
00	31. Ref's Own Table	

1) Grand Slam (Big Bertha, #1)

AREA OF EFFECT: 200 hexes
DAMAGE: 120-1440
WATE: 50 kg
EXPS/VALUE: 300/50000

Damage is rolled on 12d12 times 10. This is the ultimate concussion grenade knocking down and stunning everything in its area of effect. For more information refer to chapter 45, Grenades and Aerosols.

2) Corrosive (Corrosive grenade, #3)

AREA OF EFFECT: 60 hexes
DAMAGE: 50-400
WATE: 25 kg
EXPS/VALUE: 200/15000

Initial damage is rolled on 50d8. Eats away at inorganic materials for 10 to 80 units, inflicting 20 to 200 (20d10) hit points of damage each unit. For more information refer to chapter 45, Grenades/ Aerosols.

3) Polar (Cryoblast grenade, #4)

AREA OF EFFECT: 160 hexes
DAMAGE: 30-300
WATE: 25 kg
EXPS/VALUE: 300/25000

There is a 1% chance per hit point of damage inflicted of the target being trapped in ice. For more information refer to chapter 45.

4) Battery (Energy Drain, #5)

AREA OF EFFECT: Special
DAMAGE: Special
WATE: 12 kg
EXPS/VALUE: 275/75000

The grenade will drain all batteries within 200 hexes and explode for a killing attack within 60 hexes. The damage of the killing attack depends on the amount of energy around to drain. If there is a power plant near by, the bomb will be ferocious, but if there are not many batteries near by the bomb will only be lethal. 50d4 would be a good amount of damage for a populated technological area. For more information refer to chapter 45.

5) Lazer (Energy grenade, #6)

AREA OF EFFECT: 150 by 150 by 10 hexes
DAMAGE: 120-480
WATE: 25 kg
EXPS/VALUE: 300/250000

Sends a lazer sheet parallel to the ground, travelling with the contours of the terrain. Damage is rolled on 12d4 times 10. For more information refer to chapter 45.

6) Bomb (Fragmentation grenade, #1)

AREA OF EFFECT: 20 hex
DAMAGE: 50-500
WATE: 25 kg
EXPS/VALUE: 125/2000

This is the standard drop from the plane, hide in the car type bomb. For more information refer to chapter 45.

7) Nuclear (Fusion grenade, #9)

AREA OF EFFECT: 200 hexes
DAMAGE: 100-1200
WATE: 50 kg
EXPS/VALUE: 300/100000

Anything that is tiny, small, or medium sized within the area of effect, will explode without any saving throw. Any flammable object within 300 hexes will instantly immolate. Any organic creatures within 400 hexes will be blinded for 1 to 8 hours. Any target within 600 hexes (that is 1.2 kilometers) will be irradiated for an intensity equal to 1/10 the blast damage. These effects are cumulative as the target gets closer to the epicenter. For more information refer to chapter 45.

8) Nerve gas (Gas grenade, #10)

AREA OF EFFECT: 260 hexes
DAMAGE: Special
WATE: 25 kg
EXPS/VALUE: 275/225000

Refer to Table 44.4, *Gas Type* to determine the effect of the gas. The gas will attack as a poison with an intensity of 4 to 24. Note that nerve gas need not be inhaled to have its effect. Simply touching the contaminated area may produce the effect. The area will remain poisoned for 1 day per intensity of poison attack. For more information refer to chapter 45.



Table 44.4: Gas Type

DIE ROLL	GAS EFFECT
01-10	Blindness, 1 to 10 hours
11-20	Comatose, 1 to 10 hours
21-30	Death, permanent
31-40	Insanity, 1 to 4 days
41-50	Lethargy, 1 to 10 hours, 1/2 activity
51-60	Nausea, 1 to 20 hours, 1/2 attributes
61-70	Paralysis, 1 to 20 hours
71-80	Reduce attribute by d10, 1 to 6 hours
81-90	Unconsciousness, 1 to 4 days
91-99	Vomiting, 1 to 6 hours, incapacitated
00	Other

9) Gravruptor (Gravruptor grenade, #11)

AREA OF EFFECT: 250 hexes
DAMAGE: Special
WATE: 50 kg
EXPS/VALUE: 300/300000

The bomb affects anything up to 100 tonnes in wate. The bomb will either lift the targets up into the air, to fall 1 to 10 hexes afterward, or smash the targets into the ground with 1 to 10 gravities. Either instantaneous acceleration (up or down) will inflict 1-12 hit points in damage per gravity of acceleration. If used in zog (zero gravity) the targets will fly away at 1 h/u per 2 hit points of damage. This affects everything less than 100 tonnes in wate. For more information refer to chapter 45.

10) Attractor (Magnetic Disrupter, #12)

AREA OF EFFECT: 150 hexes
DAMAGE: Special
WATE: 37 kg
EXPS/VALUE: 300/112500

The bomb cannot be moved from its location, and it will attract anything less than 5 tonnes towards its epicenter. The attractor will usually have a penchant for a certain material type of the referee's discretion. This could be dirt, skin, or air car hulls. For more information refer to chapter 45.

11) Disrupter (Molecular disrupter, #14)

AREA OF EFFECT: Special
DAMAGE: Special
WATE: .30 kg
EXPS/VALUE: 300/500000

Please consult the grenade directly for the details of this peculiar, and unpredictable weapon. Anything disintegrated is turned into warm gas, and anything damaged is missing little slivers of itself. Missing slivers inflicts 8d8 hit points of damage. There is absolutely no cover offered. The molecular disrupter grenade is detailed in chapter 45.

Table 44.5: Extent of Disruption

DIE ROLL	RADIUS OF DISINTEGRATION	DAMAGE RADIUS
01-10	None	None
11-80	None	20 hexes
81-90	20 hexes	40 hexes
91-96	40 hexes	60 hexes
97-99	60 hexes	80 hexes
00	Oh oh.	Hmmmm.

12) Jumping Jack (Multiple explosive, #15)

AREA OF EFFECT: Special
DAMAGE: Special
WATE: .75 kg
EXPS/VALUE: 250/25000

The jumping jack bomb will have several explosions with unpredictable effect. Roll once on Table 44.6, to determine its method of effect. There will be a 1 to 30 unit pause per explosion, and the new epicenter will be 20 to 120 hexes away from the last one. The next explosion will be in a random direction from the last one. For more information refer to chapter 45.

Table 44.6: Bomb Pattern

DIE ROLL	EXPLOSIONS PATTERN
01-50	100 hexes, 40-400 60 hexes, 30-300
51-85	120 hexes, 50-500 80 hexes, 40-400 40 hexes, 30-300
86-99	100 hexes, 40-400 100 hexes, 40-400 100 hexes, 40-400 100 hexes, 40-400
00	Other

13) Napalm (Napalm grenade, #16)

AREA OF EFFECT: 40 by 160 hex swath
DAMAGE: 60-600
WATE: 39 kg
EXPS/VALUE: 300/50000

When discharged the bomb launches itself into the air, and sprays napalm along its path. Additional burning damage will usually be irrelevant to all but the freshest combat robot. The path will burn for 20 to 80 units after the attack, inflicting 20 to 240 HPS in damage. For more information refer to chapter 45.

14) Diversion (Pyrotechnic, #18)

AREA OF EFFECT: 100 hexes
DAMAGE: None
WATE: 10 kg
EXPS/VALUE: 100/8750

This bomb will either be flash, smoke, or sonic. The flash bomb will blind all those within the area of effect for 1 to 10 hours. A smoke bomb will obscure the area of effect for 1 to 10 hours. A sonic bomb will deafen all targets for 1 to 10 hours. The targets get a chance to save versus mental attack for blinding and deafening. The intensity of the attack is 4 to 24. For more information refer to chapter 45.

15) Neutron bomb (Radiation grenade, #19)

AREA OF EFFECT: 240 hexes
DAMAGE: 30-180
WATE: 55 kg
EXPS/VALUE: 200/25000

This bathes everything in the area of effect with intensity 25 radiation, as well as the initial damage. The area will remain hot for 1 month per point of damage inflicted, possibly many years. For more information refer to chapter 45.

16) Sky Breaker (Sky Lighter, #20)

AREA OF EFFECT: 800 by 600 hex area
DAMAGE: 40-400
WATE: 70 kg
EXPS/VALUE: 300/275000

This bomb explodes straight up apparently having absolutely no effect on the surrounding area. Then 20 to 60 units later the area of effect is annihilated with shards of ice raining from the sky. For more information refer to chapter 45.

17) Torc bomb (Torc grenade, #21)

AREA OF EFFECT: 240 hexes
DAMAGE: Special
WATE: 45 kg
EXPS/VALUE: 275/450000

The torc bomb does no damage to anything that is not contained within a force field. The bomb makes all force fields implode on themselves for 120 to 1440 (12d12 times 10) hit points in damage. The bomb can only affect force fields less than 240 hexes in radius. For more information refer to chapter 45.

18) Lazer Cover (Antilazer aerosol, #22)

AREA OF EFFECT: 70 hexes
DAMAGE: None
WATE: 50 kg
EXPS/VALUE: 275/50000

For 1 to 10 hours lazers will have no effect. The cover does not obscure vision, or energy weapons, but harmlessly dissipates all lazers. This bomb is also called the peacemaker. For more information refer to chapter 45.

19) Dismodulator (Catabolic Dismodulator #25)

AREA OF EFFECT: Special
DAMAGE: Special
WATE: 50 kg
EXPS/VALUE: 300/2250000

IIII

Everything that is inorganic within a 20 hex radius of effect will be converted into a cloud of freezing, iridescent gas. A saving throw versus intensity 13 to 28 (3d6 plus 10) is granted to persona robots. All organic creatures within a 60 hex radius will take 50 to 600 hit points in damage from the dismodulation byproducts. For more information refer to chapter 45.

20) EMP Bomb (Demagnetizer aerosol, #26)

AREA OF EFFECT: 100 hexes
DAMAGE: None
WATE: 55 kg
EXPS/VALUE: 300/1250

The Electromagnetic pulse bomb incapacitates all non-hardened electronic devices within the area of effect. Military hardware will get a save versus poison intensity 4 to 24. Non-military hardware will cease to function for 15 hours, with a 15% chance of suffering permanent equipment damage. See chapter 21, Equipment Damage. For more information about this weapon refer to chapter 45.

21) Foam (Foam aerosol, #29)

AREA OF EFFECT: 160 by 40 hexes deep
DAMAGE: None
WATE: 75 kg
EXPS/VALUE: 100/1237

The foam bomb slowly hardens entrapping all who remain in the area of effect for more than 4 minutes. Suffocation is not a risk, but the foam pad is permanent, and starvation is a real possibility. For more information refer to chapter 45.

22) Tracer (Matter Detector aerosol, #33)

AREA OF EFFECT: 120 hexes
DAMAGE: None
WATE: 49 kg
EXPS/VALUE: 300/2000000

All matter will be coated with chemicals that emit heat, vibrations, aromas, light and radiation. The effect is immediate exposing all hidden objects within the area of effect. For more information refer to chapter 45.

23) Cover (Mistor aerosol, #34)

AREA OF EFFECT: 500 hexes
DAMAGE: None
WATE: 70 kg
EXPS/VALUE: 100/20000

Every sense is dulled to uselessness within this area of effect. Getting lost for the entire 10 to 60 day duration is a real possibility. For more information refer to chapter 45.

24) Diffusion (Molecular diffusion, #35)

AREA OF EFFECT: 140 hexes
DAMAGE: 120-960
WATE: 100 kg
EXPS/VALUE: 300/25000

The damage is rolled on 12d8 times 10. For more information refer to chapter 45.

25) Paint (Paint aerosol, #37)

AREA OF EFFECT: 80 hexes
DAMAGE: None
WATE: 50 kg
EXPS/VALUE: 50/2250

Covers everything within range with paint the same colour as the bomb's casing. Yes, it can paint everything striped within an 80 hex radius. Those personas that don't make a DEX roll will be blinded for 1 to 20 minutes. The paint will also make an intensity 1 poison attack on all organics covered in paint. For more information refer to chapter 45.

26) Toxin bomb (Poison aerosol, #39)

AREA OF EFFECT: 240 hexes
DAMAGE: Special
WATE: 50 kg
EXPS/VALUE: 300/35000

Use Table 44.7, *-Cides* to determine what creature type is exterminated by the toxin bomb. Targets must save versus intensity 2 to 24 poison, or die. Those that save will take poison damage. This is a very deadly weapon. There is no lasting effect. For more information refer to chapter 45.

Table 44.7: -Cides

DIE ROLL	BOMB KILLS
01-05	Carnivores
06-10	Chemovores
11-30	Detritovores
31-35	Herbivores
36-65	Insects
66-95	Plants (photosynthetic)
96-99	Racial type, humanoid
00	Other

27) Bug bomb (Repellent aerosol, #40)

AREA OF EFFECT: 60 hexes
DAMAGE: None
WATE: 50 kg
EXPS/VALUE: 300/2500

The repelled type of creature will make every effort to escape from the area of effect of the repellent. Personas must make a save versus intensity 13 to 28 (3d6 plus 10) poison or have to leave the area of effect. For more information refer to chapter 45.

Table 44.8: Repellant

DIE ROLL	BOMB REPELS
01-05	Carnivores
06-10	Chemovores
11-15	Detritovores
16-35	Herbivores
36-85	Insects
86-95	Plants
96-99	Anthropomroph Type
00	Other

28) Sonic bomb (Siren aerosol, #41)

AREA OF EFFECT: 20 kilometers
DAMAGE: 2-12
WATE: 50 kg
EXPS/VALUE: 100/3750

The ear splitting siren will wail for 2 to 8 minutes. This attack will deafen all targets for 1 to 10 days. This has severe ecological effects on the environment, since all small animals tend to die of fright. For more information refer to chapter 45.

29) Smoke (Smoke aerosol, #42)

AREA OF EFFECT: 240 hexes
DAMAGE: None
WATE: 50 kg
EXPS/VALUE: 50/5000

Smoke will disperse over 10 to 80 weeks, or it can be moved by a bulldozer. The colour of the smoke will match the colour of the casing of the bomb. For more information refer to chapter 45.

30) Web (Web aerosol, #43)

AREA OF EFFECT: 160 by 20 hex swath
DAMAGE: None
WATE: 50 kg
EXPS/VALUE: 300/50000

The area of effect is covered with a spider web like glue that entraps anything. The targets are trapped for at least 20 to 160 minutes until the web decomposes. A bizarre PSTR roll may free the target. There is a 3% chance of gluing one's mouth shut, and suffocating. For more information refer to chapter 45.

31) Ref's Own Table

AREA OF EFFECT: Special
DAMAGE: Special
WATE: Varies
EXPS/VALUE: Varies/Varies

The referee should remember that bombs are dangerous. They can easily snuff out whole expeditions, spacevehicles, and cities completely indiscriminately.

Chapter 45
Grenades and Aerosols

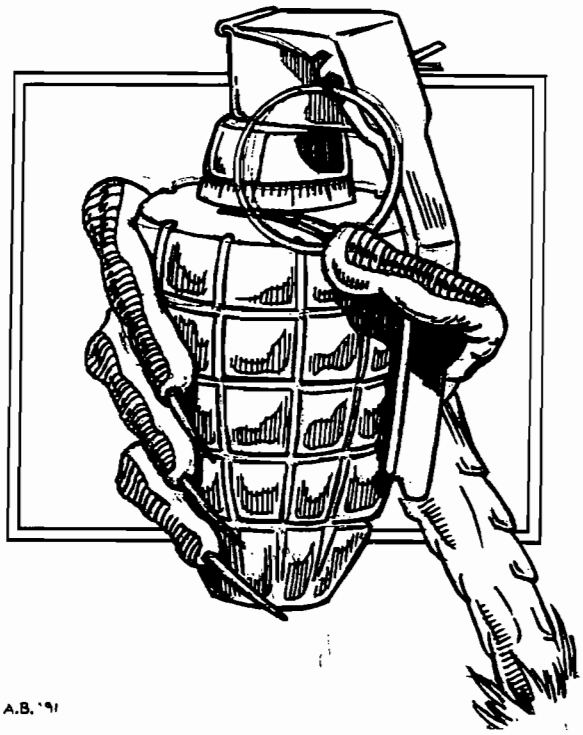
This is the chapter devoted to technological area of effect weapons. The classic area of effect weapon is the grenade, and the area of effect weapon of the future (or distant past), is the aerosol. Each weapon type is discussed in the following paragraphs. Random grenades and aerosols can be generated on Table 45.5, *Grenade / Aerosol Type* in this chapter. When a player is generating toys for her persona she should use that table. For convenience there is a *Grenade Type Subtable* and an *Aerosol Type Subtable*. These tables should be used by the referee when she specifically needs either a grenade or and aerosol.

Grenades, and aerosols, generally act the same instant that they are detonated. Only under certain circumstances may a grenade explode later than one unit after being thrown.

Grenades

A grenade is any hand, claw, or paw thrown area of effect weapon. Grenades are remarkable for their ease of use, and even more remarkable for their deadliness. The grenade is particularly unintelligent, and will damage expedition members as indiscriminately as opponents. No normal armour type can stop the damage of a grenade, and anything caught within the area of effect will be damaged. There is only slim chance that a target will be able to avoid damage, and that is when the grenade is a dud. There is only a 1 in 1000 chance that a grenade will be a dud (see chapter 30, Grenade and Aerosol Combat).

Hopefully this is completely obvious, but once a grenade is discharged (exploded), it is irretrievably lost. To determine what grenade type will be blown to smithereens, roll on the *Grenade and Aerosol Type* table. A roll of 50, or less, will be a grenade type. If the referee wishes only a grenade be generated she should refer to the *Grenade Type Subtable*.



Grenade Amount: The grenade types described have WATE, value, and effects listed for a single grenade. The referee must roll a d6 to determine the number of grenades that are found in a cache.

Grenade Trigger: To make the subject of grenades a little more confusing there are several different types of fuses. For the convenience of the ref 9 out of 10 grenades are detonated by contact with the target hex, or any substantially solid object along its path. All other grenades will have timers, and will explode 0 to 3 units after being thrown.

Before a grenade will detonate, it must be

triggered, and thrown. A list of several different trigger types are given on Table 45.1, *Grenade Trigger Type*. The trigger types do not require explanation, and simply indicate what must be done to activate the grenade. For example, an inertia trigger is activated when the grenade goes through a throwing motion, and a twist trigger will active when some device is twisted on the grenade.

Table 45.1: Grenade Trigger Type

DIE ROLL	GRENADE TRIGGER
01-20	Cap
21-40	Fuse
41-60	Inertia
61-80	Pin
81-95	Twist
96-00	Other

Grenade Description: Not all grenades are created equal, and even grenades of the same type may have different shapes and colours. These variations have arisen from the fact that different companies build their grenades differently, and even the same company may have packaged the same grenade differently from one military order to the next. Grenades have no identifying markings at all. Identification must be made by feel, and other indicators. Roll once on Table 45.2, *Grenade Shape*, and once on Table 45.3, *Grenade Colour*. Note that the *Alien Coat Colour* table has a greater variety of colours, and if time permits exotic grenades could be coloured there.

Table 45.2: Grenade Shape

DIE ROLL	GRENADE SHAPE
01-10	Bag
11-20	Banana
21-30	Cube
31-40	Pear
41-50	Pineapple
51-60	Pyramid
61-85	Sphere
86-00	Other

Table 45.3: Grenade Colour

DIE ROLL(d12)	GRENADE COLOUR
1	Black
2	Blue
3	Gold
4	Green
5	Grey
6	Pink
7	Red
8	Silver
9	Tan
10	Yellow
11-12	Striped (use d10 twice)

Aerosols

An aerosol is a cylindrical canister that violently ejects a pressurized, gaseous solution through a push button valve. When activated, an aerosol will discharge all of its contents, and cannot be used again. Unlike grenades, aerosols lack a history of military use. The canisters could have arisen from yet unforeseen methods of conflict, or could merely be maliciously employed industrial devices. Aerosols are rolled on the *Grenades / Aerosol Type* table, and any roll greater than 50 will yield an aerosol. If only an aerosol need be generated then

the referee should refer to the *Aerosol Type Subtable*.

Aerosol Trigger: Aerosols are even simpler to use than grenades. Push the release valve on top of the canister, and all its contents instantly spray out for all their described effects.

Aerosol Amount: The wate, value, and effects are listed for the complete discharge of a single aerosol. The ref rolls a d8 to determine the number of aerosol canisters found in a package.

Aerosol Description: The aerosol can appears to be an oversized version of today's typical Freon container. The aerosol may have a distinctive colour—either the canister, or the jet—that can be rolled on the *Grenade Colour* table.

Aerosol Markings: Since many of the aerosols described in this chapter are non-military in nature, many may still have their industrial labelling intact. To determine the literacy of an aerosol's labelling roll a d10. A roll of 1 indicates unintelligible labelling. This is labelling that is either in an alien language, has incorrect instructions, or is somehow damaged. A roll of 10 will yield an aerosol with proper markings, and instructions. Proper labelling may greatly reduce the EXPS value of an aerosol, but increase its monetary value. All other rolls (2-9) indicate that no markings of any sort are listed on the aerosol canister.

Range

Grenades: Grenades consume the hex that they explode in, and must be thrown a safe distance to avoid damaging the user. The range of a grenade depends entirely on the thrower, and is equal to her PSTR in hexes. For grenade misses the grenade will land in a random place as determined in chapter 30, Grenade/Aerosol Combat

Aerosols: The range of an aerosol depends entirely on the pressure of its contents. This internal pressure usually ejects the contents of the aerosol a safe distance before exploding with an area of effect blast. Some aerosols have an swath area of effect, and the range represents the longest dimension of this area of effect. For more info see chapter 30, Grenade and Aerosol Combat

Area Of Effect

Grenades: For all grenades, the area of effect represents the radius of the sphere in which all occupants are affected. E.g., a fragmentation grenade has an area of effect of 1 hex. Anything in an adjacent hex to the one in which the grenade exploded will be damaged. Also, anything less than two hexes above the grenade will also be damaged. All of these area effect blasts can include expedition members.

Aerosols: An aerosol is an area of effect weapon. First the contents of the aerosol are sprayed a certain distance, and once reaching that range (or hitting a solid object) the contents explode about their area of effect. For example, a freezing aerosol has a 9 hex range, and an 8 hex area of effect. This aerosol fires out 9 hexes, and then freezes everything in an 8 hex spherical area of effect.

Damage

This is the hit point range that is inflicted upon any target caught within the area of effect of either an aerosol or grenade. Wherever the damage has been omitted, the grenade/aerosol has some other special effect. Remember that damage is rolled once, and applied to all targets within the area of effect. Unless specified there is no save versus area of effect attacks.

Wate

This is the wate of an unspent grenade, or aerosol. An empty aerosol canister has a wate 10% of its original wate. E.g., 2 kg aerosol is reduced to an empty 200 gm canister.

EXPS/Value

Experience points for identifying a grenade, or aerosol, are earned the same as for any other artifact. An equivalent experience point value can be earned after either weapon has been discharged, but these EXPS can only be earned by the firer.

The value of a grenade, or aerosol, is the value of one charge. In some cases aerosols can generate more than one charge, but even with these modifications such aerosols still have the same value.

1) Big Bertha

RANGE: PSTR
AREA OF EFFECT: 10 hexes
DAMAGE: 12-144
WATE: 2.0 kg
EXPS/VALUE: 300/1000

The big bertha is a massive concussion grenade. All targets within the area of effect are automatically knocked down. Any persona, or opponent, caught within 12 hexes of the epicenter must make a recovery roll (deci dice less than 5 times HPS plus CON), or be stunned for 1-10 units. All medium, or smaller, sized creatures within a 15 hex blast radius must make a difficult (d20) DEX roll, or be knocked down.

Table 45.4: Grenade/Aerosol Type

DIE ROLL	GRENADE/AEROSOL TYPE	DIE ROLL	GRENADE/AEROSOL TYPE
01-02	1. Big Bertha Grenade	53-54	23. Attraction Aerosol
03-04	2. Chemical Explosive Grenade	55-56	24. Blinding Aerosol
05-06	3. Corrosive Grenade	57-58	25. Catabolic Dismodulator Aerosol
07-08	4. Cryoblast Grenade	59-60	26. Demagnitizing Aerosol
09-10	5. Energy Drain Grenade	61-62	27. Disintegration Aerosol
11-12	6. Energy Grenade	63-64	28. Exploding Aerosol
13-14	7. Exploding Pin Grenade	65-66	29. Foam Aerosol
15-17	8. Fragmentation Grenade	67-68	30. Freezing Aerosol
18-19	9. Fusion Grenade	69-70	31. Gas Aerosol
20-21	10. Gas Grenade	71-72	32. Invisibility Aerosol
22-23	11. Gravruptor Grenade	73-74	33. Matter Detector Aerosol
24-25	12. Magnetic Disrupter Grenade	75-76	34. Mistor Aerosol
26-29	13. Mini Grenade	77-78	35. Molecular Diffusion Aerosol
30-31	14. Molecular Disrupter Grenade	79-80	36. Napalm Aerosol
32-33	15. Multiple Explosive Grenade	81-85	37. Paint Aerosol
34-35	16. Napalm Grenade	86-87	38. Pharmaceutical Ejector Aerosol
36-37	17. Pin Grenade	88-89	39. Poison Aerosol
38-43	18. Pyrotechnic Grenade	90-93	40. Repellant Aerosol
44-46	19. Radiation Grenade	94-95	41. Siren Aerosol
47-48	20. Sky lighter Grenade	96-97	42. Smoke Aerosol
49-50	21. Torc Grenade	98-99	43. Web Aerosol
51-52	22. Anti lazer Aerosol	00	44. Ref's Own Table

The effects of the big bertha are cumulative, so a target 8 hexes from the target hex would take damage, be knocked down, and have to make a recovery roll or be stunned.

2) Chemical Explosive Grenade

RANGE: PSTR
AREA OF EFFECT: 6 hexes
DAMAGE: 8-64
WATE: .75 kg
EXPS/VALUE: 100/200

A chemical explosive grenade is the more typical concussion, fragmentation device that is commonly chucked about during war pix, and punk rock concerts. The chemical explosive is the bigger sister of the Fragmentation grenade (#8).

Table 45.5: Grenade Type Subtable

DIE ROLL	GRENADE TYPE
01-05	1. Big Bertha Grenade
06-10	2. Chemical Explosive Grenade
11-15	3. Corrosive Grenade
16-20	4. Cryoblast Grenade
21-25	5. Energy Drain Grenade
26-30	6. Energy Grenade
31-35	7. Exploding Pin Grenade
36-40	8. Fragmentation Grenade
41-45	9. Fusion Grenade
46-50	10. Gas Grenade
51-55	11. Gravruptor Grenade
56-60	12. Magnetic Disrupter Grenade
61-65	13. Mini Grenade
66-70	14. Molecular Disrupter Grenade
71-75	15. Multiple Explosive Grenade
76-80	16. Napalm Grenade
81-85	17. Pin Grenade
86-90	18. Pyrotechnic Grenade
91-94	19. Radiation Grenade
95-97	20. Sky Lighter Grenade
98-99	21. Torc Grenade
00	44. Ref's own table

Table 45.6: Aerosol Type Subtable

DIE ROLL	AEROSOL TYPE
01-05	22. Anti lazer Aerosol
06-10	23. Attraction Aerosol
11-15	24. Blinding Aerosol
16	25. Catabolic Dismodulator Aerosol
17-21	26. Demagnitizing Aerosol
22-23	27. Disintegration Aerosol
24-28	28. Exploding Aerosol
29-33	29. Foam Aerosol
34-38	30. Freezing Aerosol
39-43	31. Gas Aerosol
44-48	32. Invisibility Aerosol
49-53	33. Matter Detector Aerosol
54-58	34. Mistor Aerosol
59-63	35. Molecular Diffusion Aerosol
64-68	36. Napalm Aerosol
69-73	37. Paint Aerosol
74-78	38. Pharmaceutical Ejector Aerosol
79-83	39. Poison Aerosol
84-87	40. Repellant Aerosol
88-91	41. Siren Aerosol
92-95	42. Smoke Aerosol
96-99	43. Web Aerosol
00	44. Ref's Own Table

3) Corrosive Grenade

RANGE: PSTR
AREA OF EFFECT: 3 hexes
DAMAGE: 5-40, Special
WATE: 1.0 kg
EXPS/VALUE: 200/300

The corrosive grenade bathes the area of effect with acids, alkalies, or non-neutralizing combinations of both. The corrosive grenade's contents are highly volatile, but neutralize themselves almost automatically on organic surfaces.

The corrosive nature of this ejected concoction will continue to eat away at inorganic materials—such as: metals, plastic, rubber, etc.—unless washed off. If things such as armour, weapons, or robots are left to corrode they will take an additional 2-20 hit points of damage for each of the continuing 1-8 units of reaction. E.g., an unwashed robot would take 2-20 points for 4 units after the initial blast.

Corrosive grenades are also known as acid baths, and draino bombs.

4) Cryoblast grenade

RANGE: PSTR
AREA OF EFFECT: 8 hexes
DAMAGE: 3-30
WATE: 1.0 kg
EXPS/VALUE: 300/500

The cryoblast grenade subjects everything in its area of effect to a blast of freezing cold. The grenade is not only capable of freezing things solid, but it can trap targets in the ice that it produces. Medium, or smaller, sized targets have a % chance, equal to the damage inflicted, of being trapped in the ice. So a medium sized beasty that took 19 points of damage would have a 19% chance of being frozen immobile. The cryoblast grenade can also freeze swords in scabbards, render buttons frozen, jam weapons, etc.

The cryoblast is also known as a cryofrag, a berg bomb, or a rinkmaker.

5) energy drain grenade

RANGE: PSTR
AREA OF EFFECT: Special
DAMAGE: Special
WATE: 0.5 kg
EXPS/VALUE: 275/3000

An energy drain grenade will suck the life out of nearby potential energy stores (batteries), and then self destruct. Any batteries within a 10 hex radius will be instantly devoid of charge. The grenade will then shower a smaller 3 hex area of effect with its fragments, and kinetic energy. This explosion will inflict 1d4 hit points in damage for every battery drained. Therefore, if a hapless target has three batteries in her weapon, 4 in her backpack, and a nearby expedition member has a total of 9 on her person, the grenade would explode—in 0 to 3 units—inflicting 16d4 of damage to all within 3 hexes.

The energy drain grenade cannot affect robot batteries, or power plants. Psionic batteries get a save vs. mental attack before losing a battery life. The psionic attack strength of the grenade attack is 0. Note that an energy drain grenade could kill a persona using psionic batteries by reducing her MSTR to 0. For more information about psionic batteries see chapter 55, Support Equipment.

The energy drain grenade is also known as an Amp-ire grenade, or a Never-ready.

6) Energy grenade

RANGE: PSTR
AREA OF EFFECT: 15 by 15 by 1 hexes
DAMAGE: 12-48
WATE: 1.0 kg
EXPS/VALUE: 300/5000

The energy grenade emits a controlled lazer explosion of the given volume (15h x 15h x 1h). Regardless of the terrain in which the grenade is employed, it will always occupy the given volume. Note that the 1 hex component will always run parallel to gravity. The grenade's blast area will race along corridors, through open doors, around corners, and down escalators. Using this weapon in unfamiliar terrain could have its effects hurtling directly back at the thrower.

The energy grenade is also known as an anti-trench grenade, or a mouser.

7) Exploding Pin Grenade

RANGE: PSTR
AREA OF EFFECT: 4 hexes
DAMAGE: d6 per pin
WATE: 1.25 kg
EXPS/VALUE: 150/650

The exploding pin grenade is a rather sadistic version of a micro grenade launcher. When an EPG goes off, it showers the 4 hex area of effect with tiny pins. These tiny pins can stick into the hardest of alloys (AR less than 1000). When ever a pin hits, it will immediately explode inflicting the d6 damage described above. The key is the number of pins which stick into a target, and this depends solely on the target's size. Use Table 45.7, *Pin Hit* to determine how many pins will explode for damage.

Table 45.7: Pin Hit

TARGET SIZE	NUMBER OF PINS
Tiny	1-3 (d3)
Small	1-4 (d4)
Medium	1-6 (d6)
Large	2-12 (2d6)
Gigantic	2-18 (3d6)

8) Fragmentation grenade

RANGE: PSTR
AREA OF EFFECT: 1 hex
DAMAGE: 5-50
WATE: 0.85
EXPS/VALUE: 125/75

A fragmentation grenade is your common everyday run of the mill shrapnel grenade. These are commonly called frags, or grenades. They are the smaller version of the Chemical explosive grenade (#2).

9) Fusion grenade

RANGE: PSTR
AREA OF EFFECT: 10 hexes
DAMAGE: 10-120
WATE: 2.0 kg
EXPS/VALUE: 300/4000

A fusion grenade unleashes a micro nuclear explosion. In addition to damage from the initial nuclear blast, there are a host of other nasty effects that increase the deadliness of the weapon. Any flammable object within 15 hexes of the epicenter has a % chance (equal the damage of the blast) of immolating. Anything ignited by the grenade will burn until extinguished. Any organic creatures within 20 hexes of the epicenter not actively shielding its eyes will have a % chance (equal to 1/2 the blast damage) of being blinded for 1-10 minutes. And lastly, any target within 30 hexes of the epicenter is subject to a radiation attack of an intensity equal to 1/10 of the blast damage.

Any reader should have noticed that this is not a close combat weapon, and the even more observant readers have noticed that a fusion grenade cannot be thrown without having some effect on the attacker.

The effects of a fusion grenade are cumulatively lethal. Any target caught within the 10 hex radius would first take damage, let's say a modest roll of 60 hit points of damage. Then there is a 60% chance a catching on fire, a 30% chance of being blinded, and then an intensity 6 radiation attack. Only the most hardy of souls are going to survive this.

For effect the ref can make the 10 hex area of effect a lingering radiation zone of an intensity equal to 1/10 of the blast damage. The radiation zone's intensity level will decrease by one point per hour, day, or week, depending on how dirty the grenade was.

Fusion grenades are also known as micro-nukes, and tactical nukes.

10) Gas Grenade

RANGE: PSTR
AREA OF EFFECT: 13 hexes
DAMAGE: Special
WATE: 0.95 kg
EXPS/VALUE: 275/250

The gas grenade discharges a toxic combination of contact, and respiratory poisons in a dense enough mist to affect any organic creatures within it. The cloud of gas will dissipate in 1-8 unit All targets must save vs. poison attack for every unit that they are within the area of effect. Prevailing winds may affect the duration, and intensity of the gas cloud if the ref sees fit. The gas' intensity will vary from 4-24 (4d6). This value is generated once for the entire cloud, and will determine if it is a strong or weak gas.

The type of gas ejected by the grenade can be rolled on Table 45.8, *Gas Type*. This table will explain the gas' effect on targets, and how long these effects last.

Table 45.8: Gas Type

DIE ROLL	GAS EFFECT
01-10	Blindness, 1-10 minutes
11-20	Comatose, 1-10 minutes
21-30	Death, Permanent
31-40	Insanity, 1-4 hours, use *RPC personality table*, chapter 11
41-50	Lethargy, 1-10 minutes, 1/2 movement
51-60	Nausea, 1-20 minutes, 1/4 all attributes
61-70	Paralysis, 1-20 minutes, completely immobile
71-80	Reduced attribute, 1-6 minutes, d10 off of a random attribute
81-90	Unconsciousness, 1-4 hours
91-99	Vomiting, 1-6 minutes, completely incapacitated
00	Other

11) Gravruptor grenade

RANGE: PSTR
AREA OF EFFECT: 25 hexes
DAMAGE: Special
WATE: 2.0 kg
EXPS/VALUE: 300/6000

The gravruptor grenade generates 1-6 random gravities of anomalous attraction. The effect will either smash targets into the ground, throw them high into the air, or fling them off into space. The gravruptor grenade produces an instantaneous burst of random acceleration, and newtonian physics conveniently need not be applied. Objects greater than 10 tonnes in wate are not affected by this grenade's attack.

There is a 50% chance that the gravruptor grenade will add 1-6 g to the local terrain. The effects of this should be obvious, as targets crash to the ground, weapons are torn from grasps, and vehicles grind into the dirt. This pressing problem will also inflict damage to all targets in the area of effect. This damage is 1 to 12 hit points in damage per extra gravity. E.g., 3 gravities would smash targets into the ground for 3-36 hit points of damage.

When the gravruptor grenade is reversing gravity there will be an acceleration of 1-6 gravities in a direction opposite to the present gravity direction. The general effect is that things go flying into the air. All items are lifted 1 hex in the air per anomalous gravity. There is no damage inflicted on the initial toss up, but the subsequent trip down from 1-6 hexes will inflict substantial damage. There will be 1-6 hit points of damage inflicted per hex that the target falls through. If the targets should hit a ceiling, or some other such covering, on the way up they would take 1 to 6 hit points per gravity inflicted.

All of the above effects are described for a normal gravity world. What effects this grenade has on high gravity and low gravity planets depends entirely on the ref.

The effects of this weapon in zero gravity are described here because this is the environment that the weapon was primarily designed for. All targets are subjected to 1 to 6 hit points of damage per gravity of acceleration, and fly away from the grenade's target hex at 1 h/u for every 2 points of damage. So if a target in deep space took 5 gravities, inflicting 16 hit points of damage, she'd fly away at 8 h/u until stopped.

The gravruptor grenade is also known as a downer, and a jump bomb.

12) Magnetic Disrupter

RANGE: PSTR
AREA OF EFFECT: 15 hexes
DAMAGE: Special
WATE: 1.5 kg
RANGE: PSTR: 300/4500

The magnetic disrupter grenade will generate a super attraction for a particular type of material. Whatever the grenade attracts will hurtle towards the epicenter of the area of effect at very high speeds. Nine times out of ten the grenade will attract metals and alloys. The remaining 10% of the time some other obscure material will be drawn towards the grenade (flesh, plastic, lumber, concrete). If there is dispute as to whether a particular item is affected by the grenade then the referee and player should consult the highly technical and well researched Sphincter dice described in chapter 16, Special Rolls. For instance, does this grenade affect the weapons that the opponents are holding?

This grenade can have lethal effects, since great big chunks of plastic, or metal, will be racing across the area of effect. The referee must decide whether or not a persona is a potential target of flying debris. If the grenade were detonated in a junk yard everyone would almost certainly take maximum damage from the flying material. Deciding who is hit be the debris is determined by the referee. How much damage is inflicted is determined by the wate of the debris.

If a persona is hit by flying debris, she will take at most 20d4, and at the least 1d4 hit points in damage. Magnetically attracted junk will inflict 1d4 hit points per hex per unit that it is travelling.

The wate of the object is divided into the arbitrary number of 20 h/u per kg, and this will determine how fast and how dangerous the projectile is. A 2 kg projectile would inflict 10d4, and move at 10 h/u. A 20 kg object would harmlessly tumble along at 1 h/u, possibly inflicting a d4 of damage if it were to roll over a sleeping target. Objects that are less than 1 kg in wate may move faster, but cannot inflict more than 20d4 damage. Objects greater than 20 kg cannot move slower than 1 h/u, nor inflict less than a d4 of damage. Objects which have a wate greater than 500 kg will attract the grenade instead of vice versa. The user could employ this grenade to attract herself towards a spacevehicle.

13) Mini grenade

RANGE: 1/4 PSTR
AREA OF EFFECT: Special
DAMAGE: 3-18
WATE: 0.1 kg
EXPS/VALUE: 170/1000

IIII

Mini grenades are so small and light that they cannot be thrown far, and must hit the target to inflict damage. Because they are so diminutive in size, mini grenade users may wish to throw a handful of these micro explosives at their target. The persona can throw up to three mini grenades in one handful. The first grenade attacks at minus 50, the second at minus 75, and the third at minus 100. Remember that the grenades only need to hit the target, and not penetrate armour to inflict damage. For convenience the *Size Armour Rating* table has been included here.

Table 45.9: Size Armour Rating

TARGET SIZE	ARMOUR RATING
Tiny	700
Small	600
Medium	500
Large	400
Gigantic	300

Mini Gas Grenades: There is a 10% chance that a mini grenade will have the effects of a gas grenade, modelled after Gas Grenades, #10 in this chapter. Mini gas grenades do no damage, but have an effect similar to one of the regular gas grenades. The area of effect for the, mini gas grenade is no larger than the target hex in which it lands, and the attacker need only hit the target hex as with a regular grenade. Any targets caught within this brief puff of gas need only make one save vs poison, since the cloud dissipates the same unit it appears.

Mini Pyrotechnic Grenades: There is also a 10% chance that mini grenades will function the same as pyrotechnic grenades, modelled after Pyrotechnic Grenades, #18 in this chapter. Mini pyrotechnic grenades do no damage, and function identically to regular pyrotechnic grenades in all respects. The grenade user need only hit the target hex that the grenade is aimed at.

Mini grenades are also known as pea grenades, or pill grenades. High tech mini grenades can become extremely small indeed.

14) Molecular Disrupter grenade

RANGE: PSTR
AREA OF EFFECT: Special
DAMAGE: 8-64, Special
WATE: 1.75 kg
EXPS/VALUE: 300/10000

A molecular disrupter is a temperamental disintegration grenade. When it is discharged, it is capable of turning matter into a warm, seething cloud. The problem is that neither the thrower, nor the grenade, has any idea how much matter is about to be disrupted. Each time a molecular disrupter is used Table 45.10, *Extent of Disruption,* must be referred to to determine how devastating the effect is.

The table lists both damage and disintegration values. Damage is caused by thin slivers of disintegrated matter, that punch microscopic holes through targets in the given area of effect, inflicting 8 to 64 (8d8) hit points in damage to all targets.

Disintegration indicates that all matter—this includes personas—has been turned into an effervescent cloud of warm gas. The effect of this on matter is devastating, and final. Any organic creatures caught in a disintegration area of effect will be killed.

The molecular disruption grenade is also known as a disintegration grenade.

Table 45.10: Extent of Disruption

DIE ROLL	RADIUS OF DISINTEGRATION	DAMAGE RADIUS
01-10	None	None
11-80	None	2 hexes
81-90	1 hexes	4 hexes
91-96	2 hexes	6 hexes
97-99	3 hexes	8 hexes
00	Oh oh.	Hmmmm.

15) Multiple Explosive grenade

RANGE: PSTR
AREA OF EFFECT: Special
DAMAGE: Special
WATE: 2.0 kg
EXPS/VALUE: 250/1000

The multiple explosive grenade is the exploding cigar of lethal combat. This grenade is thrown and will explode like any other normal grenade, but that is where the similarities end.

Once the first explosion has discharged its deadly casing, the grenade is flung into the air, only to land and explode again. The successive explosions will be 0 to 3 units apart, and 1 to 6 hexes in a random facet direction from the previous target hex. There are three versions of this grenade, use the Grenade Pattern Table to determine which pattern is followed. The radius of the area of effect, and the damage are listed for each of the grenade's multiple explosions. Such grenades are dangerous to the expedition because they can easily hop their way back to home ranks. Unless properly identified, a multiple explosive grenade is indistinguishable from a regular grenade.

Multiple explosive grenades are also known as jumping jacks.

Table 45.11: Grenade Pattern

DIE ROLL	EXPLOSIONS PATTERN
01-50	5 hexes, 4-40 3 hexes, 3-30
51-85	6 hexes, 5-50 4 hexes, 4-40 2 hexes, 3-30
86-99	5 hexes, 4-40 5 hexes, 4-40 5 hexes, 4-40 5 hexes, 4-40
00	Other



16) Napalm grenade

RANGE: PSTR
AREA OF EFFECT: 2 by 8 hex strip
DAMAGE: 6-60
WATE: 1.75 kg
EXPS/VALUE: 300/2000

The napalm grenade is unique in that it has a swath area of effect as opposed to a spherical area of effect. When the grenade is discharged, it launches itself into the air for an 8 hex trip while raining adhesive flammables all along its course. Normally this grenade will launch itself in the same direction that it was thrown. If the thrower is unskilled in grenade combat, and rolls less than 200 on her to hit roll the napalm grenade will launch itself in a random direction.

Anything caught in this blazing area of effect will take the damage listed, will immolate, and will continue burning for 2-8 units. The continued burning will inflict 2-24 hit points of damage each unit.

The 2 hex by 8 hex patch of flame will burn itself out in 1 to 10 minutes. Referees should also be prepared to consider the effects of smoke inhalation, which is unavoidable when this weapon is used in enclosed spaces.

Napalm grenades are also labelled phosphorous grenades and Smoky the Fear bombs. For further information see the Napalm gun (#31), in chapter 46, Guns..

17) Pin grenade

RANGE: PSTR
AREA OF EFFECT: 4 hexes
DAMAGE: 1-10
WATE: 1.0 kg
EXPS/VALUE: 150/500

The pin grenade is the needler of area of effect combat. The pin grenade pierces everything in its 4 hex radius of effect with hollow pins. In addition to the damage taken from the shower of pins, each projectile can inject toxins stored in its head. This means that organic targets will have to make a save vs. poison, or be affected by the attack.

Consult Table 45.12, *Pin Poison* to determine what kind of attack the pin grenade has. A liquid pharmaceutical could also be placed within the holding well of the pin grenade. There is a 20% chance that a pin grenade will not harbor any toxin at all, and this means it can be filled with whatever toxin the persona has available.

The intensity of the chemical will vary from 3 to 18. The persona must make a saving throw even if a beneficial pharmaceutical has been placed in the pin grenade. If the saving throw is successful the drug will have no effect. This procedure is carried out to represent the randomness of dose that the target is receiving.

The pin grenade is also known as a porcupine, or inoculator grenade.

Table 45.12: Pin Poison Type

DIE ROLL	GAS EFFECT
01-10	Blindness, 1-10 minutes
11-20	Comatose, 1-10 minutes
21-30	Death, Permanent
31-40	Insanity, 1-4 hours, use *RPC personality* table, chapter 11
41-50	Lethargy, 1-10 minutes, 1/2 movement
51-60	Nausea, 1-20 minutes, 1/4 all attributes
61-70	Paralysis, 1-20 minutes, completely immobile
71-80	Reduced attribute, 1-6 minutes, d10 off of a random attribute
81-90	Unconsciousness, 1-4 hours
91-99	Vomiting, 1-6 minutes, completely incapacitated
00	Other

18) Pyrotechnic grenade

RANGE: PSTR
AREA OF EFFECT: 5 hexes
DAMAGE: None
WATE: 0.35 kg
EXPS/VALUE: 100/175

Pyrotechnic grenades are smoke, sonic, and flash weapons. These are not used so much as weapons, but as support devices for military maneuvers, or a magic show. Pyrotechnic grenades come in any combination of the above, roll on Table 45.13, *Pyrotechnic Grenade Type* to determine the combination.

Table 45.13: Pyrotechnic Grenade Type

DIE ROLL	PYROTECHNIC COMBINATION
01-30	Flash
31-60	Smoke
61-90	Sonic
91-92	Flash, and smoke
93-94	Flash, and sonic
95-96	Smoke, and sonic
97-98	Flash, sonic, and smoke
99-00	Other

Smoke:A smoke grenade does nothing more than fill the area of effect with very dense smoke. The smoke will settle in 1 to 10 minutes.

Flash: Flash grenades will temporarily blind any target that has optical sensors. The sensors (eyes, cameras) will remain inoperative for 1 to 10 units. There is a saving throw versus intensity 2 to 16 (2d8) poison.

Sonic: Sonic grenades have a lovely eardrum numbing boom that accompanies their discharge. Any audio receptors in the area of effect will be rendered completely inoperative for 1 to 10 minutes, and ring for a good time after that. There is a saving throw versus intensity 2 to 16 (2d8) poison.

19) Radiation grenade

RANGE: PSTR
AREA OF EFFECT: 12 hexes
DAMAGE: 3-18
WATE: 2.8 kg
EXPS/VALUE: 200/1000

The radiation grenade viciously douses its 12 hex area of effect with a variety of lethal radiation types. Anyone caught in the bath area will take 3 to 18 points of damage, but must also save vs. a radiation attack of an intensity equal to the damage rolled. The attack will leave the area of effect radioactive for 3-18 days, or 1 day per intensity level of the radiation. The radiation zone loses 1 degree of intensity each day until clean. The radiation zone will always read anomalous to a radiation detector.

The radiation grenade is also known as a Neutron grenade, or a micrograve.

20) Skylighter grenade

RANGE: PSTR
AREA OF EFFECT: 40 by 30 hex rectangle
DAMAGE: 4-40
WATE: 2.95 kg
EXPS/VALUE: 300/5500

The sky lighter is a truly outdoorsy type of grenade. When it initially discharges, it inflicts no damage, and explodes straight up, disappearing into the sky. 2 to 6 units later all targets in the rectangular area of effect will be rained upon with piercing ice. This grenade depends on complex meteorological mechanisms which are useless if used indoors, in liquid free atmospheres, or in zero gravity.

The sky lighter grenade is also known as a painmaker, rainmaker, or chicken little bomb.

21) Torc grenade

RANGE: PSTR
AREA OF EFFECT: 12 hexes
DAMAGE: 12-144
WATE: 1.75 kg
EXPS/VALUE: 275/9000

The torc grenade does no damage to targets not contained within a force field. Any force field that comes into contact with the area of effect of a torc grenade will be destroyed, and all occupants will take the allotted damage (12-144 hit points).

If the force field is less than 12 hexes in radius, the torc grenade will destroy it, and damage all targets with in it. The torc grenade cannot knock down a force field greater than 12 hexes in radius, but every target within it will take damage. The torc grenade will have no effect what so ever on force fields greater than 24 hexes in radius. A force field powered by a renewable power plant will stay knocked down for 1 to 10 minutes.

The torc grenade is also known as a force field disrupter.

22) Antilazer aerosol

RANGE: 4 hexes
AREA OF EFFECT: 7 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 275/1000

The antilazer aerosol will dissipate any lazer bolts which pass through its gaseous field. The antilazer aerosol cloud does not obscure vision, but it does does cause lazers to flare out into harmless glowing balls. The antilazer aerosol affects lazers, but energy attacks—fission, fusion, plasma—are unaffected. There is no limit to the amount of damage that antilazer aerosol can dissipate, and shimmering cloud will simply evaporate 1-10 minutes after it was sprayed.

23) Attraction aerosol

RANGE: None
AREA OF EFFECT: 1 kilometer
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 250/1000

The attraction aerosol is an incredibly potent anti-repellant. The attraction aerosol discharges pheromones, vibrations, chemicals, or sounds that attract a particular type of creature. Whatever type of creature is affected by this aerosol will swarm towards where it was discharged. The creatures will be hungry, desperately in love, or just plain curious. Exactly how many aliens approach the expedition depends mostly on the mood of the referee. The ref should moderate a wholesale onslaught of deadly aliens with lots of harmless animals. The basic effect is: thrice as many dangerous encounters a day; this will continue for 2 to 8 days. The type of creature attracted is given on Table 45.14, *Alien Attraction Type*. This is similar to Attraction Odor, physical mutation #3.

This aerosol is also known as a love bomb.

Table 45.14: Alien Attraction Type

DIE ROLL	ALIEN ATTRACTED
01-06	Ambusher
07-12	Carnivore
13-18	Chaser
19-24	Chemosynthetic
25-30	Detritovore
31-36	Herbivore
37-42	Hunter
43-48	Mitotic reproduction
49-54	Omnivore
55-60	Oviparous reproduction
61-66	Photosynthetic
67-72	Spore reproduction
73-78	Trapper
79-90	Vivaporous reproduction
91-00	Persona race type

24) Blinding aerosol

RANGE: 12 hexes
AREA OF EFFECT: 3 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 300/50

Any target with organic optical sensors must save versus poison or be blinded when subject to this attack. Every 3 units spent within the cloud will require the target to make another save versus poison or be blinded. The save is against intensity 2-20 (2d10) poison. If blinded, the target will remain blind for 0 to 9 minutes. If the duration of the blindness is less than 1 minute, the target will be blinded for 1 to 20 units. The cloud of the aerosol is invisible, and will dissipate in 1 to 12 units. Any target entering the cloud must save versus blindness.

The blinding aerosol is commonly called tear gas.

25) Catabolic Dismodulator aerosol

RANGE: 12 hexes
AREA OF EFFECT: 3 hexes, Special
DAMAGE: 5-60, Special
WATE: 2.0 kg
EXPS/VALUE: 300/25000

The catabolic dismodulator turns inorganic matter into an opaque, multi-hued, cloud of gas. The effects are devastating to equipment, and robots. If the ref feels that the effects of this weapon may severely disrupt the course of a campaign, she may allow persona robots a save versus intensity 13 to 28 (10+3d6) poison, or be destroyed. Note that only solid inorganic matter within the target hex is dismodulated. The 3 hex area of effect refers to the cold damage taken from the cloud of gas.

Those organic creatures hit directly with a catabolic dismodulator have a 5% chance of dismodulating along with their equipment. If the dice should indicate this, it is only polite to offer the same saving throw awarded to persona robots. If the player fails this roll her persona is dead.

26) Demagnetizer aerosol

RANGE: 12 hexes
AREA OF EFFECT: 5 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 300/25

The relevance of this aerosol to anything in particular escapes me, it is sort of an industrial strength tape head cleaner which briefly nullifies the weak forces of magnetism.

The obvious problems that could arise from this are: magnetic buckles detaching themselves; TV sets going blank; magnetic legs (vehicles, and robots) collapsing; electronic components ceasing to function; computer memories being erased; and little plastic animals falling off of the fridge. Military electronics will get a save versus mental attack, intensity 3 to 18, to avoid being affected by the attack.

The magnet's battery source, the magnets themselves, or any electronic components will be restored to normal operation after 3-18 units. There is a 1% chance per unit of dysfunction of the device being permanently damaged. Refer to the *Extent of Damage* table in chapter 21, Equipment Damage.

27) Disintegrator aerosol

RANGE: 15 hexes
AREA OF EFFECT: 1 hex
DAMAGE: Special
WATE: 2.0 kg
EXPS/VALUE: 300/12000

The disintegrator aerosol turns inorganic substances into dust. More refined, and discerning, than its cousin the catabolic dismodulator aerosol (#25), the disintegrator aerosol will only affect a certain substance. The substance type is determined on Table 45.15, *Disintegration Type*. Any amount of this material caught in the 1 hex area of effect will be broken down into a useless dust massing much less than its previous wate.

Any complex equipment, composed of many basic materials, caught in the area of effect has a % chance, determined by the referee, of malfunctioning. The malfunction is assumed to have been caused by some integral part of the device disintegrating into dust (gas). The chance of this happening can be determined by rolling Sphincter dice, as described in chapter 16, Special Rolls. The extent of the damage should be determined on the *Extent of Damage* table under chapter 21, Equipment Damage.

Table 45.15: Disintegration Type

DIE ROLL	SUBSTANCE DISINTEGRATED
01-30	Alloy
31-45	Metal
46-60	Plastix
61-70	Soil
71-80	Stone
81-98	Wood
99-00	Other, flesh, bone

28) Exploding aerosol

RANGE: None
AREA OF EFFECT: 1 hex
DAMAGE: 5-60
WATE: 2.0 kg
EXPS/VALUE: 300/100

This sadistic device explodes like a fragmentation grenade when it is triggered. All targets in the 1 hex area of effect take the damage listed. The referee should note that it is very impolite to laugh when an exploding aerosol is discharged.

29) Foam aerosol

RANGE: None
AREA OF EFFECT: 8 hexes by 2 hexes high
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 100/250

The foam aerosol creates a pad of creamy foam 16 hexes across, and 2 hexes deep. For the first minute, the foam can be easily travelled through. By the end of the second minute the foam is starting to thicken, and movement is halved. Three minutes after being discharged the foam will be so viscous that movement will be reduced to one quarter. The pad will be completely solidified 4 minutes after its discharge, and anything caught within it will be completely trapped. At no time, even during the solid phase, is breathing hampered in any way by the foam. Anything entombed by the foam pad will starve to death before anything else.

The foam is not much stronger than styrofoam, but only those persons trapped in the outer edges, and those who are particularly industrious will be able to free themselves.

The colour of the foam will be the same as on the outside of the aerosol canister. Once solid, the foam is structurally sound, and well insulated.

This aerosol has been given synonyms such as the insulator, and the homemaker.

30) Freezing aerosol

RANGE: 9 hexes
AREA OF EFFECT: 8 hexes
DAMAGE: 5-60
WATE: 2.0 kg
EXPS/VALUE: 300/1000

The freezing aerosol subjects all targets in its area of effect (8 hexes) to an enthalpy attack, coating everything with ice and snow. The freezing aerosol has a % chance, equal to the damage inflicted, of entrapping large, or smaller, sized targets in ice. This attack also freezes switches in place, triggers in the firing position, pins in grenades, pant zippers closed, etc.

The ref should record all pertinent details about this weapon, and refer to either the Cryoblast grenade (#4), or the Cryogun (#7), in chapter 46, Guns.

31) Gas aerosol

RANGE: 7 hexes
AREA OF EFFECT: 6 hexes
DAMAGE: Special
WATE: 2.0 kg
EXPS/VALUE: 250/900

The gas aerosol fills the area of effect with a pall of transparent, but noticeable gas. The cloud of gas will affect all within it, and saving throws vs. poison must be made for every unit within the area of effect. The cloud will dissipate in 4 to 16 units. The intensity of the poison in the gas cloud varies between 2 and 16. Roll on Table 45.16, *Aerosol Gas Type* to determine what is ejected by the aerosol.

Table 45.16: Gas Type

DIE ROLL	GAS EFFECT
01-10	Blindness, 1-10 minutes
11-20	Comatose, 1-10 minutes
21-30	Death, Permanent
31-40	Insanity, 1-4 hours, use *RPC personality* table, chapter 11
41-50	Lethargy, 1-10 minutes, 1/2 movement
51-60	Nausea, 1-20 minutes, 1/4 all attributes
61-70	Paralysis, 1-20 minutes, completely immobile
71-80	Reduced attribute, 1-6 minutes, d10 off of a random attribute
81-90	Unconsciousness, 1-4 hours
91-99	Vomiting, 1-6 minutes, completely incapacitated
00	Other

32) Invisibility aerosol

RANGE: None
AREA OF EFFECT: 1 hex
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 300/250000

The magical invisibility aerosol permeates all visible matter within its area of effect with a substance that does not reflect, or deflect the path of light. Everything in the area of effect will be undetectable to sensors that use reflected white light. Sonar, infravision, ultravision, and other such sensors will detect these "invisible" objects normally.

Everything within 1 hex of the epicenter is invisible: the ground, walls, equipment, personas, halves of personas. The aerosol does an effective job of making the targets disappear, but remember that these invisible objects still exist. Equipment is easily lost, personas still make noise, personas still smell, and eye hand co-ordination is virtually non-existent. The invisibility aerosol can offer a great escape route, but can also cause a lot of trouble for the users. The effects of this aerosol will last for 1 to 4 days.

33) Matter Detector aerosol

RANGE: 0 hexes
AREA OF EFFECT: 12 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 300/40000

The matter detector aerosol is much more useful than its title implies. Any solid matter within the area of effect of this aerosol will be affixed with chemicals that emit low levels of heat, light, radiation, and vibrations. This allows matter to be detected by any of the more common sensors (eyes, infravision, sonar, etc.). The aerosol can also be used to determine whether something is composed of solid matter or not. Hence it makes a good hologram detector also.

All matter in the area of effect will glow light blue, and then fade into glowing technicolor for 1-4 minutes. The effect of the matter detector will continue for 1 to 4 minutes, and during that time any target can be seen through smoke, darkness, behind holograms, or in hiding places. Any to hit rolls will receive a bonus of +65 to hit on any target hit with a matter detector aerosol. Hiding maneuvers are 10 DDs more difficult if the persona has been affected by this aerosol, and ambushes are 10 times easier to detect. Targets that wish to avoid detection may attempt to disappear after the 1-4 minute duration ends.

This aerosol is also called a marker aerosol, or a targeting aerosol.

34) Mistor aerosol

RANGE: None
AREA OF EFFECT: 25 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 100/400

The mistor is the complete opposite to the matter detector aerosol. The mistor renders all detection equipment—eyes, sonar, infravision, touch, smell, everything—completely useless when within the area of effect. No lights can penetrate the cloud, yelling is futile, and everything feels cool to the touch. Virtually all sensors are dulled through lack of stimuli. Any attacks made are in a random direction, even if the target recently brushed against the attacker. Movement is random, unless the persona has some form of heightened directional sense. The suspension will remain cohesive for 1-6 days.

35) Molecular Diffusion aerosol

RANGE: 10 hexes
AREA OF EFFECT: 7 hexes
DAMAGE: 12-96
WATE: 2.0 kg
EXPS/VALUE: 300/2500

The molecular diffusion aerosol is a nasty sounding combat weapon that inflicts the prescribed damage to all targets in the area of effect. How the aerosol inflicts its damage, and what happens when it is discharged is left to the improvisational talents of the referee.

36) napalm aerosol

RANGE: 8 hexes
AREA OF EFFECT: 8 by 2 hex swath
DAMAGE: 6-60
WATE: 2.0 kg
EXPS/VALUE: 300/1900

The napalm aerosol blasts a swath of flaming gas and gel when it is triggered. This is definitely not a toy you'd like to mistakenly point backwards. Anything caught in the blazing area of effect will be seared for 6 to 60 (6d10) hit points of damage, and then promptly immolate for further damage. Targets that have immolated will burn for an additional 2 to 8 units. Burning targets will take an additional 4 to 24 hit points of damage each unit that they are aflame. Other than the flaming targets, the napalm aerosol will extinguish itself immediately.

37) Paint aerosol

RANGE: 4 hexes
AREA OF EFFECT: 4 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 50/45

The paint aerosol can be used to paint the entire wall of a room with one explosive button push. Unfortunately this time saving feature will paint everything in front of the wall also. The completely indiscriminate nature of the paint aerosol allows it to be used as a weapon. When sprayed onto opponents, or expedition members, they must make a successful saving throw versus poison, or be blinded for 1 to 20 units. The intensity of the poison will be from 1 to 12. The referee may allow the player to use her persona's DEX instead of CON for this saving throw. The paint colour will be the same as the colour of the aerosol canister.

38) Pharmaceutical Ejector

RANGE: 12 hexes
AREA OF EFFECT: 1 hex
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 200/Double pharmaceutical's

This aerosol can be used to apply long range prescriptions to groups of patients. What sort of plague, military infestation, or Woodstock celebration prompted the invention of such a dispenser is unknown. The pharmaceutical type, effect, duration, etc. is determined in chapter 50, Pharmaceuticals.

All targets in the area of effect must fail a save versus poison to be affected by the chemical. The intensity of the poison (pharmaceutical) is 2 to 20. This intensity is reduced by one for every target in the area of effect. The more potential users, the milder the dose. Note that it is possible to make the spray from this aerosol completely ineffective by having too many targets in the area of effect. The cloud dissipates immediately after it has been ejected.

39) Poison aerosol

RANGE: 12 hexes
AREA OF EFFECT: 12 by 3 hex swath
DAMAGE: Death
WATE: 2.0 kg
EXPS/VALUE: 300/700

The poison aerosol is a very selective, very lethal, combined nerve gas respiratory poison. Whatever type of creature is poisoned (see Table 45.17, *-Cide*) by this aerosol must make a save versus intensity 2 to 24 poison, or die. Creatures that save versus the poison attack will automatically be repulsed by the 12 hex x 3 hex swath, and will not cross, or approach the lingering residue. The attack is only lethal to those targets caught within the initial blast, but the repellant effect will linger for 1 to 3 hours.

These population strength poison aerosols are usually labelled "raid", or nerve gas canisters.

Table 45.17: -Cide

DIE ROLL	TOXIN KILLS
01-05	Carnivores
06-10	Chemovores
11-30	Detritovores
31-35	Herbivores
36-65	Insects
66-95	Plants
96-99	Anthropomorph Type
00	Other

40) Repellent aerosol

RANGE: None
AREA OF EFFECT: 3 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 300/50

This is the pacifist's version of the poison aerosol (#39). Creatures of the repelled type must save versus poison (intensity 13-28), or not be able to approach anything covered by this aerosol. The aerosol will start to repulse creatures at a 10 hex range. This repelling effect will last for 1 to 6 days. Intelligent creatures may make an additional save each new day in which they approach the repulsive area. Unintelligent aliens will most likely bolt in terror when failing to save versus the repellent.

This aerosol is also called off, repex, or protector.

Table 45.18: Repellant

DIE ROLL	AEROSOL REPELS
01-05	Carnivores
06-10	Chemovores
11-15	Detritovores
16-35	Herbivores
36-85	Insects
86-95	Plants
96-99	Anthropomorph Type
00	Other

41) Siren aerosol

RANGE: None
AREA OF EFFECT: 1 kilometer
DAMAGE: 2-12
WATE: 2.0 kg
EXPS/VALUE: 100/75

This ear splitting siren will wail for 2-8 minutes, inflicting 2-12 hit points of damage to all within the area of effect. The siren aerosol will inflict double damage to mutants employing sonar. There is also a 10% chance per hit point of damage inflicted of that the target will become deaf. There is no saving throw granted. Hearing will be restored after 1-10 hours. The screeching will continue to inflict 2 to 12 hit points of damage each minute until the hearing target is deafened, unconscious or out of range.

This aerosol has severe environmental effects. When used outdoors most of the smaller animals—birds, hares, jackalopes, and rats—in the 1 kilometer radius of effect will be killed. The expedition will also have to deal with a considerable number of deaf, confused, and possibly angry local fauna.

42) Smoke aerosol

RANGE: None
AREA OF EFFECT: 12 hexes
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 50/100

This smoke aerosol will instantly discharge a 24 hex diameter sphere of dense smoke. The smoke will obscure the vision of any visual sensors caught within its field. This means that there is a -230 per hex to hit penalty for ranged attacks, unless the persona has some sort of smoke cutting device. The smoke is so dense that it can only be moved by a gale force wind, or a bull dozer. The cloud will disperse in 1 to 8 weeks. The colour of the smoke will be the same as the colour of the canister that it was ejected from.

43) Web aerosol

RANGE: 8 hexes
AREA OF EFFECT: 8 by 1 hex swath
DAMAGE: None
WATE: 2.0 kg
EXPS/VALUE: 300/1000

The web aerosol splatters the area of effect with a super adhesive goo. Anything caught in the area of effect will be trapped until the webby mess dissipates 2-16 minutes later. Any persona that saunters into the messy web will instantly become glued.

To escape the persona must make a bizarre PSTR roll (kilo-die). Otherwise she is trapped until the web decomposes. During each escape the entrapee must ensure that she does not suffocate herself by gluing shut her mouth and nose. There is a 1% chance of this happening each time that she struggles (attempts to break free). The colour of the web will be the same as the colour of the aerosol canister.

The persona can attempt to make subtle movements, such as pulling a gun trigger, activating an aerosol, or taking a pharmaceutical. To this properly she must make a successful difficult DEX (d20) roll, or be unable to move at all.

Procedures such as burning, dissolving or disintegrating the web will have varying chances of success. The chance of an action being successful can be determined by rolling Sphincter dice, as described in chapter 16, Special Rolls. Each attempt to free a persona will indicate a chance to entrap the rescuer.

A web aerosol is also known as silly string.

#142
Hoty
Spider Webaero.

44) Ref's Own Table

RANGE: Varies
AREA OF EFFECT: Varies
DAMAGE: Varies
WATE: Varies
EXPS/VALUE: Varies/Varies

Another table of weird referee devices.

IIII

IIII

Chapter 46
Guns

Guns are weapons designed for lethal personal combat. They are designed to destroy targets with whatever means is available. Guns are included in the technology book because combat is, unfortunately, an unavoidable aspect of most exploration. If our planet earth is any indication of how dangerous the universe is, then weaponry of some sort will always be present. If the unintelligent wildlife doesn't pose a threat to the expedition, then malicious intelligent life forms will, and if there is no threat to the expedition, then its members will often fight amongst themselves. It's not that the hypothetical races are so violent, its just that is what we can expect from the players themselves.

Getting back on track, the persona's will want weaponry to fight their battles. The most popular form of personal weaponry is the gun, and guns are covered in detail here. This chapter includes a host of weapons from all forms of popular entertainment.

The gun is rolled on Table 46.2, *Gun Type*, and the necessary information for role-playing is recorded by the referee. Don't be daunted by the apparent volume of information to be recorded. The essentials are damage, and ammo capacity. All other information is for combat connoisseurs of varying degrees. For instance, referees using the theatrical combat system need only record the rate of fire, and the damage for a successful hit. However referees using the tactical combat system may need to know the range and decay of the weapon being used. Only use the amount of information that ensures play remains fun!

Type/Range

Type: **Type** refers to the weapon type that the gun falls into. The separation of these weapon types is detailed in chapter 28, Weapons. A type C weapon can make one attack per each unit. This means one to hit roll every 2 seconds. The delay between attacks is due to items like weapon recharge, weapon restabilization, re-aiming, or recalibration.

When using the combat table, see chapter 27, Tactical Combat, all weapons in this chapter attack as weapon type C. This is the classification for powered weapons. All guns attack as weapon type C regardless of whether their type is listed as type D, type E, type F, or Special.

Guns that recharge faster, are better stabilized, or are easier to aim can fire more often. For example, type D attacks twice per unit, type E attacks three times each unit, and type F attacks four times a unit. Often a gun will have several types listed like C, D, F. This means that the persona can set the weapon to make various numbers of attacks each unit. This is usually adjusted by trigger squeeze, or some switch setting on the weapon. Each attack requires a to hit roll.

Special is a full auto feature where the weapon releases at least 15 rounds in less than 2 seconds. This full auto burst yields 5 to hit rolls, where the persona can aim at any five contiguous targets in her forward field of vision. A hit will score 0 to 3 bullets on the target. Each bullet that hits the target will inflict the damage listed for the gun. If a gun that inflicts 2 to 12 Hps of damage, hit with a full auto burst for 2 bullets, the attacker would roll 2d6 twice for damage. The full auto special is a very lethal attack. However, as the rapid fire mode continues, the gun becomes more and more difficult to control, and a cumulative to hit roll penalty of -30 is added for each roll to hit.

The special attack can bog down combat for inexperienced players. The first thing to do if combat is getting too slow is to remove the -30 per to hit roll penalty. If this doesn't work then replace the 5 to hit rolls with a single to hit roll on one target, that inflicts 1 to 11 bullets of damage (d12-1), if it hits. Deadly, but simple.

Range: The range is the effective range of the weapon itself. This does not reflect the skills of the persona in any way. The weapon's range is limited by wavering bullets, dissipating charges, or decaying material.

If the range is listed as 120 hex, -230: the gun has no to hit penalties up to 120 hexes, and then a penalty of -230 to hit per hex beyond that range. This gun would have -230 to hit a target 121 hexes away. Some weapons even have -1000 for any hexes beyond their range, this means that the attack literally stops at that distance. Theatrical combat has no range penalties, and any range effects are optional.

Damage

The damage is the range of hit points that can be removed from a target when the gun scores a hit. The more hit points removed, the more damage the gun inflicts. The guns are given a range of damage that is randomly generated each time a successful hit is made. This randomness accounts for all the unpredictability that is involved in tissue damage and projectile physics. This damage range is all the damage that the gun can inflict; type C weapons get no damage adjustment. When using the combat table all powered weapons whether type C, D, E, F, or Special attack as type C weapons

If the gun's damage is listed as "special", then the nature of the damage is discussed in the gun description, and it is usually complex or has some special effect (vaporization, death, etc.).

If there is a list of damages like 2-24, 2-20, 3-18, 2-16, and 1-15, then this gun has models with various calibres, or power levels. A gun will only have one damage type. For example, the first damage range on the list inflicts the most damage, 2-24, it is the highest calibre (power level), and is called an extra high powered weapon. The list goes as follows: XHP, HP, MP, LP, and XLP. See Table 46.1, *Gun Calibre* for their explanation.

Table 46.1: Gun Calibre

DIE ROLL	GUN CALIBRE	TIMES VALUE	ADJUST BATTERIES
01-05	XLP	0.75	-20%
06-20	LP	0.8	-10%
21-80	MP	1.0	—
81-95	HP	2.0	+10%
96-00	XHP	3.0	+20%

Accuracy

Accuracy very simply reflects the accuracy of the gun. The better balanced, and better designed, the weapon, the easier it is to hit the target. The accuracy stat of a gun is simply added to the to hit roll.

Ammo/Malfunction

Ammo: The ammo of a gun is the maximum ammo amount that can be found in the cartridge, or the maximum number of attacks per battery set. When this number of attacks is exhausted, the persona must reload. A gun with an ammo listing of 45 could fire 45 rounds before the persona would have to reload. Referees should note that guns are rarely found fully loaded.

Malfunction: The malfunction stat is the kilodie chance that the weapon has lost its attack for one reason or another. If the weapon has a malfunction stat of 30, any to hit roll less than 30 would indicate a weapon malfunction. The lost attack may be due to a dud shell, a battery mischarge, or a mechanism jam. Some malfunctions have lethal effects for those standing nearby the weapon. The malfunction is checked against the persona's unadjusted kilodie roll. The referee should check any unadjusted kilodie roll less than 40.

Wate/Ammo

Wate: The wate is simply the unloaded wate of the gun in kilograms. The wate of a gun can be reduced, or increased, depending on the tech level of the device. If a list of three wates is given (4.62, 2.75, 1.95), then they refer to the different wates of caliber weapons. XHP, and HP use the leftmost value (4.62), MP uses the middle value (2.75), and LP, and XLP use the rightmost value (1.95).

Ammo: This is the wate of the ammunition. If there is no value listed to the right of the gun wate, then the gun uses batteries, and the battery wate is added instead. Batteries are rolled in chapter 55, Support Equipment. A set wate, like 20 gm, gives the wate of a complete cartridge. A percentage value indicates that the wate of the ammo is a fraction of the wate of the entire gun. For example, if a 2.5 kg gun had ammo listed as 1% then one of its shells would have a wate of 25 gm. As a ref, I ignore ammo wate completely. The information is included for the purists, or for when enormous amounts of ammo are being hand held.

Exps/Value

Exps: This is the amount of experience points awarded to the firer of the gun, or whoever else, identifies the gun's nature. See chapter 15, Experience, for more info.

Value: This is the value of the gun, if it should ever be sold, or appraised. There is no guarantee that a gun will be sold for its correct worth. The value given that is in brackets indicates the value of the ammo, "b" means that the ammo is actually a battery charge.

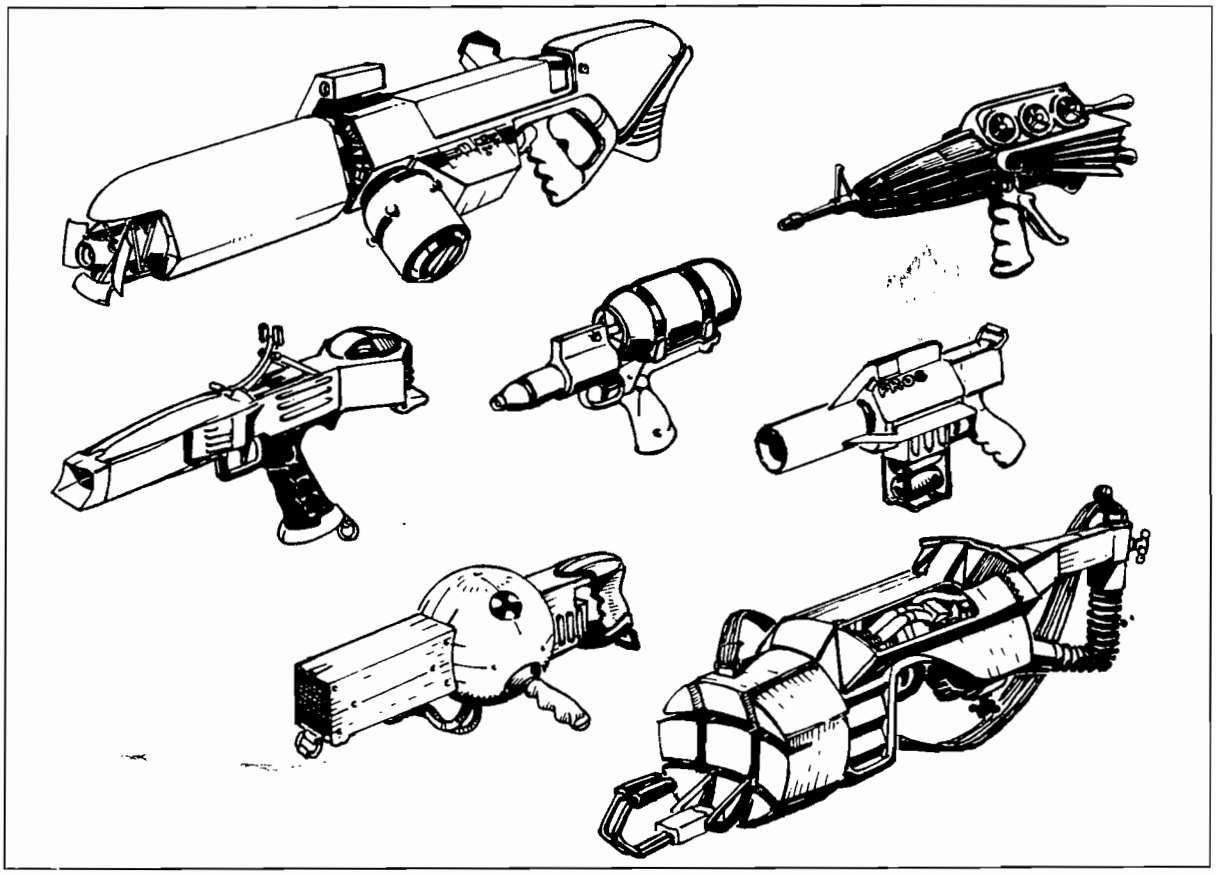


Table 46.2: Gun Type

DIE ROLL	GUN TYPE	DIE ROLL	GUN TYPE
01-02	1. Aerosol Pistol	48-49	27. Job Rifle
03-04	2. Aerosol Rifle	50-52	28. Lazer Pistol
05	3. Antimat Pistol	53-55	29. Lazer Rifle
06	4. Antimat Rifle	56	30. Napalm Gun
07-08	5. Beegun	57-59	31. Needler
09-11	6. Bolt Action Rifle	60-61	32. Plasma Pistol
12-13	7. Cryogun	62-63	33. Plasma Rifle
14-15	8. Death Ray Pistol	64-65	34. Plastix Pistol
16-18	9. Derringer	66-67	35. Plastix Rifle
19	10. Disintegration Gun	68-69	36. Protein Disrupter
20-21	11. Electron Pistol	70-71	37. Radiation Gun
22-23	12. Electron Rifle	72-74	38. Revolver
24-25	13. Fission Pistol	75-76	39. Semi-automatic Lazer Pistol
26-27	14. Fission Rifle	77-78	40. Semi-automatic Lazer Rifle
28	15. Full-automatic Lazer Pistol	79-80	41. Semi-automatic Pistol
29	16. Full-automatic Lazer Rifle	81-82	42. Semi-automatic Rifle
30	17. Full-automatic Pistol	83-86	43. Slug Thrower
31	18. Full-automatic Rifle	87	44. Sonic Pistol
32	19. Fusion Pistol	88	45. Sonic Rifle
33	20. Fusion Rifle	89-91	46. Stun Pistol
34-36	21. Gauss Pistol	92-94	47. Stun Rifle
37-39	22. Gauss Rifle	95-96	48. Variable Lazer Pistol
40-41	23. Glass Gun (Rifle)	97-98	49. Variable Lazer Rifle
42-43	24. Grapple Gun	99	50. Watergun
44-45	25. Gravrupter Gun	00	51. Ref's Own Table
46-47	26. Job Pistol		

IIII

1) Aerosol pistol

TYPE/RANGE: C/Double, -1000
DAMAGE: Special
ACCURACY: -150
AMMO/MALFUNCTION: 3 times/20
WATE/AMMO: 0.5 kg
EXPS/VALUE: 500/2000

An aerosol pistol amplifies some of the abilities of targetable aerosols. This pistol will double the targetable range, and triple the number of charges of an ordinary aerosol canister. In no way does this pistol alter area of effect, duration, or damage of an aerosol. Aerosol canisters cannot be disconnected from the pistol until all charges are extinguished. If an aerosol that has a range of 10 hexes and an area of effect of 3 hexes were to be inserted into this pistol, the aerosol would then have a range of 20 hexes, the same area of effect, and it could be ejected from the pistol 3 times.

A malfunction indicates a loss of all remaining charges. There is a slim chance (determined by the ref) of the weapon exploding on malfunction.

2) Aerosol rifle

TYPE/RANGE: C/Triple, -1000
DAMAGE: Special
ACCURACY: -50
AMMO/MALFUNCTION: 5 times/20
WATE/AMMO: 1.6 kg
EXPS/VALUE: 500/8000

An aerosol rifle enhances two of the abilities of targetable aerosols. This rifle will triple the targettable range, and quintuple (five times) the number of charges in an aerosol canister. In no way can this device alter the area of effect, duration or damage of any aerosol. Aerosol canisters cannot be disconnected from an aerosol rifle until all charges are deployed. If an aerosol that has a range of 10 hexes and an area of effect of 3 hexes were to be inserted into this pistol, the aerosol would then have a range of 30 hexes, the same area of effect, and it could be ejected from the rifle 5 times.

A malfunction will indicate a loss of all remaining charges. There is a slim chance, determined by the ref, that the weapon will explode on a malfunction.

3) Antimat pistol

TYPE/RANGE: C/90 hexes, -100
DAMAGE: Special
ACCURACY: -30
AMMO/MALFUNCTION: 1/30
WATE/AMMO: 2.7 kg/5 gm
EXPS/VALUE: 900/100000 (10000 plus batteries)

An antimat pistol launches a micro particle of antimatter suspended in a lattice of electrons. This lattice will shatter when it hits a liquid or solid. The resulting explosion will instantly annihilate 50 kg of matter. The explosion releases a blast of heavy particles and super-heated gases that will affect everything within a ten hex radius regardless of cover. Everything in the ten hex radius will take 25 to 70 (5d10+20) hit points of damage.

A malfunction with this weapon means the electron lattice has shattered within the gun. This usually means a harmless misfire, but if the ref is in a bad mood the gun will disintegrate itself.

4) Antimat rifle

TYPE/RANGE: C/150 hexes, -95
DAMAGE: Special
ACCURACY: 0
AMMO/MALFUNCTION: 2/40
WATE/AMMO: 5.0 kg/10 gm
EXPS/VALUE: 900/375000 (15000 and batteries)

An antimat rifle is the long range cousin of the antimat pistol. The antimat rifle releases a larger particle of antimatter, and causes a more powerful explosion. The antimat rifle attack eliminates approximately 200 kilograms of matter. The resulting blast has a 25 hex radius inflicting 35 to 80 (5d10+30) hit points of damage. In other respects, the antimat rifle functions the same as an antimat pistol. More information is listed under gun #3, Antimat pistol.

5) Beegun

TYPE/RANGE: C/150 hexes, -100
DAMAGE: Death
ACCURACY: 0
AMMO/MALFUNCTION: 1/2
WATE/AMMO: 2 kg/200 gm
EXPS/VALUE: 500/250000 (30000)

The beegun's activation chamber excites a normally docile insect into a poisonous rage. After two units of warming up, the beegun is ready to fire as a normal weapon. If this weapon scores a hit, the insect will inject a deadly and instantaneous poison. The hit victim must save vs. intensity 19 to 24 (18+d6) poison, or die. If the target does save she will be comatose for 1-4 days. The ammunition for a beegun is not reusable.

A malfunction can only occur in the ammo of this weapon. If a malfunction occurs, a hit will inflict 1 to 10 hit points of damage, but it will not be poisonous.

6) Bolt Action rifle

TYPE/RANGE: C/150 hexes, -50
DAMAGE: 4-48, 3-36, 3-30, 3-24, 2-20
ACCURACY: +75
AMMO/MALFUNCTION: 15/10
WATE/AMMO: 3.7 kg, 3.4 kg, 3.1 kg (1.5%)
EXPS/VALUE: 400/500 (1)

This is your normal hunting, or target, rifle. This weapon can also be called a pump action, revolving chamber, steam, or pneumo rifle. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type. A malfunction with this weapon is a misfire, and not a jam.

7) Cryogun

TYPE/RANGE: C/10 hexes, -200
DAMAGE: 4-24
ACCURACY: 0
AMMO/MALFUNCTION: 10/30
WATE/AMMO: 2.0 kg
EXPS/VALUE: 700/6000 (batteries)

A cryogun subjects everything along its path to extreme cold. Every target along the two by fifteen hex path will take damage. The damage generated is equivalent to the percentage chance of an object being trapped or frozen along the path. If 15 hit points of damage is rolled, there would be a 15% chance of trapping a medium, or smaller, sized object in ice. There would also be a 15% chance of freezing swords in scabbards, buttons in the on position, steering wheels straight ahead, etc.

The chance of freezing must be checked for each object. The freezing effects of a cryogun will melt away in 6 to 60 units. Heating will halve the melting time. Trapped targets that make a kilo die PSTR roll can break free of the ice. This weapon is also known as a frigidaire, or a cop gun (they don't have to yell "freeze" they just pull the trigger). A malfunction results in the loss of a charge.

8) Death Ray pistol

TYPE/RANGE: C/90 hexes, -190
DAMAGE: Special
ACCURACY: 0
AMMO/MALFUNCTION: 4/3
WATE/AMMO: 1.8 kg/10 gm
EXPS/VALUE: 700/300000(batteries plus 500)

The death ray pistol attacks the electrochemical life force of organic creatures. The beam attack must score a hit to be effective. Any organic creature hit by a death ray pistol must save vs. poison or die. The intensity of the attack (3-24) is generated every time the weapon is fired. This weapon is also called a kill-o-zap gun or a terminator. The malfunction of this weapon will occasionally call for an attack on the firer. Normal malfunctions result in the loss of all remaining charges.

9) Derringer

TYPE/RANGE: C/20 hexes, -333
DAMAGE: 4-24
ACCURACY: 0
AMMO/MALFUNCTION: 5/3
WATE/AMMO: 0.4 kg/0.9%
EXPS/VALUE: 250/150 (1)

The derringer is a small compact and concealable weapon. It is composed mostly of plastic alloys, and is coated with finger-printless materials. The derringer can be melted to nothing in less than 15 units by submersing it in boiling water . When being concealed this weapon will give bonuses of +20 on sneaky PT rolls. This weapon is also known as a family planner, or a Saturday night special. A malfunction will jettison dud ammo and count as a misfire.

10) Disintegration gun

TYPE/RANGE: C/100 hexes, -115
DAMAGE: 8-64, Special
ACCURACY: 0
AMMO/MALFUNCTION: 5/20
WATE/AMMO: 4.5 kg/30 gm
EXPS/VALUE: 900/500000(batteries and 9000)

The disintegration gun is a very temperamental weapon. It is capable of boiling away large amounts of any liquid or solid that it hits. The firer must first score a hit, and then after that no one is sure how much material will be destroyed. The disintegration rifle could boil away 1-100 (a deci die) kilograms of matter, this amount must be rolled after every hit. The more matter to be disintegrated, the less likely the event will occur. There is a 1% chance per kg of destroyed matter that the attack will fail.

Partial vaporizations, those which leave a portion of the target undisintegrated, will inflict 1d20 of damage per kilogram of material vaporized. Vaporization has no effect on adjacent objects other than surrounding them in a colourful haze of gas. A failed vaporization will inflict 8 to 64 hit points of damage.

If an attack were supposed to disintegrate 27 kilograms of matter then there would be a 27% chance that the attack would fail. If the attack did fail, the target would merely take 8d8 hit points in damage. If the attack did not fail then the target would either disappear completely (if its wate were less than 27 kg), or it would take 27d20 hit points in damage.

The disintegrated matter must be semi-contiguous, e.g. a hit on the backpack, would annihilate the backpack, and send its unharmed contents clattering to the floor. If the target has been missed, but there is a chance that some piece of equipment has been disintegrated, refer to the hit location tables in chapter 36, Hit Locations. To determine if items are contiguous can be done by rolling Sphincter dice, as described in chapter 16, Special Rolls.

Very rarely will a malfunction of this weapon result in its vaporization. This gun is also known as a vaporizer.

11) Electron pistol

TYPE/RANGE: C/100 hexes, -60
DAMAGE: 2-24, 2-20, <u>3-18</u>, 2-16, 1-15
ACCURACY: 0
AMMO/MALFUNCTION: 10/10
WATE/AMMO: 1.3 kg, <u>1.0 kg</u>,.0.8 kg
EXPS/VALUE: 500/5000 (Batteries)

The electron pistol unleashes a blast of electrons which damage the bonding ability of molecules. An attack from an electron pistol can pass through a force field unaffected. In fact, the attack of an electron pistol will damage a force field and continue on with its attack to damage the target. An electron pistol is also called a penetrator, or the chickenz surprise.

The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type. A malfunction results in the loss of a charge.

12) Electron rifle

TYPE/RANGE: D/170 hexes, -60
DAMAGE: 5-50, 4-48, <u>4-40</u>, 4-32, 3-30
ACCURACY: +50
AMMO/MALFUNCTION: 15/10
WATE/AMMO: 4.2 kg, <u>4.0 kg</u>, 3.8 kg
EXPS/VALUE: 750/20000(batteries)

A minute organized beam of electrons massacre the target's molecules. The beam has the ability to punch holes in force fields. If a hit is made the attack will damage both the target and the force field. This is a larger version of the electron pistol, gun #11. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

13) Fission pistol

TYPE/RANGE: D/90 hexes, -60
DAMAGE: 5-50
ACCURACY: 0
AMMO/MALFUNCTION: 10/10
WATE/AMMO: 1.5 kg
EXPS/VALUE: 500/8000 (batteries)

The fission pistol uses an energy wave to superheat hydrogen molecules in its path. Obviously this weapon can only be used in hydrogen laden atmospheres (air and water are good examples). Charges are still drained if the weapon is fired in the absence of hydrogen. This is one of the few devices that will certainly be waterproofed. Some cynics call this weapon a kettlegun. Occasionally malfunctions will indicate a backflash, resulting in damage to the firer. This weapon is similar to gun #14 Fission rifle.

14) Fission rifle

TYPE/RANGE: E/110 hexes, -70
DAMAGE: 6-72
ACCURACY: +50
AMMO/MALFUNCTION: 15/20
WATE/AMMO: 4.25 kg
EXPS/VALUE: 950/32000 (Batteries)

The fission rifle superheats hydrogen molecules in air (moisture) along the path of the shot, damaging its target with a momentary searing flash. Excepting the statistical variations, a fission rifle functions the same way as a fission pistol, gun #13.

15) Full-automatic Lazer pistol

TYPE/RANGE: C, D, Special/60 hexes, -75
DAMAGE: 4-44, 3-34, <u>2-20</u>, 2-16, 1-10
ACCURACY: 0
AMMO/MALFUNCTION: 30/7
WATE/AMMO: 2.0 kg, <u>1.8 kg</u>, 1.6 kg
EXPS/VALUE: 600/3000 (Batteries)

The full automatic lazer pistol is a standard hand held lazer weapon with a very rapid fire option. The "special" setting indicates the automatic release of 15 charges. The rules for special full automatic attacks are covered in beginning of this chapter under weapon type. When full auto is used the player makes 5 to hit rolls, where each hit indicates 0-3 (d4-1) lazer bolts inflict damage. The rate of fire is determined by trigger squeeze. This weapon can also be dubbed as a flap gun. A malfunction with this weapon indicates optical burnout.

The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

16) Full-Automatic Lazer rifle

TYPE/RANGE: C, F, Special/120 hexes, -60
DAMAGE: 5-50, 4-40, <u>3-30</u>, 2-20, 2-16
ACCURACY: +70
AMMO/MALFUNCTION: 30/30
WATE/AMMO: 4.1 kg, <u>4.0 kg</u>, 3.9 kg
EXPS/VALUE: 700/12000 (Batteries)

The above details separate the full-automatic lazer rifle from the full-automatic lazer pistol, gun #15. In all other instances the two weapons are identical. This weapon is also known as a lazer gatling, a falr ("faller") gun, or a flotto lazer rifle.

The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

17) Full-automatic pistol

TYPE/RANGE: C, D, Special/60 hexes, -70
DAMAGE: 3-30, 2-20, 2-16, 2-12, 1-10
ACCURACY: 0
AMMO/MALFUNCTION: 15/20
WATE/AMMO: 2.0 kg, 1.5 kg, 1.0 kg/1.5%
EXPS/VALUE: 350/1000 (1)

A full-automatic pistol fires bullets, and tosses out spent cartridges. Like all the full-automatic weapons, this one has a very rapid fire option. The "special" setting will discharge 15 rounds in one unit. The rules for "special" are found in the beginning of this chapter under weapon type. When full auto is used the player makes 5 to hit rolls, where each hit indicates 0-3 (d4-1) bullets inflict damage. The rate of fire is determined by trigger squeeze. This weapon is alternately called a machine pistol, or flotto pistol. Malfunction with this weapon indicates a mechanism jam.

The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

19) Full-automatic rifle

TYPE/RANGE: C, E, Special/90 hexes, -44
DAMAGE: 4-48, 4-32, 3-30, 3-24, 2-20
ACCURACY: +50
AMMO/MALFUNCTION: 30/30
WATE/AMMO: 3.9 kg, 3.5 kg, 3.3 kg/1.5%
EXPS/VALUE: 700/4000(1)

The full-automatic rifle is the standard weapon of military service. It can fire accurately at one shot per unit, or it can be used to saturate an area with fire. " Special" fires 15 rounds in a unit. When full auto is used the player makes 5 to hit rolls, where each hit indicates 0-3 (d4-1) bullets inflict damage. A malfunction is mechanism jam.This weapon is also known as a smig, F.A.R., sub machine gun, ripley etc. The full-automatic rifle is the rifle version of a Full-automatic pistol, gun #17.

19) Fusion pistol

TYPE/RANGE: C/60 hexes, -85
DAMAGE: Special
ACCURACY: -40
AMMO/MALFUNCTION: 5(3)/40
WATE/AMMO: 2.3 kg/Negligible
EXPS/VALUE: 550/200000(Batteries plus 2000)

The fusion pistol is an absolutely vicious weapon. When fired, it releases a micro blob of fusion material. The firer of this weapon will take 3-30 hit points of damage from a fusion backflash. This damage will be inflicted every time the weapon is fired, unless the firer is wearing powered armour (chapter 42, Armour). The fusion pistol has built in shielding that will protect the firer, while absorbing some of the gun's charges. When the fusion pistol's shielding is being used, the pistol only has three charges. The status of the shielding is determined when the batteries are inserted.

The pistol itself inflicts substantial damage to targets in two manners. The first is getting caught in the fusion blob's path. This does not mean that the persona has been hit by the blob, but that it passed near her. The second method is getting hit with the fusion blob proper. For this to happen a successful to hit roll must be made. No to hit roll is required to get caught in a fusion blob's path, and as long as the attack passes near the target she will take damage.

All personas and equipment (including the target) along the trajectory of the fusion blob will take 6 to 60 (6d10) hit points in damage. This swath of heat damage affects anything within a one hex radius along the fusion blob's path. This path of this damage is two hexes wide. The fusion blob inflicts additional damage on the target if a hit is scored. The amount of damage depends on the target's size. See Table 46.3, *Fusion Pistol Effects* to determine how much damage the targets take.

Table 46.3: Fusion Pistol Effects

TARGET SIZE	SWATH DAMAGE	HIT DAMAGE
Tiny, Small	6-60	Explodes
Medium	6-60	14-140
Large, Gigantic	6-60	10-100

Using the *Fusion Pistol Effects* table it can be determined that a hit on a medium sized target would inflict 14 to 140 (14d10) hit points of damage. First 6 to 60 hit points from the heat of the approaching blob, and then 8 to 80 hit points from the blob itself.

If the target is tiny or small sized it will explode if it is hit with a fusion attack. Anything within one hex radius of an exploding target will take 6 to 60 hit points of damage from molten shrapnel and boiling goo. This means that anything standing along the fusion blob's path, and within one hex of an exploding target (tiny or small sized) will take 12 to 120 hit points of damage.

It should be immediately obvious that this weapon has not been designed for close quarters combat. This weapon has been nicknamed G.V.M.B. (grossly vicious meat burner), or the party killer. A malfunction will result in an explosion inflicting 6 to 60 hit points of damage to everything within a 3 hex radius. This is the pistol version of gun #20, Fusion rifle.

20) Fusion rifle

TYPE/RANGE: C/90 hexes, -60
DAMAGE: Special
ACCURACY: -25
AMMO/MALFUNCTION: 5 (3)/40
WATE/AMMO: 8.0 kg/Negligible
EXPS/VALUE: 900/800000(Batteries plus 2000)

A fusion rifle is the big sister of the fusion pistol, gun #19, and it is an even more vicious and disgusting weapon. When fired, it releases a micro blob of fusion material. The firer of this weapon, and all within 1 hex will take 6 to 60 hit points of damage from a fusion backflash. This damage will be inflicted every time the weapon is fired, unless the target is wearing powered armour (chapter 42, Armour). The fusion rifle has built in shielding that will prevent the backflash, while absorbing some of the charges. When the fusion rifle's shielding is being used, the rifle only has three charges. The status of the shielding is determined when the batteries are inserted.

The rifle itself inflicts substantial damage to targets in three manners. The first is getting caught in the fusion blob's path. This does not mean that the target has been hit by the blob, but that it passed near her. The second method is getting hit with the fusion blob proper. For this to happen a successful to hit roll must be made. No to hit roll is required to get caught in a fusion blob's path, as long as the target is standing within the swath's area of effect. The third method is to get caught within the area of effect of an exploding target.

All personas and equipment (including the target) along the trajectory of the fusion blob will take 8 to 80 (8d10) hit points in damage. This swath of heat damage affects anything along the fusion blob's path, which is 3 hexes wide. This fusion blob inflicts additional damage on the target if a hit is scored. The amount of damage inflicted depends on the target's size. See Table 46.4, *Fusion Rifle Effects* to determine how much damage the target's take.

Table 46.4: Fusion Rifle Effects

TARGET SIZE	SWATH DAMAGE	HIT DAMAGE
Tiny, Small	8-80	Explodes
Medium	8-80	Explodes
Large	8-80	18-180
Gigantic	8-80	16-160

Using the *Fusion Rifle Effects* table it can be determined that a hit on a large sized target would inflict 18 to 180 (18d10) hit points of damage. First 8 to 80 hit points from the heat of the approaching blob, and then 10 to 100 hit points from the blob itself.

If the target is tiny, small, or medium sized it will explode if it is hit with a fusion rifle attack. Anything within three hexes of an exploding target will take 8 to 80 hit points of damage from molten shrapnel and boiling goo. This means that anything standing along the fusion blob's path, and within one hex of an exploding target (tiny or small sized) will take 16 to 160 hit points of damage.

It should be immediately obvious that this weapon has not been designed for close quarters combat. This weapon has been nicknamed G.V.M.B. (grossly vicious meat burner), or the party killer. A malfunction will result in an explosion inflicting 8 to 80 hit points of damage to everything within a 5 hex radius.

21) Gauss pistol

TYPE/RANGE: D/100 hexes, -55
DAMAGE: 5-50, 4-40, 3-30, 2-24, 2-16
ACCURACY: +100
AMMO/MALFUNCTION: 10/1
WATE/AMMO: 1.8 kg, 1.5 kg, 1.0 kg/1.8%
EXPS/VALUE: 500/3000 (3)

The gauss pistol magnetically hurls special ammunition. Each round has a sufficient electrostatic charge to power the firing mechanism. The magnetic force stored within the rounds cannot be harnessed for any other procedure, unless a DD20 maneuver is completed by a mechanic. Magnetic attacks do affect this weapon. It must be noted that this weapon is not silent. A malfunction indicates a mechanism jam (very, very rare). The gauss pistol is a relative of gun #22, gauss rifle.

The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

22) Gauss rifle

TYPE/RANGE: E/190 hexes, -40
DAMAGE: 5-60, 5-50, 4-48, 3-30, 2-20
ACCURACY: +170
AMMO/MALFUNCTION: 15/2
WATE/AMMO: 3.75 kg, 3.5 kg, 3.25 kg/10%
EXPS/VALUE: 754/12000(5)

With the above alterations noted, the gauss rifle is the same as gun #21, gauss pistol. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

23) Glass gun

TYPE/RANGE: D/100 hexes, -99
DAMAGE: 4-48
ACCURACY: Special
AMMO/MALFUNCTION: 10/10
WATE/AMMO: 3.6 kg/200 gm glass cylinder
EXPS/VALUE: 300/5000 (75)

The glass gun sprays clouds of minute plexiglass shards. This weapon gets a +200 accuracy bonus on to hit rolls against non-pieced armour. Some examples of non-pieced armour are furs, leather, padded, studded, ring, scale and chain. Denizens that have non-pieced armour also fall into this category. This weapon does not get its accuracy bonus when it is being used against full piece armour. Examples of full piece armour are: robots, powered armour, full plate armour, and vac suits.

Each cartridge has its own power source. This power source can only be accessed by the glass gun, unless a mechanic succeeds at a 20 DD maneuver. A malfunction indicates a mechanism jam.

24) Grapple gun

TYPE/RANGE: C/15 hexes, -1000
DAMAGE: Special
ACCURACY: -100
AMMO/MALFUNCTION: 1/30
WATE/AMMO: 3 kg/ Part of gun
EXPS/VALUE: 330/1006

The grapple gun fires a cord that is attached to a very sticky blob (appearing as a bunch of grapes), or a vicious metal barb. The sticky thing does no damage, but it will attach to anything that it hits. The pointed barb will inflict 4 to 24 hit points of damage, and has a 5% chance per hit point of damage of sticking. The grapple gun will have the vicious barbed format 60% of the time. The grapple gun has a built in winch that can pull 130 kg at up to 3 h/u. A grapple that is unattached can be rewound at a speed of 6 h/u. Unless a grapple is under tension it can easily be removed. Removing a pointed barb grapple will inflict a d4 hit points in damage. A malfunction with this weapon indicates a mechanism jam.

25) Gravruptor gun

TYPE/RANGE: C/30 hexes, -80
DAMAGE: Special
ACCURACY: 0
AMMO/MALFUNCTION: 10/35
WATE/AMMO: 4.25 kg
EXPS/VALUE: 1000/10000 (batteries)

This gun causes bizarre gravitational anomalies on those targets that it hits. Any target that is hit by the weapon will be subject to a blast of random gravity. The target gets no chance to negate the attack if the to hit roll is successful. If the target's wate is more than 500 kg it is unaffected by this attack.

A hit with this weapon surrounds the target with a random 1-4 gravities. This unpredictable dose of acceleration will throw the target in a random direction. Targets will take 1 to 12 hit points in damage per gravity regardless of whether they hit a ceiling, wall, fall to the ground, or are flung off into space. This weapon can inflict from 1 to 12 to 4 to 48 hit points of damage. There are additional effects, these depend on the atmospheric gravity around the target.

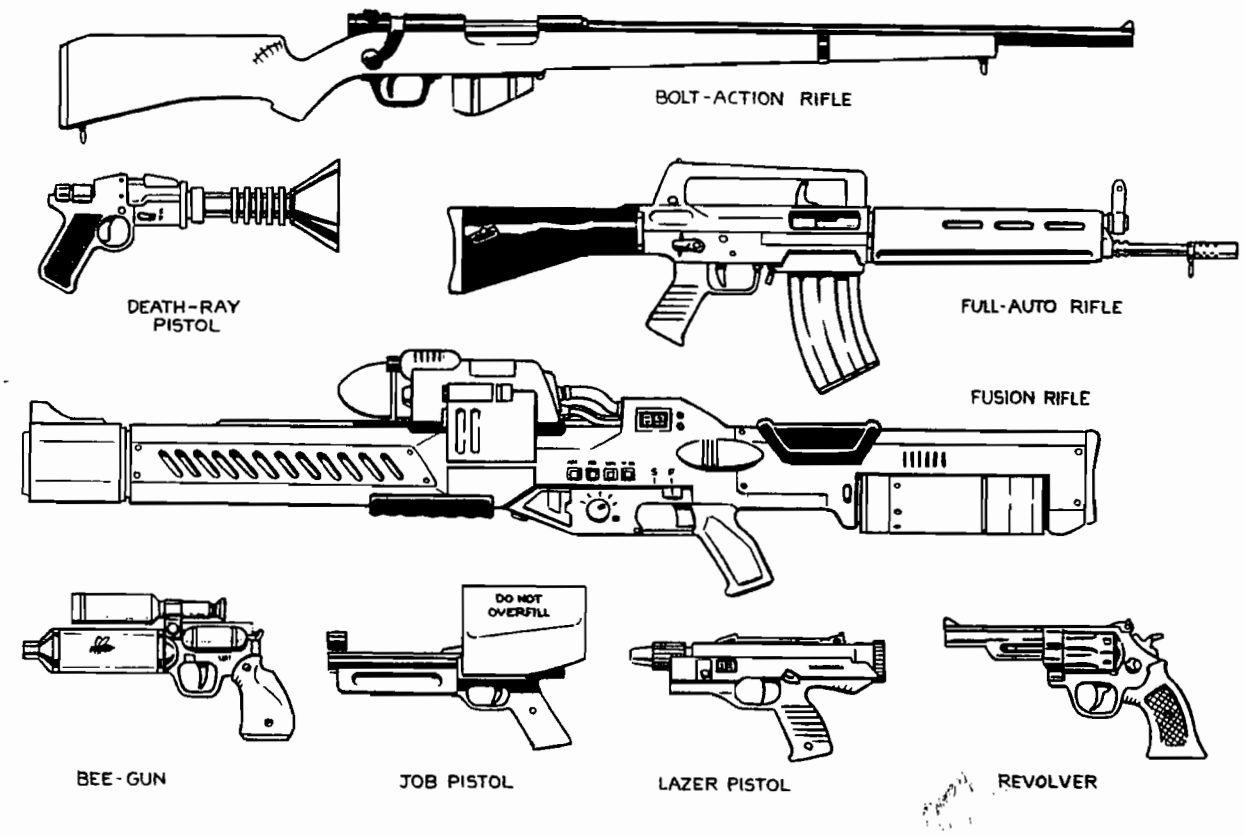
The lower the gravity the greater the effect that the gravruptor gun has on its target. The range effects are doubled in 1/2 gravity situations and quadrupled in 1/4 gravity situations. For instance a target would be knocked back 1 hex per 3 hit points of damage in 1/2 gravity.

The gravruptor gun is designed for zero gravity combat. It has no recoil to cause the firer any spin problems, and sends those targets that it hits flying off into space. A successful to hit roll will still inflict damage for accelerating the target, and the target will then fly away at 1 h/u per 2 hit points of damage. Thus a hit that inflicts 20 hit points of damage would send the target racing off into space at an uncontrolled movement rate of 10 h/u.

The gravruptor gun is also known as an accelerator rifle, or a gravgun. A malfunction with this weapon will result in a gravitational anomaly in the firing hex.

Table 46.5: Effects of Gravrupter

DIE ROLL(d6)	DIRECTION OF BLAST	EXTRA EFFECTS
1	With gravity	Auto knockdown, 1 unit per gravity
2-5	Perpendicular	Auto knockback, one hex per 6 hit points damage
6	Against gravity	Fly up one hex per 12 hit points of damage



26) Job pistol

TYPE/RANGE: C/25 hexes, -100
DAMAGE: Special
ACCURACY: -30
AMMO/MALFUNCTION: Special/30
WATE/AMMO: 1.0 kg
EXPS/VALUE: 400/4500 (Batteries)

The "Jack of all bullets" (hence JOB) pistol is capable of propelling almost any solid material as a projectile attack. The job pistol employs a combination gauss, spring and vacuum chamber mechanism. To inflict damage this gun must be loaded with between 400 and 600 grams of materials. This random garbage (sand, rocks, plastic, batteries, or bullets) will do 1-20 hit points of damage if a hit is scored. One battery set can hurl about 5 kg of junk (this is about 10 shots).

This weapon is not a grenade launcher. Grenade launchers arm, and fire, a grenade. Pre-arming and then firing grenades inside a job pistol can result in accidental detonation. A malfunction with this weapon indicates that garbage is jammed in the firing mechanism.

27) Job rifle

TYPE/RANGE: C/100 hexes, -75
DAMAGE: Special
ACCURACY: +25
AMMO/MALFUNCTION: Special/20
WATE/AMMO: 4.0 kg
EXPS/VALUE: 500/17500 (Batteries)

The "Jack of all bullets" rifle must be loaded with between 800 and 1200 grams of solid material. This material will inflict 3 to 30 hit points of damage, if it scores a hit. The job rifle is good for about 10 kg of junk. This converts to approximately 10 shots. In all other respects this gun is identical to the job pistol.

28) Lazer pistol

TYPE/RANGE: C/80 hexes, -50
DAMAGE: 4-40, 3-30, 2-20, 2-16, 1-10
ACCURACY: +60
AMMO/MALFUNCTION: 10/5
WATE/AMMO: 1.3 kg, 1.15 kg, 1.0 kg
EXPS/VALUE: 400/1500 (Batteries)

This is your everyday, run of the mill, one shot per unit coherent light energy weapon. The lazer pistol is also called a phaser or blaster. It will have the classic pinging, zapping or crackling noise. The lazer pistol has a kick back from ionized gasses that blow out of the emission chamber. A malfunction indicates the loss of a charge. This weapon is related to gun #30, lazer rifle. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

29) Lazer rifle

TYPE/RANGE: C/150 hexes, -40
DAMAGE: 5-50, 4-40, 3-30, 2-20, 2-16
ACCURACY: +100
AMMO/MALFUNCTION: 15/20
WATE/AMMO: 3.7 kg, 3.6 kg, 3.5 kg
EXPS/VALUE: 500/6000 (Batteries)

Except for the above alterations, a lazer rifle operates the same as gun #28, lazer pistol.

30) Napalm gun

TYPE/RANGE: C/15 hexes, -250
DAMAGE: 10-100
ACCURACY: -100
AMMO/MALFUNCTION: 5/25
WATE/AMMO: 4.5 kg/300 gm shell
EXPS/VALUE: 900/12000 (200)

The napalm gun ejects a jet of flaming adhesive chemicals. The jet from the gun is covers a 19 by 1 hex area of effect. The area of effect is a straight line, and cannot be swept over an arc. Everything caught inside the one hex wide path will take 10-100 hit points of damage. All objects capable of burning have a chance of bursting into flames. The percentage chance of immolating is equal to the damage rolled. If a target were to take 64 hit points in damage, it would have a 64% chance of bursting into flames. Targets that are set alight will burn for 1 to 10 units. Each unit of burning will inflict an additional 2 to 20 hit points of damage. This weapon is also labelled the torch, a bic, flame thrower, or a cig weaver. Usually, a malfunction indicates a mechanism jam, but occasionally it may cause the flame thrower to explode.

31) Needler

TYPE/RANGE: E/30 hexes, -85
DAMAGE: 3-18
ACCURACY: -25
AMMO/MALFUNCTION: 10/2
WATE/AMMO: 0.7 kg/100 gm
EXPS/VALUE: 300/300 (special)

A needler is a silent gauss pistol that launches bunches of very sharp needles at high velocities. The needles can be coated in a variety of quick release poisons. If a hit is scored, a save versus poison must be made by the target, or the poison will have its effect. The poisons will only have an effect on organic targets. The poison effect is determined on Table 46.6, *Needler Effects*. The needler is the weapon most often used used by peace officers.

The effect of a needler attack is instantaneous, and the effect of each attack is complete incapacitation. The poison effect will last for 1 to 4 minutes. If the target saves versus poison there will be no effect. The poison intensity must be rolled for every hit, this reflects the complexities of long range injections. Each cartridge is a self-contained unit, containing the needles, toxin and battery source. A malfunction results in a mechanism jam.

Table 46.6: Needler Effects

Die Roll	Poison Effect	Poison Intensity	Value of Cartridge
01-30	Paralysis	4-16	1000
31-75	Nausea	4-24	150
76-85	Unconsc.	2-20	200
86-99	Pharmac.	3-30	Pharmac. value
00	Other		

32) Plasma pistol

TYPE/RANGE: E/100 hexes, -25
DAMAGE: 4-32
ACCURACY: +50
AMMO/MALFUNCTION: 12/5
WATE/AMMO: 1.6 kg/Negligible
EXPS/VALUE: 500/9000 (3000 plus batteries)

The plasma pistol employs a miniscule fusion discharge to inflict damage. Each shot releases a tiny jumble of plasmoid molecules. A malfunction can result in 4 to 32 hit points of damage to the firer (ref's discretion). This is the holster sized version of gun #33, Plasma rifle.

33) Plasma rifle

TYPE/RANGE: F/160 hexes, -50
DAMAGE: 4-48
ACCURACY: 0
AMMO/MALFUNCTION: 15/8
WATE/AMMO: 4.0 kg/Negligible
EXPS/VALUE: 700/360000 (3000 plus batteries)

The plasma rifle employs a miniscule fusion discharge to inflict damage. Each shot releases a tiny jumble of plasmoid molecules. A malfunction can result in 4 to 32 hit points of damage to the firer (ref's discretion). This is the infantry sized version of gun #32, Plasma pistol.

34) Plastix pistol

TYPE/RANGE: E/35 hexes, -85
DAMAGE: 4-40, 4-30, 3-30, 3-24, 2-20
ACCURACY: 0
AMMO/MALFUNCTION: 10/10
WATE/AMMO: 1.2 kg, 1.4 kg, 0.9 kg/10% cylinder
EXPS/VALUE: 500/2000 (75)

A plastix pistol spits globs of molten plastix. This weapon was specifically designed for penetrating plastix armour. When attacking a target that is wearing plastix armour the opponent is considered unarmoured. Any hit scored on plastix armour, against an unprotected AR, will inflict double damage. The extra damage is taken from the melting plastix armour. The ammunition for this weapon is a solid cylindrical cartridge that contains both the plastix compound, and the energy to charge the gun. To employ the energy stored in the cartridge for something other than the plastic weapon, a 20 DD mechanic roll must be successful A malfunction with a plastix pistol indicates a mechanism jam.

35) Plastix rifle

TYPE/RANGE: E/120 hexes, -50
DAMAGE: 6-60, 6-40, 4-32, 3-30, 2-24
ACCURACY: +60
AMMO/MALFUNCTION: 20/12
WATE/AMMO: 4.2 kg, 4.0 kg, 3.8 kg/10% cylinder
EXPS/VALUE: 600/8500 (100)

Except for the above alterations in range, damage, and wate the plastix rifle functions identical to a plastix pistol (gun #35).

36) Protein disrupter

TYPE/RANGE: C/125 hexes, -60
DAMAGE: 5-60, 5-50, 4-40, 3-30, 3-24
ACCURACY: +150
AMMO/MALFUNCTION: 15/10
WATE/AMMO: 4.3 kg, 4.2 kg, 4.1 kg
EXPS/VALUE: 700/11000 (Batteries)

Hits from a protein disrupter instantly tears apart essential protein structures in organic molecules. The beam from the gun unravels collagen, melts bone, and liquifies flesh. Wounds from this weapon appear as a gory mush. Medical attention must be accompanied with a cauterizing ray (medical equipment #27), or a blood congealater (medical equipment #12), otherwise the veterinarian will suffer a +5DD penalty.

This weapon is specifically designed to be an anti-organic weapon. Inorganic objects (robots, walls, machines, Argellian rock women) are unaffected by the attack since the disrupting ray passes through them unimpeded. Walls, machines or robots that have organic components, although not considered "organic" can be affected by this attack. Inorganic armours have no effect on the attack of a protein disrupter, and the target's AR is essentially 500. Note that the firer must still generate a to hit roll to ensure that a hit was made, and to check for a weapon malfunction. Malfunction with a protein disrupter will inflict 1 to 10 hit points to anything organic in the firing hex.

37) Radiation gun

TYPE/RANGE: E/150 hexes, -70
DAMAGE: Special
ACCURACY: 0
AMMO/MALFUNCTION: 15/25
WATE/AMMO: 3.76 kg/10 gm
EXPS/VALUE: 900/8500 (250 and batteries)

This gun fires beams of lethal radiation. Whenever a target is hit, it must save vs. intensity 3 to 24 (3d8) radiation. The intensity of the radiation must be determined for every hit. This is also known as an x-ray gun, or a rad rifle. A malfunction with this gun will bathe a 3 hex radius with intensity 3 to 24 radiation for one to six units.

38) Revolver

TYPE/RANGE: C/80 hexes, -66
DAMAGE: 3-30, 2-20, 2-16, 2-12, 1-10
ACCURACY: 0
AMMO/MALFUNCTION: 5/5
WATE/AMMO: 1.25 kg, 1.0 kg, 0.75 kg/1.5%
EXPS/VALUE: 250/200 (1)

This is a pistol version of a bolt action rifle, gun #6. A malfunction indicates dud ammunition, and does not jam the gun. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

39) Semi-automatic Lazer pistol

TYPE/RANGE: C, D/70 hexes, -60
DAMAGE: 4-40, 3-30, 2-20, 2-16, 1-10
ACCURACY: +50
AMMO/MALFUNCTION: 15/6
WATE/AMMO: 1.8 kg, 1.6 kg, 1.4 kg
EXPS/VALUE: 500/2000 (Batteries)

A semi-automatic lazer pistol can fire once, or twice, a unit. This weapon is also called a blaster, or a sotto lazer pistol. Malfunctions with this gun indicate optic collator burnout. This weapon is the holster version of gun #40, Semi-automatic lazer rifle. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

40) Semi-automatic Lazer rifle

TYPE/RANGE: C, D, E/125 hexes, -50
DAMAGE: 5-50, 4-40, 3-30, 2-20, 2-16
ACCURACY: +90
AMMO/MALFUNCTION: 20/25
WATE/AMMO: 3.9 kg, 3.8 kg, 3.7 kg
EXPS/VALUE: 600/8000 (Batteries)

Except for the above differences, a sotto lazer rifle is the same as a sotto lazer pistol, gun #39.

41) Semi-automatic pistol

TYPE/RANGE: C, D/70 hexes, -60
DAMAGE: 3-30, 2-20, 2-16, 2-12, 1-10
ACCURACY: +40
AMMO/MALFUNCTION: 10/10
WATE/AMMO: 1.5 kg, 1.25 kg, 1.4 kg/1.5%
EXPS/VALUE: 300/750 (1)

A semi-automatic pistol can fire once, or twice, each unit. This weapon is also called a sotto pistol. When a sotto pistol malfunctions, it has a mechanism jam. The underlined damage is the most frequent damage range, and the other listed damages are for higher and lower calibers of this weapon type.

42) Semi-automatic rifle

TYPE/RANGE: C, D, E/110 hexes, -44
DAMAGE: 4-48, 3-36, 3-30, 3-24, 2-20
ACCURACY: +60
AMMO/MALFUNCTION: 25/20
WATE/AMMO: 3.8 kg, 3.4 kg, 3.0 kg/1.5%
EXPS/VALUE: 600/2800 (1)

Except for the above alterations in wate damage and range, this gun is identical to a semi-automatic pistol, gun #41.

43) Slug-thrower

TYPE/RANGE: C, D/40 hexes, -50
DAMAGE: 3-18
ACCURACY: 0
AMMO/MALFUNCTION: 20/3
WATE/AMMO: 250 gm/90 gm
EXPS/VALUE: 300/250 (50)

The slug thrower is a quiet, but not silent, spring fed weapon. The self-contained cartridge has an energy supply, and all the slugs needed for an ammunition set. A malfunction indicates a mechanism jam.

44) Sonic pistol

TYPE/RANGE: D/40 hexes, -211
DAMAGE: 4-32, 3-24, 2-16, 1-8, special
ACCURACY: -50
AMMO/MALFUNCTION: 12/35
WATE/AMMO: 1.3 kg
EXPS/VALUE: 630/2000 (Batteries)

The sonic pistol inflicts damage by delivering its energy along low frequency sound waves. There are a variety of attacks that the firer can choose from. The attack options are listed on Table 46.7, *Sonic Pistols*. She can choose from several sonic blast attacks of varying levels. The more powerful the attack the greater the drain on her batteries. There is also a setting that does little damage, but deafens acoustic sensors. The sonic pistol is not an area of effect weapon, and single targets must be chosen by the firer.

The damaging attacks have no deafening or area of effect attack. They simple vibrate the target with sound to inflict their damage. The special deafening attack will disable organic audio sensors for 1 to 10 hours, and inorganic ones must await repair. The audio sensor gets a save versus poison of intensity 4 to 32. A malfunction will result in a medium powered blast (2-16 hit points of damage) to all within a 3 hex radius.

Table 46.7: Sonic Pistols

PISTOL SETTING	CHARGE DRAIN	SETTING EFFECT
Ex hi-powered	3	Damage, 4-32
Hi-powered	2	Damage, 3-24
Med-Powered	1	Damage, 2-16
Lo-powered	1/2	Damage, 1-8
Special	1	Deafens

45) Sonic rifle

TYPE/RANGE: E/80 hexes, -211
DAMAGE: 5-40, 4-32, 3-24, 2-16, special
ACCURACY: -50
AMMO/MALFUNCTION: 20/40
WATE/AMMO: 3.8 kg
EXPS/VALUE: 675/8000 (Batteries)

The sonic rifle is functions on the same principles as the sonic pistol only it has a more powerful attack.

The damaging attacks have no deafening or area of effect attack. They simple vibrate the target with sound to inflict their damage. The special deafening attack will shut down organic audio sensors for 1 to 10 hours, and inorganic ones must await repair. The audio sensor gets a save versus poison of intensity 4 to 40. A malfunction will result in a medium powered blast (3 to 24 hit points of damage) to all within a 3 hex radius.

Table 46.8: Sonic Rifle

RIFLE SETTING	CHARGE DRAIN	SETTING EFFECT
Ex hi-powered	3	Damage, 5-40
Hi-powered	2	Damage, 4-32
Med-Powered	1	Damage, 3-24
Lo-powered	1/2	Damage, 2-16
Special	1	Deafens

46) Stun pistol

TYPE/RANGE: D/80 hexes, -80
DAMAGE: Stun
ACCURACY: +80
AMMO/MALFUNCTION: 10/5
WATE/AMMO: 1.4 kg
EXPS/VALUE: 500/1500 (Batteries)

A stun pistol can override the central nervous system of organic targets shutting down essential motor centers and leaving the target semi-conscious. As nasty as this sounds the stun pistol is the weapon of pacifists, disabling targets without harm. If a hit is scored the target must save vs. intensity 2 to 16 (2d8) poison, or collapse stunned. A stunned target will remain stunned for 3-30 units. Another name for a stun pistol is stunner. A malfunction with this weapon results in the loss of a charge.

47) Stun rifle

TYPE/RANGE: D/130 hexes, -35
DAMAGE: Stun
ACCURACY: +170
AMMO/MALFUNCTION: 15/5
WATE/AMMO: 3.95 kg
EXPS/VALUE: 700/6000 (Batteries)

A stun rifle can override the central nervous system of an organic target in the same fashion as a stun pistol, gun #46. When a hit is scored the target must save vs intensity 4 to 24 poison, or collapse stunned. A target stunned with a stun rifle will remain stunned for 1-6 minutes (30 units per minute).

48) Variable Lazer pistol

TYPE/RANGE: C/180 hexes, -80
DAMAGE: 4-40, 4-32, 3-30, Stun, Light
ACCURACY: 0
AMMO/MALFUNCTION: 10/20
WATE/AMMO: 1.5 kg
EXPS/VALUE: 700/9000 (Batteries)

This is a multi setting lazer pistol, where the persona using it can adjust the power level of the killing attack or select from two non-lethal settings. A dial sets the variable lazer to any of the listed functions. It occupies no time to switch from one setting to the next, although an initiative roll may be required to use the weapon before another persona.

Table 46.9: Variable Lazer Pistol

PISTOL SETTING	CHARGE DRAIN	SETTING EFFECT
Ex hi-powered	3	Damage, 4-40
Hi-powered	2	Damage, 4-32
Med-Powered	1	Damage, 3-30
Stun	1	Intensity, 2-16
Flashlight	1	Per hour of use

The stun attack is intensity 1 to 10, and the persona must save versus poison or be stunned for 3 to 30 units. For more information about stun attacks refer to gun #46, stun pistol. The lazer flashlight will cast a one hex wide beam up to 50 hexes away. Note that this weapon does not always appear as a pistol, and is commonly disguised as a flashlight. A malfunction will result in complete battery drain.

49) Variable Lazer Rifle

TYPE/RANGE: D/130 hexes, -80
DAMAGE: 8-64, 8-48, 6-36, Stun, Light
ACCURACY: 0
AMMO/MALFUNCTION: 12/20
WATE/AMMO: 4.1 kg
EXPS/VALUE: 780/36000 (Batteries)

This is a multi-setting lazer rifle. The persona can adjust the power level of the rifle's killing attack, or she can select from two non-lethal settings. The VLR does not always appear as a rifle, and can be disguised as a very powerful searchlight. The various settings can be chosen by presetting a dial. It occupies no time to switch from one setting to the next, although an initiative roll may be required to use the weapon before another persona.

Table 46.9: Variable Lazer Rifle

RIFLE SETTING	CHARGE DRAIN	SETTING EFFECT
Ex hi-powered	3	Damage, 8-64
Hi-powered	2	Damage, 8-48
Med-Powered	1	Damage, 6-36
Stun	1	Intensity, 3-34
Flashlight	1	Per hour of use

The stun setting has an intensity of 1 to 12. If the target does not save versus poison attack she will be stunned for 4 to 40 units. For more information about stunning refer to gun #47, stun rifle. The lazer flashlight can cast a two hex wide beam 100 hexes.

50) Water gun

TYPE/RANGE: C/50 hexes, -190
DAMAGE: 3-18
ACCURACY: 0
AMMO/MALFUNCTION: 10/10
WATE/AMMO: 0.75
EXPS/VALUE: 500/750 (Batteries)

A watergun synthesizes and then lethally propels droplets of water. This gun has no water storage, and it requires at least 5% atmospheric humidity to synthesize water droplets. If the relative humidity is not substantial another water source must be found. This gun is totally waterproof, but it will not function underwater. This weapon is also called a squirt gun. A malfunction indicates a malformed water droplet and the loss of a charge.

51) Ref's Own Table

TYPE/RANGE: Varies/Varies
DAMAGE: Varies
ACCURACY: Varies
AMMO/MALFUNCTION: Varies/Varies
WATE/AMMO: Varies/Varies
EXPS/VALUE: Varies/Varies

The ref's own table is for all those weapons that the players and the referee have thought up, and would like to have in their campaign. The ref should use the given outline for guns that she is going to use in this game to avoid undesirable complications when she plays. The referee should consider, beyond the basic format, what happens when it malfunctions, what are the gun's limitations, and what is the reason for introducing it into the game. Most of all a new gun should be fun.

IIII

Chapter 47
Medical Equipment

Medical equipment is designed to repair organic machines. Each piece of medical equipment performs its own private miracle, but nothing does everything, and some things do nothing. Even though the equipment is highly advanced, the equipment still requires some input from so-called professionals.

Veterinarians are the primary users of medical artifacts, most artifacts merely require a single vet to point the device correctly, while other devices need whole research teams. Biologists can find some use for the principals of some medical equipment, and can use them to the benefit of their PT rolls. Hopefully, medical equipment will not only be used to repair the wounded from battle, but to heal the sick, aid the needy, and other humanitarian efforts (ha!). The statistics of medical equipment are detailed in the following paragraphs.

Duration

Duration is the amount of use that can be had from a piece of medical equipment before it must be discarded, or its batteries replaced.

If the duration only has a certain number of uses like "One use", or "50 uses", then the device is depleted when that number of uses is reached. Many devices only require a charged set of batteries, but other devices are either disposable, or require replacement materials.

Devices that have a time length like "500 units", or "25 hours" can operate for that length of time before their batteries are depleted. Other durations of the same ilk list wates like "500 kg". This means that the device can process 500 kg of flesh, or materials, before the batteries must be replaced.

The last duration type is "power source". This means that the artifact requires so much power that it must be attached to an industrial power source, like a nuclear generator, or a hydroelectric power plant. It is not uncommon for these artifacts to require a cooling down period, or even a maintenance, between uses.

Wate

The wate of medical equipment is the functional wate of the toy excluding batteries. For some equipment the wate after tech level adjustment is an indicator of how difficult the machine is to use.



EXPS/Value

EXPS: The experience point value is awarded to the persona who correctly identifies the device, or is successfully treated with the artifact and then identifies it. Enormous experience point awards are supposed to be granted to entire expeditions, or research teams, not individual personas.

Value: This is the electrum piece value of the device in a regular market, certain devices may be invaluable if a wealthy enough persona's health is on the line.

Combining Equipment

A veterinarians gather medical equipment their proficiency as physicians will increase greatly. In fact with enough medical equipment a low level veterinarian could perform the most amazing of miracles. Because of this some referees will want to limit the amount of equipment that he persona will be able to use at once. This is entirely the preference of the referee.

A vet could be limited to using 2 pieces of medical equipment per experience level. If additional pieces are desired then the persona must make a successful PT roll to include them. Research teams can greatly assist her because each persona can control several artifacts yet all the players rolling will earn PT roll bonuses.

Table 47.1: Medical Equipment

DIE ROLL	MEDICAL ITEM	DIE ROLL	MEDICAL ITEM
01-03	1. Age Determiner	46-47	25. Fever Control Blanket
04-05	2. Anesthetics Mask	48	26. Incubator
06-07	3. Anti-cancer Beam	49-50	27. Injury Detector
08-09	4. Anti-mutation Beam	51-52	28. Internal Viewer
10-11	5. Anti-virus Beam	53	29. Life Ray
12-13	6. Automatic Tourniquet	54-56	30. Limb Capper
14-15	7. Bandage Box	57-62	31. Medi-kit
16	8. Biorganic Attachments	63-65	32. Medi-wraps
17	9. Biorganic Replacements	66-70	33. Medical Kit
18	10. Blind Goggles	71-73	34. Metab Counter
19-20	11. Blood Clot Disrupter	74-75	35. Mood Ball
21-22	12. Blood Congealator	76-78	36. Mutation Detector
23-24	13. Bone Setter	79	37. Neuro Cap
25-27	14. Breath Ball	80-82	38. Poison Detector
28-29	15. Cardio Vest	83	39. Poison Box
30	16. Cerebro Converter	84	40. Psionic Box
31	17. Cloning Equipment	85-87	41. Race Determiner
32-33	18. Coma Control Unit	88	42. Rejuv Chamber
34-35	19. Comfy Couch	89-90	43. Respirator
36-38	20. Consciousness Headband	91-92	44. Scalpel
39-40	21. Cauterizing Ray	93-96	45. Stasis Bag
41	22. Deaf Head Phones	97	46. Touch Gloves
42	23. Drug Box	98-99	47. Translinker
43-45	24. Eye Cleansers	00	48. Ref's Own Table

1) Age Determiner

DURATION: 5 years
WATE: 1 kg
EXPS/VALUE: 200/5000

This little black box constantly gives the chronological age of all higher organic creatures within a three hex range. The device can be adjusted to determine the age of microbes and other organic life forms. The age determiner can be used to help detect a disguise, notice a time space aberration, or assist in any research that requires tissue growth or culture maintenance. There is a bonus of +7 offered for any age related, or growth related PT rolls. One set of batteries lasts for about five years.

2) Anesthetics Mask

DURATION: 300 Minutes
WATE: 1.2 kg
EXPS/VALUE: 10/6000

An anesthetics mask looks like a gas mask with various dials and indicators. The mask will render any organic mammal unconscious for the time set on the mask. This is a pain free state similar to being maintained under general anesthetic, however no pharmacological agents are employed. It is virtually impossible to subject an unwilling patient to the anesthetics mask. Once employed there is absolutely no saving throw granted.

The mask should not be prematurely removed from the subject. If the creature is not returned to consciousness by the mask, there is a 2% chance that unconsciousness will persist for 1-100 days. The mask can only anesthetize one creature at a time. The mask will offer a +20 bonus to any PT roll that requires a stable unconscious patient. One set of batteries will anesthetize for a total of 300 minutes (5 hours).

3) Anti-Aging Beam

DURATION: 25 years
WATE: 15 kg
EXPS/VALUE: 1000/1500000

This machine bastes the creature with information encoded energy that has a chance of reprogramming aging cells in the body. The subject must lie in the 1 meter x 2 meter treatment rectangle one hour a day for three consecutive days. The player must make a successful recovery roll to have her persona receive the effects of this device. The beam can eliminate any unnatural aging that the persona has been subject to. For instance, aging due to chrono attack weapons, or special drive accidents could be healed by the anti-aging beam.

The effect of the beam is to reduce the cellular age of the persona by 3 to 30 years per treatment. The de-aging of the body's cells will not heal any lost attributes, but it will reduce the persona's age. For instance if a persona were 52 years of age and she had suffered PSTR and DEX penalties for aging she could decrease her age by 3 to 30 years, but this would not restore her lost attribute points. To restore lost attributes the persona must employ a rejuv chamber, medical equipment #42. The value of the anti-aging treatment is that she will require 3 to 30 more years of aging to reach the same attribute decay level again. See chapter 13, Health.

The amount of aging is always random, and can only be adjusted if a veterinarian makes a PT of 1 year adjustment per 2 DD. For a vet persona to reduce the amount of de-aging by 5 years would require a 10DD maneuver. If the persona should be aged below 1 year, she is dead. Since the amount of de-aging acquired by the cells is usually random then this device could easily kill a frequent user. The anti-aging beam could be used to age a target if a veterinarian were to adjust it accordingly (10 DD at least).

4) Anti-Mutation Beam

DURATION: 100 kg
WATE: 35 kg
EXPS/VALUE: 2000/200000

An anti-mutation beam (A.M.B.) can cause mutated cells (or groups of cells) to restructure themselves into their original biological forms. If the beam were pointed at a mutant with the physical mutation arms, the arms would fall off as the beam hit her. This would work the same for beneficial mutations also, antennae would shrivel up, and a symbiotic attachment would curl up and fall off. A mental mutation would simply stop working. Thus the anti-mutation beam is as much a defence against mutants, as it is a cure for defective mutations.

Not all mutations are obviously genetic anomalies, and some merely represent extreme variations of normality. If there is a dispute brewing over whether the anti-mutation beam is appropriate, or not, consult the Sphincter dice, as described in chapter 16, Special Rolls.

The beam will be effective if the mutant fails a poison attack against her physical mutations, and psionic attack against her mental mutations. The attack intensity of the A.M.B. is 2 to 12 plus one per level of veterinarian using the device. The total body wate of the patient is considered when treating for mutations, and the device can eliminate mutations from 100 kg of flesh per battery set. The beam has a 40 cm range, and its effect is instantaneous.

If a veterinarian wishes to only eliminate certain mutations she can cover parts of the mutant's body, and focus the beam. To avoid a specific mutation requires 3DD per physical mutation, and 10DD per mental mutation. If the vet wanted to eliminate a mutant's pus producing organ, while retaining her symbiotic attachment and pyrokinesis the vet would have to make a 13DD maneuver.

5) Anti-Virus Beam

DURATION: 200 units
WATE: 2.5 kg
EXPS/VALUE: 1000/100000

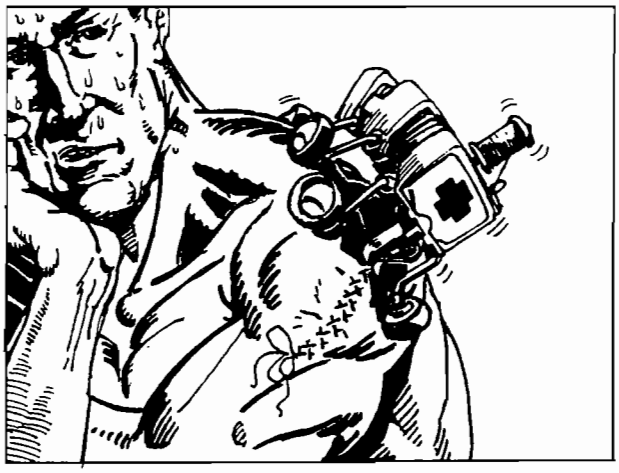
The hand held anti-virus beam will kill any foreign virus, bacteria, or organism that is found infiltrating an organic substance. The beam will not kill those organisms which are determined to be in a symbiotic relationship with the patient. This super-sterilizer has a range of 75 cm.

There is a larger version which weighs 10 times as much, is worth 125000, and is effective on all micro-organisms within a 2 hex radius of effect. The large sterilizer will be found 20% of the time. Both sizes have a battery life of 200 units. This artifact will give a veterinarian +10 on her PT roll when dealing with open wounds, and countering infections.

6) Automatic Tourniquet

DURATION: Unlimited
WATE: 1.5 kg
EXPS/VALUE: 250/750

An automatic tourniquet can be wrapped over or near any major source of blood loss. The tourniquet is more than just an automated constricting bandage, and it employs electrical impulses to constrict and dilate appropriate blood vessels. Once activated, the electric tourniquet will eliminate damaging effects caused by massive bloodloss. The tourniquet will function on a severely damaged limb, an internal bleed, or a head wound. If the tourniquet is improperly placed (e.g., around a creature's neck) safety mechanisms will ensure that it disconnects itself. The automatic tourniquet will not heal damage, but it will prevent further damage. The electric tourniquet will always function (no batteries necessary) if attached to a warm organic creature. Veterinarians earn +20 on any PT rolls that involve blood loss (surgery to severe trauma).



7) Bandage Box

DURATION: 75 Minutes
WATE: 5 kg
EXPS/VALUE: 500/1500

This medical device is more than just a collection of bandages and plasters. A bandage box will quickly crawl all over the patient's body and sew, or glue, together any open wounds that it finds. It will also sterilize and redress any old wounds. A bandage box will take 1-6 minutes to sew up a medium sized patient (anthropomorph sized). A battery set will provide power for 75 minutes of search-and-sew. A vet will earn a bonus of +15 on quick fix PT rolls when using a bandage box, and a bonus of +5 on any surgery PT rolls.

8) Biorganic Attachment

DURATION: One Use
WATE: Varies
EXPS/VALUE: 500/Varies

A biorganic attachment is a ready to affix limb. It may be from an organ donor bank, from some biological vat, or from a dissected clone, but either way the limb has been prepared for attachment to a host body. Once attached be biorganic attachment will become seamless with the persona. If the persona is strong the attachment will quickly grow in strength. If the persona is weak and sickly the attachment will quickly atrophy. A simple check on the sphincter dice, chapter 16 Special Rolls, will determine if the arm is the correct size or not.

Biorganic attachments are relatively easy for a veterinarian, or a biologist to attach. Requiring a 4DD maneuver for success. If the limb was intended for a different base race from the host then the PT roll increases to 8DD. There are several types of biorganic attachments, and these types are determined on Table 47.2, *Limb Type*, Table 47.3, *Attachment Type*, and Table 47.4, *Base Race of Limb*. Each biorganic attachment is described by a roll on each of those tables.

Table 47.2: Limb Type

DIE ROLL	LIMB TYPE
01-20	Left leg
21-40	Right leg
41-60	Left arm
61-80	Right arm
81-90	Wing
91-98	Tail
99-00	Other

Table 47.3: Limb Attachment

DIE ROLL	ATTACHMENT FORMAT	EXPS/VALUE
01-30	Basic Unit	750/50000
31-55	Size Exemption	850/75000
56-75	Race Exemption	1000/100000
76-85	Self-attaching	1500/10 times
86-98	Luxury Edition	1500/10 times
99-00	Other	

Table 47.4: Base Race of Limb

DIE ROLL	BASE RACE
01-02	Aquarian
03-11	Avarian
12-21	Canine
22-30	Equine
31-39	Feline
40-49	Florian
50-61	Human
62-70	Insectoid
71-79	Reptilian
80-89	Rodentia
90-99	Ursidea
00	Other (Bot, alien)

Basic Unit: All racial and hite restrictions apply, a failed PT roll will not affix the limb. The limb can be saved for later use on another persona if the attempt fails.

Size Exemption: As long as the persona is of the same race as the attachment, the attachment will adapt itself to the size of the wearer.

Race Exemption: The attachment may be fitted onto the limb of any anthropomorph of any size. The limb appears as a textureless mannequin limb. It will sprout hair, and change colour to match that of the persona it is attached to.

Self Attaching: This limb will be based on any of the above types. Whichever type it is will be worth 10 times the chosen type's value. For instance, a self attaching, race exempt biorganic attachment would be worth 1000000. The self attaching unit does not require any medical attention to be present, and can attach itself with 90% accuracy (a 90% chance of success).

Luxury Edition: This sausage-in-a-bag can attach itself regardless of race, or size, and may replace any external body part that is not an organ. A luxury edition biorganic attachment can replace fins, wings, noses, trunks, ears, eyelids, or external mutations. It requires no medical attention, and has a 99% chance of success.

9) Biorganic Replacement

DURATION: One use
WATE: less than 1 kg
EXPS/VALUE: 960/Varies

Biorganic replacements are ready to implant organs, tissues, or glands. They can be straight from tissue culture vats, harvested from clones, harvested from criminals, or cybernetically designed. The biorganic replacement can be used to enhance an existing system, or to replace an ailing one. The nature of each biorganic replacement is discussed in the following paragraphs, as is its value and attribute bonus.

For any biorganic attachment to work, the vet must properly implant it using surgery. This has base difficulty of 15DD. The process of biorganic replacement will take 1 to 6 hours, and the persona must be unconscious, yet alive, for the entire time. The referee is encouraged to modify the DD of this maneuver to each replacement type and the circumstances surrounding the operation.

For instance if a biorganic replace were being used to replace the sight of a blinded persona then the referee should ensure an almost certain chance for surgery success and tissue acceptance. If the replacement is being used for enhancement of fully functional eyes then the chance for success should be reduced.

If the biorganic replacements are being abused to build super personas then the referee should increase the chances of failure, and inflict some of her own side effects. For instance too many muscle grafts may result in tissue rejection that includes previous implants and some of the patient's original tissue, leaving her with a PSTR that is less than she began with.

The replacement must be of the correct race. The persona must fail a recovery roll on implantation, or the replacement will be rejected. The veterinarian can increase the patient's likelihood of failing her recovery, and increase the chance of the replacement being accepted by the host.

The replacement type is rolled on Table 47.5, *Type of Biorganic Replacement*, the base race is rolled on Table 47.6, *Base Race*.

Table 47.5: Type of Biorganic Replacement

DIE ROLL	BIORGANIC REPLACEMENT
01-07	Blood filters
08-14	Bone hardening
15-21	Brain tissue
22-28	Conductive tissue
29-35	Contractile tissue
36-42	Covering Encasement
43-49	Covering Hardening
50-56	Digestion
57-63	Heart, pump
64-70	Lung
71-77	Mental Mutation Insert
78-84	Physical Mutation Insert
85-89	Sensory, audio
90-95	Sensory, optical
96-97	Sensory, touch
98-99	Taste, smell
00	Other

Table 47.6: Base Race

DIE ROLL	BASE RACE
01-02	Aquarian
03-11	Avarian
12-21	Canine
22-30	Equine
31-39	Feline
40-49	Florian
50-61	Human
62-70	Insectoid
71-79	Reptilian
80-89	Rodentia
90-99	Ursidea
00	Other (Bot, alien)

Blood filters (150000): These will assist, or replace, the body's present organs for cleansing the blood. If the replacement is added to a persona with a fully functioning system she would improve her CON attribute by 10% (adjustment cannot be less than +1, nor greater than +2), and earn a bonus of +2 when making saving throws against poison attacks.

Bone hardening (100000): This persona's bones have been treated with microbiological cultures that will lay down a hardening laminate on all of her bones. This can only be done on those personas that are at least adult in age. When applied to normal strength bones, the persona will earn a HPS maximum bonus of 20%. Bone hardening cannot be over laid.

Brain tissue (1000000): This treatment involves the insertion of additional brain tissue which will give the patient improved mental capacity and memory retrieval. When installed in a fully functioning system she would improve her INT attribute by 10% (adjustment cannot be less than +1, nor greater than +2). There is a cumulative 15% chance per implant that something will go wrong. Initial implants will involve mild insanities, and later implants may involve severe insanities. If the persona is abusing brain tissue implants she may find herself competing with other thinkspaces for control of her body.

Conductive tissue (500000): Conductive tissue involves the implantation tissue that grows alongside motor neurons producing wider, lower resistance neural pathways. These allow for faster reaction times and improved dexterity. When installed in a fully functioning nervous system the patient would improve her DEX attribute by 10% (adjustment cannot be less than +1, nor greater than +2). The implants will also offer an initiative roll bonus of +2. See chapter 22, Initiative for more information.

Contractile tissue (100000): Contractile tissue biorganic replacements are muscle tissue plus the necessary neural wiring to make the implants useful. The muscle can improve the patient's PSTR attribute by 10% (adjustment cannot be less than +1, nor greater than +2). For every 3

points of PSTR increase, representing several muscle grafts, the patient will suffer a -2 DEX penalty, as her fine motor system gets confused amidst the additional tissue.

Covering, Encasement (50000): This is an exatmo hardened body glove that is surgically integrated with the patient. Once she is permanently inserted into her new skin she will be unaffected by exatmo pressures, any airborne contact toxins, and her natural armour rating will be 550. The patient will also suffer a -5 CHA penalty and a -2 DEX penalty. All of the mutant's orifices can be voluntarily sealed, connected to air sources, or whatever.

Covering, Hardening (10000): A hardened skin covering involves the plating of the mutant's fat pads, Kevlar foam inserts, and shock absorbant head moldings. The persona suffers a CHA penalty of -2, but enjoys an improved armour rating of +80, and a 10% bonus on her HPS maximum. Covering hardening can only be done once.

Digestion (55000): This biorganic replacement can be used to place any malfunctioning organ associated with the digestive tract. This includes teeth, stomach, intestine, and related organs. If this system is inserted into a fully functioning patient it will allow her to chew on peculiar items, and consume them without gastric despair. This patient would earn a bonus of +5 on saves versus ingested poisons.

Heart, pump (200000): The vital juices pump replacement can replace an ailing heart, or it can be used to supercharge a fully functioning one. The additional heart tissue will improve the persona's CON by 10% (improvement cannot be less than +1, and cannot exceed +2).

Lung (200000): The additional respiratory tissue is not limited to lung, but can be gills for aquarians, or green leafy material for florians. The respiratory tissue will allow healthy individuals to improve their CON by 10% (improvement cannot be less than +1, and cannot exceed +2). They will also earn a bonus of +2 on saves versus respiratory poisons, and will be able hold their breath twice as long as normal.

Mental Mutation Insert (10000000): This is a very bizarre biorganic replacement indeed. The operation will insert a single mutation that is determined on the *Mental Mutation* table in chapter 58. It is not recommended to insert a defect at such great economic expense.

Physical Mutation Insert (5000000): A physical mutation attachment will be determined by the *Physical Mutation* table in chapter 59. Defects are not to be inserted unless the referee has some how justified the penalty as part of her ongoing campaign.

Sensory Audio (2000000): Audio biorganic replacements can be used to bypass damaged audio sensors, or to enhance undamaged ears. If the biorganic replacement is used to enhance the patient's hearing she will earn a bonus of 10% on her AWE attribute. This bonus cannot be less than +1 and cannot be greater than +2. Enhanced audio sensors will double the persona's chance to detect an ambush.

Sensory, optical (3000000): The optical biorganic replacement can be used to cure blindness, or it can be used to enhance a fully functional set of eyes. The patient's AWE will be increased by 10%, this bonus cannot be less than +1 and cannot be greater than +2.

Sensory, touch (2500000): The touch sensory system can be used to repair any defect in the patient's tactile senses. If the patient's touch sensors are fully intact this biorganic replacement can be used to enhance her DEX by 10%. The bonus cannot be less than +1, and not greater than +2. An enhanced tactile system will offer the patient +10 in any eye hand co-ordination PT rolls.

Taste, smell (100000): If the biorganic replacement is used to enhance the persona's normal sense of smell, it will offer a +10% bonus on her AWE, and this bonus cannot be less than +1 and no greater than +2. The persona can use this enhanced sense of smell to better detect ambushes. Her ambush detection ability will be doubled with this enhancement.

Other (Varies): The other biorganic replacement could be combinations of the above, like a sensory package, or it could be peculiar racial ability enhancers.

10) Blind Goggles

DURATION: 12 Months
WATE: 500 gm
EXPS/VALUE: 250/200000

Blind goggles will restore sight to any humanoid creatures that suffers visual impairment. The goggles can in no way enhance regular vision. This device can only restore sight up to a range of 1 hex per point of adjusted AWE (AWE plus level). This distance is halved in darkness. The goggles will only restore regular sight and cannot reproduce any special optical abilities the persona may have had. One battery set will operate for 12 months.

11) Blood Clot Disrupter

DURATION: 150 units
WATE: 2.0 kg
EXPS/VALUE: 1300/35000

This device can be used by any veterinarian to destroy build-ups of organic material that inhibit the flow of blood through normal channels. If the vet succeeds with this DD3 maneuver, clotting can be disrupted in any of the anthropomorph races.

Once the location of a clot is determined, it can be disrupted in 1-3 units. There is a standard, whole body 15-unit treatment that will eliminate 99% of malignant clots in the body. The blood clot disrupter will assist the any persona with a +10 PT roll bonus for any blood flow related activities.

If this device is being used as a weapon, it will have unpredictable effectiveness. Each attack will drain 30 units of battery power. The blood clot disrupter's maximum effective range is 2 hexes, and it attacks as a Type C weapon. The device will inflict 2 to 12 hit points in hemorrhage damage. After each attack there is a 1% chance per hit point of damage inflicted of the the target developing a major internal bleed. A major internal bleed will inflict 5 to 50 hit points in damage

12) Blood Congealator

DURATION: 1800 units
WATE: 1.7 kg
EXPS/VALUE: 800/25000

A Blood congealator causes the blood to thicken, to produce scabs, and control undesired blood flow. External bleeding, or blood drain, may be stopped, 95% of the time, within 1-10 units. Only a vet can use a Blood Congealator to control internal bleeding. To control internal bleeding is a DD3 maneuver with a blood congealater. When combatting blood loss the vet will earn +20 on her PT roll.

When this device is being used as a weapon, it has a 2 hex range and attacks as a type C weapon. If a hit is scored it will inflict 2 to 12 hit points of damage. Each attack will cost 200 units of battery drain. For each hit point of damage inflicted there is a 1% chance of target developing an embolism. An embolism will inflict 5 to 50 hit points in damage 1 to 4 days later. The damage inflicted cannot be healed by regeneration, or pharmaceuticals, unless the target is also treated with a Blood Clot Disrupter (#11), or anti-coagulants. The damage can be healed naturally by the target, but out of the accelerated healing will not function.

13) Bone Setter

DURATION: 90 minutes
WATE: 2.0 kg
EXPS/VALUE: 1500/3000

The Bone Setter can heal major bones or groups of bones of most conceivable ailments. Fractures, cavities, cancers, deformities, and bone-ligament damage may be magically repaired with this device. The Bone Setter has no effect on Florians or insectoids for obvious reasons. A treatment takes 1-10 minutes of a 90 minute battery charge. Bone repairing can account for 1 to 6 extra hit points of healing every week. This instrument will work 90% of the time. When using a bone setter the vet will earn a bonus of +10 on her PT roll when treating traumatic injuries.

14) Breath Ball

DURATION: One use
WATE: 1.5 gm
EXPS/VALUE: 700/1000

A Breath Ball is a chemical respiration doo-hickey that has two principal uses. The first use is when the ball is held in the mouth. In this state it will slowly dissolve, and produce 15 minutes of air for an anthropomorph. Sucking on a breath ball will help the persona avoid a malicious, or inhospitable, atmosphere.

The breath ball can also restore the breathing of a non-respiring anthropomorph. If forced into the stomach, the ball will proceed to induce muscular contractions that will imitate respiration for 10 minutes. During this time, it will repair any damage done by poisons to the lungs. The breath ball can counteract any poison of intensity less than the ball's Tech Level. Note that only poisoned lungs may be repaired (gases). The persona will regain normal respiration if she makes a successful damage system shock roll.

15) Cardio Vest

DURATION: 30 hours
WATE: 2.9 kg
EXPS/VALUE: 300/1200

This vest, worn over the torso (like most vests), will regulate and monitor a heart beat for an indefinite period. It can also restore a lost heart beat by using up 1 hour's battery supply. Any persona requiring massive heart stimulation such as this will lose consciousness, and must make a recovery roll for this procedure to work.

Once the heart has been resuscitated, it can be kept beating artificially by the vest for the duration of its battery supply. The persona will remain unconscious during artificial heart stimulation. When using a cardio vest a veterinarian has a +25 bonus when making resuscitation PT rolls. Note that a Cardio Vest cannot keep the brain alive unless the lungs are operating. The vest has 30 hours of battery supply.

16) Cerebro Converter

DURATION: Power source
WATE: 1000 kg
EXPS/VALUE: 10000/11300000000

A cerebro converter can analyze an organic storage device (like a brain), convert the information to electrical signals, and then reprogram another brain with the converted information. Both thinkspaces are permanently altered by the procedure. The medical significance of this device is profound, and it can be used to switch a thinkspace from one brain to another. This device has an insidious nature, and some of its uses include complete brainwashing, ultimate disguises, and thinkspace immortality.

Such maneuvers are not without risk. It must be emphasized that this is a very dangerous device for both the personas, and the referee. For the personas, there is a high chance of death, insanity, and mental loss. The users must be aware that the cerebro converter is indiscriminate, and all knowledge (family life, loves, hates, gossip) is transferred into the receiving brain. This can cause an infinity of problems, and if properly exploited by the referee can create an endless source of fun.

One example of a cerebro conversion could be transfer of the emotions, knowledge and mental strength of the the donor into the body of the receiver. This will leave the donor body a mind blanked husk, and will obliterate the receiver's thinkspace and personality. The donor would have the race, AWE, CHA, CON, DEX, INT, PSTR, and HPS max of the receiver, and the memories, personality, thinkspace, MSTR, class and experience level of the donor. Usually the transfer will be treated like a rusty skill which the persona can access for particular information, as opposed to having access to another brain. There is no possibility of partial knowledge transfer, unless combined with other equipment.

Any procedure failure, like a power failure, or a failed performance table roll will result in a side effect. The side effect is generated on Table 47.8,

Conversion Side Effect.

The higher the tech level of the cerebro converter, the more effective the device is. Higher tech level converters can carry out more complex conversions requiring less personnel present. Consult Table 47.7, *Cerebro Converter Tech* to determine the degree of difficulty of the maneuver. If the DD is very high then several veterinarians are required to work as a research team. The research team need not be composed solely of veterinarians as biologists may prove helpful also. See chapter 14, Performance Tables, for more information about research teams. Failure of this PT roll will result in failure of the procedure, and rolls must be made on the Cerebro Converter *Side Effect* table.

The *Cerebro Converter Tech* table also lists the maximum complexity of the maneuver that can be attempted by the research team. A low tech cerebro converter can only transpose the thinkspace of a patient into the body structure of a similar patient. As the tech level increases the PT roll will suffice for transfers from conscious to unconscious patients, and then from oxygenated brains to mechanical storage devices. The type of subjects that can be converted are listed in the Subject limitations column of the *Cerebro Converter Tech* table. The veterinarian in charge may attempt any maneuver she delights in, but the referee must increase the DD of the maneuver accordingly.

Even if the veterinarian makes a stunning PT roll there is still a chance that there will be unpreventable thinkspace confusion. The base chance for success of the cerebro conversion is the ratio between the receiver's INT and the donor's combined INT and MSTR. Even if this ratio is over 100%, there is still a 15% chance of side effects (less 1% per Tech Level of the cerebro converter).

If a thinkspace were being taken from a persona with a 12 INT and a 9 MSTR, and this thinkspace were being copied over the thinkspace of a persona with a 16 INT there would be a (16 / 21 =) 76% chance of the cerebro conversion being successful. Artificially preserved brains, and mechanical-electrical devices are considered to have an INT of 25, but no MSTR.

Chance for Conversion Success
(INT, receiver)/(INT+MSTR, donor)

If the process fails for any reason at all there is a 25% chance (less 1% per tech level), that the machine will suffer a breakdown. The severity of the breakdown is rolled on the *Extent of Damage* table in chapter 21, Equipment Damage. Regardless of maintenance problems, the cerebro converter must cool down for 1 hour per point of donor's INT before being used again.

Table 47.7: Cerebro Convertor Tech

Equipment Wate	Maneuv.	Subject Restrictions
>5 tonnes	40DD	live-live conscious/ same race
2.5-4.9 tonnes	30DD	live-live conscious
1-2.49 tonnes	25DD	live-live
700-999 kg	20DD	live-live/mech/brain
500-699 kg	15DD	live-live/mech/brain
400-499 kg	10DD	brain-live/mech/brain
<400 kg	8DD	mech-live/mech/brain

Failure on any of the several roads to failure such as, a failed PT roll, thinkspace rejection, or an unexpected mechanical breakdown will result in one roll on the *Conversion Side Effect* table. The result will apply to both of the thinkspaces involved. The referee may offer players additional saving throw against mental attack before applying the side effect, but this depends entirely on her mood and the nature of the campaign.

Many of the conversion side effects involve competition between the two thinkspaces involved in cerebro conversion. The state of the thinkspace is radically altered for conversion into the other brain, and this has a great equalizing effect on both thinkspaces. If there is a great discrepancy between the combating MSTRS then the referee must adjust them both so that there is a reasonable chance of success for either attacker. This can be most objectively done by averaging the two MSTRS.

Table 47.8: Conversion Side Effect

DIE ROLL	SIDE EFFECT
01-29	Insanity
30-59	Mind Blank
60-89	Dominance
90-99	Death
00	Other

Insanity: Both thinkspaces must make a saving throw versus psionic attack or become insane. First one thinkspace attacks the other thinkspace, and then the attack is reversed. If the attack is successful, refer to the Insanity Tables listed in chapter 11, Referee Personas. Machines and robots will use their intelligence against the psionic attack, and will suffer what ever insanity that is generated.

Mind Blank: This is another pair of psionic attacks that the two thinkspaces will automatically make against each other. Failure to save will cause result in the storage system to be blanked. This can apply to any storage format attached to the cerebro converter, whether biological or mechanical. All data banks, levels of experience, memories, skills, etc. will be wiped clean from a brain that has been blanked.

Dominance: Dominance is confusing and left to the improvisational talents of the referee. The receiver could be dominated by the donor's transplanted mind, or vice versa. It is as if one thinkspace has been copied into the other, without erasing the preceding one. The more intelligent brain will usually manage to preserve itself. If the thinkspaces are of equal intelligence, the minds may be switched. Don't omit the possibility that a organic creature may become a robot if her thinkspace is dominated by a machine.

Death: The personas inflict mental attacks on each other. A successful attack will result in a combination mind blank-death attack. If the persona is killed, and then resuscitated, she must start life with a blanked mind. Note that the mental attack effects are simultaneous, and rare.

17) Cloning Equipment

DURATION: Power source
WATE: 2500 kg
EXPS/VALUE: 25000/500000000

Cloning Equipment can rapidly reproduce any life form if it is given a fraction of the original life form to work from. The clone will be a verbatim cellular construct, but it will lack the personality, intelligence and knowledge of the body that it has been formed from. The clone will have all the cellular maturity, but it will lack the life experience that the original organic creature had gathered over the years. The clone will, however, have all the physiological attributes of its sample.

The clone is nothing more than a mobile statue made from the same meats and ligaments as the sample. The clone cannot speak a language, and must be run as a referee persona. The sample donor has no control over the clone. If the veterinarians creating the clone wish to impart knowledge onto their creation they must use a cerebro converter, medical equipment #16.

The more advanced the cloning equipment is the less of a sample that is needed to synthesize the clone. A low tech cloning machine needs to have a whole body present for the entire process, which can be many hours. A very high tech cloning machine needs only to have a small sample of the organism present to create the clone. The sample must be present for the entire cloning process. There is some damage done to the sample as little bits of it are snipped off and homogenized to have their genetic components analyzed. The type of sample needed and the damage done to it is determined on Table 47.9, *Cloning Equipment*.

The DD of using a cloning machine is exceptionally high in an effort to assure that more than one veterinarian is operating the device at one time. A research team must usually be formed to successfully clone an organism. The cloning machine requires at least one veterinarian present, but a research team operating this device could be composed of vets and biologists. If the PT roll is unsuccessful, the cloning attempt automatically

fails.

Even a properly executed cloning still has a chance of failure. The chance of a successful cloning depends on how long the research team waits for the brew to be finished. The initial conception and gestation takes one hour. The clone ages one year for every following hour. If the clone is removed before the sample's age is reached, the ratio (hours/years of sample) is the percentage chance for success. If the research team were cloning an organism that is 40 years of age, and they left the clone in the brewing tank for a total of 30 hours there would be a 75% chance of success.

If the cloning process fails the either because of an unsuccessful PT roll, or because the clone didn't brew long enough the consequences are up to the referee. Most often the clone will fail catastrophically, resembling nothing more than a jumbling blob of bones, tubes, organs and rumpled skin.

If the process fails there is a 25% chance (less 1% per tech level), that the machine will suffer a breakdown. The severity of the breakdown is rolled on the *Extent of Damage* table in chapter 21 of the rule book. Regardless of maintenance problems, the cloning equipment must cool down for 2 hours per hour of use before being used again.

Table 47.9: Cloning Equipment

Wate of Equipment	DD	Minimum Sample/ Damage Inflicted
6000 kg	25	Whole body/2-12 hit points damage, and a 5% chance to drown
3000-5999 kg	20	Live body/1-4 hit points damage
2000-2999 kg	15	Live samples: skin, blood, bone/Sample destroyed
1500-1999 kg	10	Dead/live samples: blood, skin/Sample destroyed
750-1499 kg	5	Sample of skin, bone, blood/Sample destroyed
<750 kg	3	Sample of anything/ Sample destroyed

18) Coma Control Unit

DURATION: 25 days
WATE: 5 kg
EXPS/VALUE: 500/7000

A Coma Control Box will regulate an unconscious persona's healing processes. A comatose persona is one whose hit point total is less than zero. This device ensures that the persona will not lose hit points. The persona cannot be moved once attached to this device. The coma control unit cannot halt the effects of poisons or pharmaceuticals. Damage inflicted while the box is attached is still inflicted, and the coma control unit can do nothing to prevent it. The coma control unit can only regulate, and cannot intervene or heal. A battery set will last 25 days. This device must be attached by a biologist, mechanic, or veterinarian. This unit offers a +20 bonus on a vet's PT roll when she is working with comatose patients.

19) Comfy Couch

DURATION: 15 days
WATE: +70 kg
EXPS/VALUE: +700/+5000

A comfy couch is a stretcher that keeps the patient(s) hovering above its surface by anti-grav. The stretcher itself hovers above the ground, and can be pulled around without any effect on the carrier's wate allowance. It can support up to 250kg (less the wate of extra devices). Unless diverted, the stretcher will continue to hover along at 1 h/u in the direction it was originally started in. One set of batteries will run the stretcher for 15 days.

Every couch gets 0-3 (d4-1) additional medical devices built in. These operate on their own battery sets and increase the statistics of the couch accordingly. See the Comfy Couch Equipment Table for a list of additional built-in goodies. The comfy couch's extra items will automatically jump into action when an injured persona is placed in the couch. The couch will offer an award of +10 for the vet when she is making PT rolls for maneuvers which require a stabilized patient.

Table 47.10: Comfy Couch Equipment

DIE ROLL	COMFY COUCH ACCESSORY
01-07	15. Cardio vest
08-14	18. Coma control unit
15-21	20. Consciousness headband
22-28	25. Fever control blanket
29-35	27. Injury detector
36-42	31. Medi-kits
43-49	32. Medi-wraps
50-56	33. Medical box
57-63	34. Medical kits
64-70	35. Metab counter
71-77	38. Poison detector
78-84	43. Respirator
85-97	45. Stasis bag
98-00	48. Ref's Own Table

20) Consciousness Headband

DURATION: 20 uses
WATE: 200 gm
EXPS/VALUE: 200/50000

When wrapped around the head of a anthropomorph, this device can instantly restore consciousness. It is integrated with the wearer's nervous system, and will jump start it if it appears to be failing. The headband can be worn constantly to prevent loss of consciousness from poisons, shock, physical damage, or mental attacks. If consciousness is to be maintained the player must make a successful recovery roll for her persona. Regardless of the persona's physical state she will have no less than a 10% chance of making her recovery roll. The consciousness head band will require one use per extra recovery roll that the persona needs to remain conscious. Each use will inflict 0-3 hit points of electrical damage to the persona. One battery set is good for twenty recoveries.

21) Cauterizing Ray

DURATION: 20 units
WATE: 3 kg
EXPS/VALUE: 1002/220000

This device is normally used to heal the stumps of amputated digits or limbs. The ray sterilizes and arrests blood loss in one unit. The ray can be used by a veterinarian in cases of severe trauma to increase her PT roll by +20.

When wielded as a weapon, the cauterizing ray attacks as a type C weapon. The ray has a 1 hex range and inflicts 4 to 24 hit points of damage. Each attack counts as 8 units of battery drain. The damage inflicted only effects organic creatures, and cannot be regenerated.

For instance a hit with this weapon inflicting 16 hit points would reduce the target's hit points maximum by 16. The referee should only use this as a weapon against player personas in extreme situations. Only a Rejuv Chamber (#42) can return the persona to her original hit points maximum. No pharmaceuticals, mutations, or other gadgets will restore the decreased HPS max. A battery set will last for 20 units.

22) Deaf Head Phones

DURATION: Requires sound
WATE: 1.2 kg
EXPS/VALUE: 275/90000

These head phones allow any hearing impaired persona to hear normally. If hearing is normally unimpaired, a bonus of +2 is given on the persona's AWE. This equipment is waterproof, but will not function in water, or any other liquid. No batteries are required, but the deaf head phones will not operate in silence. Sonic attacks will shut off the head phones for one turn, after delivering full damage to hearing impaired personas, and double damage to personas using the head phones for acoustic enhancement.

23) Drug Box

DURATION: 1000 minutes
WATE: 10 kg;35 kg
EXPS/VALUE: 250/50000;900/900000

There are two versions of the drug box. The smaller (10 kg) of the two is a drug analyzer. The larger version (35 kg) is a drug synthesizer. A drug box will be a drug analyzer 75% of the time. The referee may let the player roll this, or she could choose whichever device is more appropriate for her campaign.

Both boxes have 1000 turns of energy in a battery set. An analysis takes 6-60 turns, and a synthesis takes 60-480 turns (1-8 hours). The check for success is rolled at the end of this period. So the persona must wait until the machine is finished before knowing what has happened.

Drug Analyzer: The drug analyzer is the smaller version of the Drug Box. It also has a lesser EXPS award (250), and a lesser value (50000) than its partner. The analyzer will analyze a pharmaceutical, and return all sorts of necessary data about it. A veterinarian using a drug analyzer will earn a bonus of +50 when making pharmaceutical related PT rolls. The following information may be obtained by the machine:

Categories of Drug Analysis
1) Pharmaceutical type
2) Effects
3) Duration
4) Side effects
5) Value

The machine prefers a full dose of the pharmaceutical to use for study; this will double its chances for successful analysis. The normal process may consume a small portion of the dose, however this should not affect the performance of the pharmaceutical. The percentage chance for success is equal to the tech level of the drug box, divided by the tech level of the drug plus a random value of 1 to 6. This value can never be higher than 80%.

Chance for Analysis Success
Tech Level Box / (Tech Level Drug + d6)
Cannot be higher than 80%

The chance for successful analysis must be rolled for each of the five separate categories of pharmaceutical information that can be acquired. For example the analyzer may determine possible side effects for a pharmaceutical, but not determine its value or type.

Drug Synthesizer: In addition to determining all of the above information, the drug synthesizer is capable of recreating the drug that it has analyzed. The second version of the Drug Box has a larger EXPS award (900), and is worth considerably more (900000). A veterinarian will receive a bonus of +75 on her PT roll when attempting to synthesize a pharmaceutical with this machine.

To synthesize an analyzed pharmaceutical, a whole dose must be destroyed. The chance for success depends on analysis and on the ability of the drug box to synthesize the raw components. The device must first correctly analyze each of the 5 components listed in the drug analyzer paragraphs. The veterinarian, or biologist can adjust the chance of success, or earn additional rolls by making PT rolls.

Chance for Synthesis Success
Tech Level Box / (Tech Level Drug + 2d8)
Cannot be higher than 80%

If the synthesis is successful, the new drug will be identical to the original sample, although the newly synthesized pharmaceutical will have double the chance of side effects. If the synthesis failed the drug box should have fail safes that prevent the production of random drugs, or poisons. The drug box can keep producing a single dose of the pharmaceutical as often as a successful synthesis roll is made.

24) Eye Cleansers

DURATION: One use
WATE: 150 gm
EXPS/VALUE: 250/3000

The eye cleansers look like opaque swimming goggles. When strapped over the eyes they foam up and bathe the eyes in healing chemicals. They will negate, and heal, all forms of chemical damage to anthropomorph eyes. If hit point damage has been caused by the chemical attack to the eyes, all of those hit points in damage will be restored. Eye cleansers can only be used once and will act in one unit. The eye cleansers will offer a bonus of +8 for any eye related PT rolls that the veterinarian has to make.

25) Fever Control Blanket

DURATION: Until damage
WATE: 50 gm
EXPS/VALUE: 50/150

The fever control blanket looks like a fragile, highly reflective, translucent sheet. It can restore and maintain the proper body temperature of any organic creature. Any internal conditions (poison, sickness, mental attack) causing fever can be countered by the blanket. It can maintain normal body temperatures against external environments within the range of -10oC and +50oC.

A veterinarian or biologist can use the blanket to determine a patient's body temperature. They will also receive a +10 bonus when using the blanket for any PT rolls that involve body temperature.

The blanket will function until it is damaged. The blanket can take 3 hit points of damage before it is destroyed. An fever control blanket is disposable, and cannot be mended. If more than one persona at a time are going to use the blanket, then they must be of the same race.

26) Incubator

DURATION: 10 months
WATE: 15 kg
EXPS/VALUE: 300/20000

This incubator can recreate the environment and conditions necessary for the gestation of embryos, seeds and fungi. The Incubator will nourish anything up to a state where it can survive outside of a womb. This does not guarantee survival, only live birth. Any life form exceeding 200 kg before it can support itself will be beyond the capacity of the incubator, and will be aborted.

The duration of gestation is given below. Deviations such as multiple births and Siamese twins (or triplets etc.) will be left to the Ref's discretion. One battery set will last 10 months. Vets and biologists can adjust the incubator to double or triple the rate of gestation, greatly reducing the embryos time spent in the incubator.

Table 47.11: Duration of Gestation

EMBRYO SIZE	EMBRYO FAUNA	TYPE FLORA
Tiny	3-18 days	3-300 hours
Small	1-8 weeks	3-300 hours
Medium	1-6 months	3-300 hours
Large	2-12 months	3-300 hours
Gigantic	3-18 months	3-300 hours

27) Injury Detector

DURATION: 100 uses
WATE: 2.5 kg
EXPS/VALUE: 2500/100000

This handy little red box will analyze the body structure of any organic creature for injury. When attached to the body, it will detect almost anything from ligament strains to rigor mortis. The Injury Detector will aid vets by adding 50 to their PT rolls when dealing with any maneuver that involves physical lesions. A battery set is good for one hundred applications to the body.

28) Internal Viewer

DURATION: Power source
WATE: 50 kg
EXPS/VALUE: 3000/950000

This device gives a three dimensional, technicolor, moving picture of the innards of organic creatures. The paddles of the internal viewer must make contact with the patient. The internal views can be taped, and subjected to a host of special effects. An Internal Viewer will aid vet diagnostics with +30 on her PT roll. This unit is generally not portable (unless its tech level produces a wate is less than 6 kg).

29) Life Ray

DURATION: Power source
WATE: 1250 kg
EXPS/VALUE: 10000/22100010042

A Life Ray will resurrect dead organic tissue almost to its original form. Enormous energy surges are used to rehydrate desiccated cells, restore chemical equilibriums, and rebalance biological polarities. The Life Ray must be employed within 50 hours of death. The Life Ray is a machine, and the subject must be placed within it.

The life ray will faithfully restore the body to the from that is presented to it. The ray will not heal or repair anything. Any corrective surgery must be completed before the life ray is activated. For instance a limb would only be reconnected to the regenerated patient only if her arm were properly reconnected before the procedure.

To properly activate the life ray is a veterinarian maneuver that has a DD equal to 1 per hour since death. For example, a patient that has been dead for 6 hours would be a DD6 maneuver. If a body has been placed in a stasis bag, the time within the bag does not count. For instance a patient that had been dead for three days, but was placed in a stasis bag 4 hours after dying would be a 4DD maneuver to resuscitate.

To be restored, the persona has two chances to make a difficult (d20) CON attribute roll. If the player is successful with either of these rolls then the persona will have a successful treatment. If the player fails both of the attribute rolls then her persona is permanently dead. The veterinarian can carry out maneuvers that will allow the player to make additional attribute rolls.

If the player fails the attribute rolls then the persona remains dead, since her system is too far along to road to entropy to be repaired. If the vet, or the research team, fails the PT roll involved then the patient can be re-bagged and an attempt can be made at a later date. Any patient with a zero attribute will die immediately unless the problem is corrected preceding, or during the life ray treatment.

The life ray does not return the persona to her exact state of health. Since the device does not repair damage that was incurred the persona's attributes will suffer penalties once life is restored. All attributes are reduced by at least one point during the process.

It is assumed that all attributes except MSTR will have suffered when the persona died. AWE, CHA, CON, DEX, INT, PSTR and HPS maximum will lose 0 to 3 points (d4-1). However, the persona's thinkspace may be enlightened by the potentially spiritual experience and a bonus of 0 to 3 points MSTR is added to her present MSTR. If any of the persona's attributes fall below one, she is permanently dead.

Once the body is technically restored by the machine, the persona must be brought back to life. Her hit point total will be at negative 1/4 of the maximum hit points. For example, a persona with 20 HPS MAX would restart life at -5 HPS total. Now a veterinarian must successfully resuscitate the patient, or she will die again. Often the referee will allow the vet to automatically succeed at this procedure.

Unless this machine is employed absolutely ruthlessly (under the premise that all personas will eventually die), it can seriously imbalance the game. If a referee has any reason not to allow a life ray to part of her campaign then she simply can replace this device with some other piece of medical equipment.

30) Limb Capper

DURATION: One use
WATE: 150 gm
EXPS/VALUE: 50/200

IIII

A Limb Capper is a flexible bowl-shaped super-bandage that is used to preserve the nerve endings, tendons, and muscles of amputated limbs while at the same time preventing further damage, and reducing pain. This artifact's prompt use will facilitate automatic biorganic attachment. The Limb Capper can only be used once, and will aid the vet with a bonus of +5 for any PT rolls that involve preserving tissue.

31) Medi-kit

DURATION: One use
WATE: 200 gm
EXPS/VALUE: 100/215

The medi-kit is a disposable, one-use personal aid for veterinarians. The kit contains bio-electric painkillers (run by micro-cells), tissue and bone adhesives, organic tissue-cutting acids, spray-on bandages (which only adhere to organics), and benign fur removers. Everything melts into uselessness after the seal has been broken in an effort to prevent unsanitary re-use. Medi-kits are also called vedi-kits, med-paks, and first aid kits. The Medi-kit awards +20 to the vet PT roll.

32) Medi-wraps

DURATION: One use
WATE: 100 gm
EXPS/VALUE: 100/3000

A Medi-Wrap is patch of synthetic skin that melts onto the wounded skin of the patient. The wrap will heal up to 30 hit points of specific skin damage. Once applied to the injured skin, its effects are immediate and any further damage will be impeded. Medi-Wraps can be used only once. If an injury is to a smaller surface area than the medi-wrap, a veterinarian can cut the wrap if a 3DD performance table roll is made. This procedure will extend the the medi-wrap by one use.

A Burn Medi-Wrap is only good for heat, friction and flame damage. Veterinarians are the only personas capable of criss-crossing medi-wrap uses. To do this a 1DD maneuver must be made. For instance a burn medi-wrap could be used to heal the burn from an acid. When cross wrapping is done the wrap will only heal 10 hit points of damage. Referees must remember that most of laser and projectile weapon damage is internal, and a medi-wrap will only be able to assist for a small portion of that type of damage.

Table 47.12: Mediwrap Type

DIE ROLL(d6)	WRAP TYPE	USE EXAMPLES
1	Acid	
2	Burn	Heat, friction,flames
3	Chemical	Napalm, phosphorous on skin
4	Cold	Freezing, cryo attacks
5	Lacerations	Cuts only
6	Molecular	Antimatter, molecular disruption

33) Medical Kit

DURATION: 50 uses
WATE: 5 kg
EXPS/VALUE: 2000/500000

A Medical Kit is equivalent to the bulk storage of fifty Medi-kits, medical equipment #31. The medi-kits are also combined with a small diagnostic computer. The small diagnostic computer that can aid any persona, whether medically trained or not, in the proper steps to first aid. The computer will give vets a +42 bonus on the performance table rolls for any maneuvers that involve acute care (quick fixes, poison cures). The computer aids personas who are not vets, but meet the INT requirements of a vet (INT 12) in the area of first aid. Any such persona can apply quick fixes (and only quick fixes) when using a medical kit. The diagnostic computer runs out of power, and the stores run out of materials, after 50 uses. Recharging a medical kit is left to the improvisational talents of the referee.

34) Metab Counter

DURATION: 10000 units
WATE: 1 kg
EXPS/VALUE: 300/25000

A Metab Counter will graphically monitor respiration, blood flow, brain wave activity, and a few other useless metabolic indicators. The metab counter is the classic futuristic physician's stethoscope. This device has a 10 hex directional range.

Vets, and biologists, can use the metab counter to locate life forms, and to determine their health. Veterinarians get a bonus of +15 on any vet PT rolls when employing a Metab Counter. Biologists get +10 on their PT rolls when using a metab counter. One battery set will operate for 10000 units.

35) Mood Ball

DURATION: 10000 units
WATE: 1 kg
EXPS/VALUE: 300/10000

The mood ball will alter and maintain the disposition of the holder. If they are depressed it will make them happy, if they get angry it will calm them down. These moods can also be adjusted by a skilled individual to manipulate the emotions of a single target within 1 hex range. There is no saving throw granted since the mood alterations are quite subtle. The mood ball is a psychiatric device that employs electrical signals and inaudible sounds to maintain socially acceptable personalities from the user.

The mood ball is not a mind control device. The user is aware that she is employing the ball for her own benefit, since they will be genuinely happier when the ball is activated. A veterinarian can use the mood ball to assist her in any psychological performance table rolls. These would include calm persona, remove suicidal thoughts, entice a purchase, subliminal suggestion, or pain reduction. The veterinarian will earn a bonus of +15 when dealing with emotion, or mood related maneuvers.

Other personas can use the mood ball to assist in salesmanship or coercion. The mood ball is reflected by a negotiation roll, or PT roll bonus of +10. A persona that is frequently subjected to the emotional adjustments of the mood ball may become dependant on the device.

36) Mutation Detector

DURATION: 5000 units
WATE: 2.1 kg
EXPS/VALUE: 300/25000

The Mutation Detector provides two binary answers to the question whether mutations are present and whether the mutations physical or mental. Beyond this, the device cannot give any hints what-so-ever regarding the nature of the mutation. If a mutant were tested, and she had both physical and mental

mutations, the mutation detector would light up brightly.

A biologist can employ the detector to gain a PT bonus of +20 when attempting to identify mutations with anthropomrophs, and +10 when attempting to identify mutations with aliens. The gadget must have an unobstructed line-of-sight, and can be no further than 10 hexes from the specimen. One battery set will last 5000 units.

37) Neuro Cap

DURATION: Mental activity
WATE: 80 gm
EXPS/VALUE: 200/90000

This medical device appears to be an oversized beanie with a yellow blinking light on top. The cap constantly generates a thinkspace interference waveform that makes it virtually impossible for any form of psionic intrusion to succeed. The neuro cap will not defend against those mental attacks which manipulate the environment around the target. It will, however, work very well against the likes of ESP, pyrokinesis, and mental control.

Mental attacks must first make a save against twice the persona's MSTR before they can attack. This value (2 times MSTR) cannot be less than 20. Thus a persona with a 15 MSTR would have a barrier of mental strength equal to 30. If the persona's MSTR were 6, her mental barrier would be 20. The Neuro Cap is just a machine; it will also obstruct beneficial psionic activity, and any mental mutation used by the persona must save vs 2 times her MSTR before it can be employed.

38) Poison Detector

DURATION: 5000 units
WATE: 1 kg
EXPS/VALUE: 25000

The Poison Detector can forewarn the expedition of unconfined toxic materials, and give diagnostic information about poisoned patients. The detector has a 10 hex directional range, and will give an idea of the poison's toxicity (poison intensity).

Contacting the detector to a poisoned patient's body will give vets essential information about the patient. The poison detector gives vets +25 their PT roll when treating poisoned personas. A bonus of +10 on PT rolls is granted to nomads, biologists, and vets doing research with the aid of the poison detector. The detector will indicate whether the poisonous materials are of a radioactive, corrosive, or biochemically toxic nature.

39) Poison Box

DURATION: 1000 hours
WATE: 10 kg
EXPS/VALUE: 1000/4500000

A Poison Box will detect, locate and identify any amount of toxic substances within a 20 hex radius.

If a Poison Box can obtain one gram of a poison, it can synthesize 10 doses of antidote. Synthesis of antidote requires 1 to 8 hours of battery use. If the antidote is taken immediately after the poison attack, the persona will get an additional saving throw where the persona's CON will be doubled against that specific poison attack.

If the antidote is not present, and no medical aid is available the persona can be attached to the poison box, and the continued effects of the poison will be arrested. The persona cannot act, but will not take damage from the poison until the machine runs out of power.

If medical attention is present, a vet using this device will get +115 on her PT rolls when working against poison. Biologists and nomads will get +40 on poison related PT rolls when using the poison box. This device has no effect if the persona is already dead. Only under the most extreme circumstances can the poison box be altered to generate poisons. This goes against every nanocircuit in the device's programming, to attempt this should be at least a 25DD mechanic maneuver.

40) Psionic Box

DURATION: 200 units
WATE: 20 kg
EXPS/VALUE: 1984/129036049

The psionic box is the closest thing there is to a brain in a box. The device contains materials that absorb psionic energy wavelengths, and frequency generators that can constructively, or destructively interfere with thinkspace wave forms. The device is like a psionic stethoscope. The veterinarian can use the psionic box to probe the local area (15 hex) for psionic anomaly.

The box is an elaborate detector that will betray the presence of any mental mutations (but not physical mutations), or manipulations of a psionic nature. For instance the psionic box could be used to eavesdrop on telepathic conversations, or send out simplistic psionic signals. Any psionic related PT rolls attempted by the device's user will gain a bonus of +102.

If the hair net like extension of the device is attached to the scalp of a suspected mutant, there is a chance of determining what mental mutations the persona has. Not which mental mutation it is, but what it does. Time stop mutation would reveal the ability to manipulate time, and not something called time stop. If the persona saves versus mental attack of intensity 4 to 24, the psionic box will yield no information. The level of the veterinarian making the assessment can be added to the intensity, increasing her chances of success. Such a probe will take 1 to 100 units of melodramatic agony. If successful, only a hint will be given about the mutation's effect. This requires a successful maneuver of DD12 for a veterinarian (DD16 for biologists).

If this device happens to be combined with a cerebro converter, the victim's mind can be searched like a roll-a-dex for vital information.

41) Race Determiner

DURATION: 50000 units
WATE: 2.1 kg
EXPS/VALUE: 300/25000

This unit analyzes skin, bone, blood and tissue composition to determine the racial stock of the subject. The subject can be either dead, or alive. The data is yielded after 1 to 20 units of the determiner's analyzing the subject. Vets and biologists can enter information on new races, and program the device to identify them. A Biologist will receive a bonus of +30 on her PT roll when making identification maneuvers with a race determiner. Vets can earn a +10 bonus on their PT rolls when making identification type maneuvers with this device. One battery set will last 5000 units.

42) Rejuv Chamber

DURATION: Power source
WATE: 250 kg
EXPS/VALUE: 2000/210000042

The rejuv chamber is a tank-like device that is capable of healing virtually any damage provided that the patient is still living. It will remove bullets, replace burned skin, set and pin bones, excise tumours, drain swellings, trepanation, realign blood chemistry, filter out toxins, and groom the patient's hair, nails and skin. After a stint in a rejuv chamber the patient will feel refreshed, clean, and alive.

The rejuv chamber can only work with the material that is presented to it. The chamber will repair nerves with bits of nerve it excises from other parts of the patient. It will culture muscle from one leg to replace it in the other. Through this shifting of bodily materials the rejuv chamber can restore lost hit points and decreased attributes.

The rejuv chamber has some limits as to what it can accomplish when healing. The rejuv chamber will restore a persona to a full hit points total. It will also restore to full any one attribute that has

been reduced for any reason (aging, disease, poison). If the persona has more than one attribute below normal, the restored attribute will be randomly determined. A Rejuv Chamber cannot restore MSTR.

Since the rejuv chamber uses the patient's own body tissue to repair damage, there is some risk when the machine is used. A patient should not use the rejuv chamber to repair herself if she is at a positive HPS total. The rejuv chamber will scavenge bits of tissue that are essential to the persona's attributes to repair the HPS damage. The rejuv chamber will return the hit points to full, but at the expense of a randomly selected attribute. The persona will get all her hit points back, but a fifth of the healed hit points will be subtracted from a randomly selected attribute, this can quite easily kill the persona. If the persona has a reduced attribute the rejuv chamber will repair the decreased attribute, and ignore the missing HPS.

If a persona with a HPS max of 35 were to hop into a rejuv chamber with 15 HPS and no damaged attributes she would be healed to full. The 20 HPS that she was healed would result in 4 points being subtracted from a random attribute. If the persona only had a 4 PSTR, and PSTR was the selected attribute the rejuv chamber would have accidentally killed her.

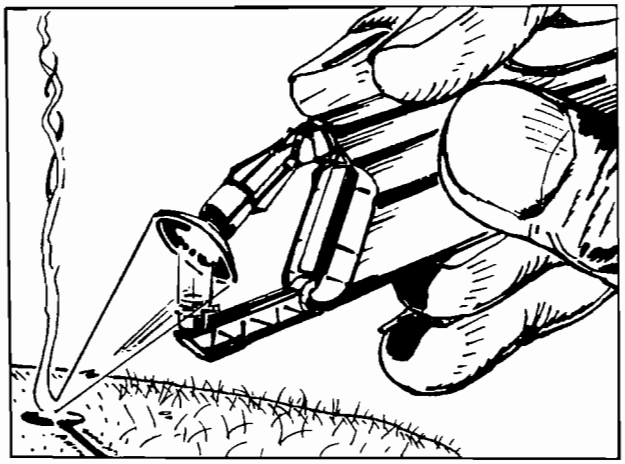
If a persona enters the rejuv chamber at a negative hit points total she will be repaired to her HPS maximum without any attribute penalties. A Rejuv Chamber will also remove parasitic infestations, diseases, poison effects, and non permanent pharmaceuticals without affecting a persona's attributes. If the patient is at full hit points, and full attributes, the rejuv chamber will remove tumours, and give wonderful manicures without deleterious effects .

One treatment requires an uninterrupted 1-6 hours in the coffin like tank of the rejuv chamber. Interrupting a rejuv chamber treatment will usually kill a patient instantly, and messily. The chamber is largely self directed and will automatically begin to operate when a patient is closed under the lid. Veterinarians can manipulate the rejuv chamber to assist them is surgical operations and medical maneuvers involving extreme trauma. A veterinarian enjoys a bonus of +50 on virtually any medical procedure when using a rejuv chamber.

43) Respirator

DURATION: 5 hours
WATE: 2.5 kg
EXPS/VALUE: 500/50000

A Respirator will monitor, regulate and restore respiration in oxygen users. Worn over the nose and mouth, this unit will monitor an anthropomorph's respiration without any battery drain. If it notices any respiratory irregularities, it will start to breath for the persona. The device will filter out toxic substances in the air, but does not have its own air supply. The Respirator will warn of heart stoppage, but will continue operating regardless for 5 hours (9000 units), or until disconnected. This artifact can be combined with a cardio vest to maintain life. A respirator will assist a veterinarian with +15 to any resuscitation PT rolls.



44) Scalpel

DURATION: 9000 units
WATE: 100 gm
EXPS/VALUE: 200/1500

A Lazer Scalpel is very exacting, and makes adjustable shallow incisions. A scalpel will easily cut through any organic covering. As a weapon, it does little damage, a d6 hit points if a hit is scored, with no PSTR bonus. When attacking, the scalpel gets +200 to hit against organics, and attacks as a type C weapon. A lazer scalpel offers a +15 bonus for PT roll to vets, or biologists, engaging in any cutting procedure. The portable unit will run for 5 hours (9000 units).

45) Stasis Bag

DURATION: One use
WATE: 300 gm
EXPS/VALUE: 200/1500

The stasis bag is the body bag of the future. All organic processes are arrested within the bag. This means that there is no decomposition, no need for respiration, and no need for food. The stasis bag will suspend any organic material in a steady state: lunches, bodies, limbs, eyes for the eye bank, and even whole unconscious organisms. The auto-embalmer cannot hold an unwilling occupant, and anyone could thrash their way out of the thin container.

A Stasis Bag will operate safely between -80°C and +80°C. Stasis Bags that are not successfully opened by a vet or biologist (DD5) have a 1% chance per year of storage of spoiling. Spoiled contents will be asphyxiated, dead, or under accelerated decomposition. One bag can hold 150 kg. Larger bags increase in value (+1000) and wate (+200 gm) for every additional 150 kg of capacity.

46) Touch Gloves

DURATION: One use
WATE: 2 gm
EXPS/VALUE: 350/25000

Touch gloves appear as thin surgical gloves. When pulled on they melt into the skin, locating the touch and pressure receptors in the persona's digits. The gloves amplify the receptor's sensitivity, and spread out their area of effect. This produces hypersensitive touch of such clarity that the user can almost feel air molecules careening off her fingertips. The gloves cannot be removed, but will wear off in about 1 to 4 days. Industrious washing can remove the gloves sooner.

Anyone wearing touch gloves will enjoy a general bonus of +1 on her AWE, and a specific AWE bonus of +3 when touch is involved There are other more specific benefits gathered in various situations. Any persona who has lost her sense of touch will have it restored in the hands, and her DEX returned to normal. Mechanics get +20 on PT rolls for delicate repairs. Veterinarians get +15 on all non-surgery PT rolls, and +30 on all surgery PT rolls. Spies get a +30 PT roll bonus when picking pockets, and opening locks. Pilots and drivers will earn +30 on driving performance tables.

47) Translinker

DURATION: As needed
WATE: 2 kg
EXPS/VALUE: 750/1000000

The translinker is a bidirectional neural to machine transducer. The translinker will allow a veterinarian to directly interface with a piece of medical equipment controlling it as an extension of her own mind. The translinker would allow a vet to integrate herself with a rejuv chamber and make medical decisions along the way. The translinker allows her to visualize the device's data as part of her own memory structure, and to control the device's controls as part of her own motor system. She becomes at one with whatever she translinks with.

A translinker could also be used by a mercenary to fire a piece of artillery, or by a spie to bypass a security lock, or by a mechanic to drive a space vehicle. A translinker would allow virtual access to a computer's memory system. If the persona starts to use the translinker for things other than simple machines there is a very real risk of the machine gathering some control over the persona, or the persona becoming addicted to the sensations translinking.

The bonus for employing a piece of equipment with a translinker is +50 on any PT rolls that involve the device. For example a veterinarian using rejuv chamber through a translinker would be a formidable physician to say the least.

The translinker can take on any format that the referee wishes. It could require a socket in the skull, or it may simply drape over the persona's head. The translinker could be connected by a cord, radio link, or via a keyboard deck. The link could be a plug in the device , or it could be a nail that is driven into the side of the machine.

48) Ref's Own Table

DURATION: Varies
WATE: Varies
EXPS/VALUE: Varies/Varies

Again the ref's own table involves those items that will make the campaign unique and exciting. They may be items that the players have thought up, or devices that the referee needed to have in her campaign. For example, what would medical equipment designed for alien systems be like? What would a rejuv chamber for gaseous swamp creatures do to a anthropomroph persona? What a about medical equipment that will repair inorganic species, like Argellian Rock Women, robots, or androids? The medical equipment list is extensive yet it only fondles the tip of the iceberg.

Chapter 48
Miscellaneous Equipment

Miscellaneous equipment is the specialized equipment chapter. Any device that is important, but too small to warrant its own chapter is included on this list. Examples are visual aids, computers, lights, and special ammunition. Also included in miscellaneous equipment are the incredibly unique devices. Examples of these are dehydrators, and teseract boxes. The miscellaneous equipment chapter is sorrowfully inadequate. There is an unlimited number of fun devices that haven't been included, or had to be omitted. Much of the equipment has gone past the line of science fantasy, and into the realm of pure fantasy. Whereas everything else in this game is very realistic (ha!). Often the equipment has no pseudo-scientific explanation, and it is up to the ref to fit the artifact into her milieu.

The miscellaneous equipment is generally non-combat. Many of the devices aid in combat, but they are not designed to inflict damage solely on their own. If a device were a gun, it would be in the gun chapter, if it were a weapon, it would be in the miscellaneous weapon chapter, and so on. For many players, devices with no combat application have no obvious use. It is true that only those players with that 'special insight' will always find a use for the equipment rolled in this chapter.

Despite the previous paragraph's comments, some of the equipment is incredibly powerful, but not necessarily violent. Judiciously limiting such device's use (read, being ruthless) will help maintain the balance of the game.

Class

Class represents the persona class whom this particular miscellaneous device was designed for. Unlike the other technology chapters, whose likely users are defined in the title of the chapter, like guns are for mercenaries, and medical equipment is for veterinarians. The miscellaneous equipment chapter knows no such allegiances, and each artifact must be designated to a certain persona class. The class heading will usually indicate which particular class.

If the class statistic says 'mech', then the device is designed for mechanics. If the artifact is labelled 'spie', then it is a piece of spying equipment. The class heading may be labelled 'All', and these toys are useable by any persona class. 'None' states that no class should be familiar with the equipment.

The class heading doesn't restrict personas from using the class equipment, but it does indicate certain effects. A class related toy is easier to identify, and this is reflected by an artifact identification bonus (see chapter 20). The persona will also receive an EXPS bonus when identifying class related equipment (see chapter 15). The only drawback of a class related artifact is that it will count the a last roll for a player generating toys. If the toy states 'All' as well as a class then the artifact will not count as a last roll. E.g., CLASS: All, merc, would not count as a last roll for a mercenary.

Duration

Duration indicates how much use the device can endure before the battery set must be replaced. Straight time usage is usually indicated in thousands of units, K units, see chapter 12, Time and Movement, for more information. It would be unusual for a battery set to run down, but who knows, it may happen just when the device is most important! Other toys have a predetermined number of uses before the battery set must be replaced. Devices with 'One use' usually consume themselves to reach their objective. The last type of duration is 'power source'. These are artifacts that require enormous power plants like nuclear generators, and hydroelectric dams.

WATE

This is the wate of the device excluding batteries and other paraphernalia. This value is added to the persona's wate allowance if she intends to carry the artifact.

Many of the miscellaneous equipment are everyday devices with certain luxury features thrown in. If, even with these special extras, the toy seems too heavy, the referee can adjust the tech level so that an acceptable wate is obtained.

Table 48.1: Miscellaneous Equipment

DIE ROLL	MISCELLANEOUS EQUIPMENT	DIE ROLL	MISCELLANEOUS EQUIPMENT
01	1. Absorbers	46-47	34. Fire Logs
02	2. Aerosol Regulator	48-50	35. Food Culture
03-04	3. Ammunition	51	36. Generator
05	4. Anti-grav Backpack	52	37. Hooks
06	5. Anti-grav Beam	53	38. Instant Stuff
07	6. Anti-grav Belt	54	39. Jet Boots
08	7. Anti-grav Boots	55	40. Jet Backpack
09	8. Anti-grav Neutralizer	56	41. Joiners
10	9. Anti-grav Pushcart	57	42. Kirlian Talisman
11	10. Attractors	58	43. Lazer Pen
12	11. Auto Lockpick	59-61	44. Lights
13	12. Auto Holster	62	45. Locks
14	13. Autobrush	63	46. Mapper
15	14. Autocard	64	47. Mindlink
16-17	15. Battery Power Plug	65-66	48. Money Counter
18-19	16. Battery Slut	67	49. Plastic Explosive
20-21	17. Battery Recharger	68	50. Psionic Headband
22	18. Bot Neutralizer	69-71	51. Recorders
23	19. Cancellors	72	52. Robot
24-25	20. Climate Band	73	53. Robotic Override
26-27	21. Climate Portent	74	54. Rocket Rollerskates
28-29	22. Clothing	75	55. Scopes
30-32	23. Communicators	76	56. Sincerity Machine
33	24. Compass	77	57. Superconductor Suit
34	25. Compukit	78-85	58. Support Equipment
35-36	26. Computers	86	59. Targeting Computer
37	27. Control Baton	87	60. Teseract Box*
38-39	28. Cords	88-93	61. Timepieces
40	29. Cutters	94-98	62. Visual Aids
41	30. Dehydrator*	99	63. Waste Disposer
42-43	31. Detectors	00	64. Ref's Own Table
44	32. Detonator	* Must re-roll, only counts	
45	33. Filters		

EXPS/Value

The EXPS value is awarded to the persona who identifies the device. If the device is class related she can earn an experience point bonus. For more information on experience points see chapter 15, Experience. The Value is what the toy would be worth if it were ever correctly appraised, which is unlikely. The values are also relative worth in the campaign to other devices that can be found. It is expected that the referee will adjust the value of artifacts as she sees fit in her campaign.

1) Absorber

CLASS: All
DURATION: 216K units
WATE: 2 kg
EXPS/VALUE: 200/Varies

Absorbers are capable of eliminating environmental components that are harmful to organic creatures. The absorbers are like industrial strength air cleaners that counteract harmful agents like radiation, gas, and smoke. The devices all operate on unknown electrochemical and mechanical principals that allow the referee to ignore any problems regarding the laws of conservation of mass. All absorbers have the same specifications and abilities. They eliminate the substance in question in a non-violent manner.

They have a 3 hex radius of effect in which the absorbed material will have absolutely no effect. For instance a radiation absorber would reduce the effects of radiation within the 3 hex area of effect for the duration of the battery set. The absorber will also clean up an area around itself, by drawing in and neutralizing the offending substance. The durations of substances like smoke, radiation and gas clouds are reduced to 1/3 if their area of effect contains an absorber. Roll on Table 48.2, *Absorber Type* to determine the type of substance absorbed.

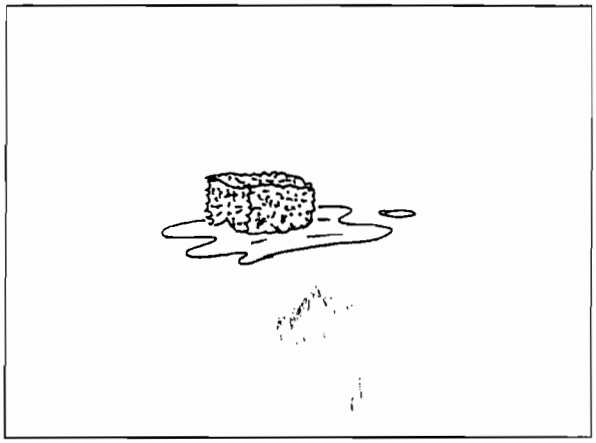


Table 48.2: Absorber Type

DIE ROLL	ABSORBER TYPE	EFFECTS
01-10	Aerosol	No effect of aerosols
11-20	Gas	No effect of gas
21-30	Energy	Batteries, energy attacks
31-40	Light	Create darkness, lazers
41-50	Liquid	Acts like a pump
51-60	Radiation	-16 on intensity of radiation
61-70	Smoke	Eliminate smoke effects
71-99	Sound	Silence
00	Other	

2) Aerosol Regulator

CLASS: All, Mechanic
DURATION: As needed
WATE: 0.5 kg
EXPS/VALUE: 150/10000

The aerosol regulator has no false advertisements in its title, it simply regulates aerosols. The cap-like device snaps onto an aerosol, restraining its all-in-one-use nature. The aerosol regulator will yield 1-4 uses for an aerosol which normally only yields one use. The aerosol regulator cannot be removed until all charges are spent. The device can also moderate the effect of any non-combat aerosol. Paint aerosols will act like normal paint canisters, and foam aerosols will dispense like shaving cream.

3) Ammunition

CLASS: Combat
DURATION: One use
WATE: +50%
EXPS/VALUE: 100/Tripled

This ammo is special ammunition for guns found in chapter 46. It is actually more like bizarre ammo. The ammo is designed for bolt action rifles, derringers, semi-automatic weapons, full-auto pistols/rifles, job pistols/rifles and revolvers. These are the typical weapons which explosively launch bullets. Other special weapons (fusion, plasma) do not have special ammo. Ammunition for such guns, as with normal ammo, is generated in chapter 55, Support Equipment. Roll on Table 48.3, *Special Ammo* to determine the special ammunition type. Generally 1 to 1000 rounds will be found. Whether, or not, ammo fits available weapons is determined by the referee. Whether or not ammo fits an available weapon can be determined by rolling Sphincter dice, as described in chapter 16, Special rolls.

Table 48.3: Ammunition Type

DIE ROLL	AMMO TITLE	AMMO EFFECT
01-07	Armour piercing	+d100 to hit
08-14	Burrow	Eliminates cover and ballistic
15-21	Caseless	Wate is quartered
22-28	Concussion	Triple damage versus robots
29-35	Explosive	+3d6 on damage
36-43	Flashless	No flash on firing
44-50	Force field	Passes through force fields
51-57	Hypodermic	Holds liquid drugs
58-63	Incendiary	Burns for 2d6 for 0-3 units
63-65	Incapacitation	d6 damage, target cannot act
66-71	Shrapnel	Damage is 1 hex area of effect
72-79	Silenced	No noise on firing
80-86	Storage	Holds 25 gm of anything
87-93	Tracer	+50 to hit in the dark
94-99	Upgrade	Increase calibre HP to XHP
00	Other	

4) Antigrav Backpack

CLASS: All
DURATION: As needed
WATE: 0, or 15 kg
EXPS/VALUE: 250/10000

The anti-grav backpack generates a force field that counteracts gravity to reduce the wate of equipment that is stores. Anything placed inside the backpack will be reduced to one tenth its normal wate. If the backpack should get turned off, it will have a wate of 15 kg plus the regular wate of all equipment stored within it. The backpack has a maximum capacity of 200 kg of equipment. This device offers no benefits to the wearer other than wate allowance. For instance the a-g backpack will not allow the persona to fly, fall slowly, or reduce her wate in high gravity atmospheres.

5) Antigrav Beam

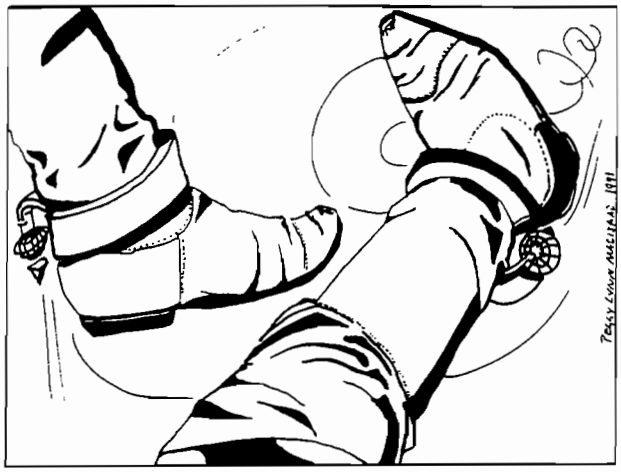
CLASS: Mechanic
DURATION: 216000 units
WATE: 2.5 kg
EXPS/VALUE: 250/500000

An antigrav beam generates anomalous gravity between 0 and 2 gravities in a one hex area of effect, up to 5 hexes away. The beam requires too much fine tuning and adjustment to be used on anything other than voluntary subjects. When the beam is aimed into the same hex as the persona using it, she can lift herself into the air and defy gravity. This box can be used to overcome gravity effects. This will allow the expedition to lift large or delicate objects out of the way, or up in the air to ease repair. The maximum wate of the object that can be effected is 20 tonnes. The antigrav beam can be used to rotate objects into any position needed. The antigrav beam will assist any persona making a manipulation PT roll will earn a bonus of +5.

6) Antigrav Belt

CLASS: Nothing
DURATION: Unlimited
WATE: 0.25 kg
EXPS/VALUE: 375/5000

The antigrav belt is a device which shows that even sadistic refs write rules. The a-g belt is a support device which keeps a persona's trousers from dropping. A similar version of the belt can be used to replace a brassiere. So depending on the mood of the ref, the player will have rolled either a a-g pant holder, or an a-g brassiere. Refer to antigrav boots for the type of antigrav equipment most personas think of.



7) Antigrav Boots

CLASS: All
DURATION: 532000 units
WATE: 8.0 kg each
EXPS/VALUE: 250/250000

Antigrav boots are the typical antigrav units thought of by most players. Antigrav boots allow the wearer to fly about without the worries of gravity. The gravity repulsion unit can operate for about 10 days before the battery set runs out. The antigrav boots can come in a belt form which has a wate of 16 kg. The antigrav boots will work on personas up to 150 kg in wate.

Either antigrav unit can travel at up to 25 h/u, hover, fly upside down, fly sideways, etc. If the persona is trying a particularly crazy maneuver then consult the driving performance tables. The antigrav device is very maneuverable, and has handling class equal to the persona's DEX.

8) Antigrav Neutralizer

CLASS: Mechanic
DURATION: 50 uses
WATE: 5 kg
EXPS/VALUE: 299/90000

The antigrav neutralizer interferes with gravity induced fields, and has the effect of negating antigrav units, gravruptor attacks, or any other non-natural gravity anomalies. The device essentially returns manipulated gravity to normal. Any devices generating anomalous gravitational fields will be shut off for 1 to 20 units. The number of units of dysfunction equals the percentage chance of the machine being damaged.

For instance if the neutralizer were used on an antigrav back pack, the back pack would crash to the floor. If the pack were disabled for 14 units there would be a 14% chance of the backpack's antigrav unit being damaged. See chapter 21, Equipment Damage for more information. The antigrav neutralizer has a range of 25 hexes, and offers a +10 PT roll bonus when working with gravity manipulation devices.

IIII

9) Antigrav Pushcart

CLASS: All
DURATION: 216000 units
WATE: 0, or 75 kg
EXPS/VALUE: 100/250000

The antigrav push cart is often called a wheel-less barrow. The gravity repulser plate will nullify the wate of any object less than 50 tonnes. The pushcart must be placed under the object, and the barrow will not raise the object any higher than 20 cm off the ground. The device has safety features which restrict the height of the repulser plate to one where the load will not fall a damaging distance. Balance, while on the plate, is unimportant since there is no gravity to tip the object over. The a-g pushcart can operate for 5 days on one battery set. The plate's max speed is 5 h/u, less 1 h/u per 10 tonnes of wate. The minimum speed is 1 h/u. A PT roll bonus of +14 is granted to any lifting PT rolls made with this device.

10) Attractors

CLASS: None
DURATION: 50 uses
WATE: 35 kg
EXPS/VALUE: 600/29000

Attractors employ an unusual array of chemical, pheromonal, gravitational, magnetic, or even stranger mechanisms to redirect objects in motion. The objects can be waves of energy, animals, or projectiles. An attractor can be used 50 times per battery set. Roll on Table 48.4, *Attractor Type* to see what the device attracts. Explanations of the various attractor types are found in the following paragraphs.

Table 48.4: Attractor Type

DIE ROLL	ATTRACTOR TYPE
01-04	Ballistic
05-08	Bots, robots
09-42	Communications
43-76	Creatures
77-80	Energy
81-84	Lazers
85-99	Projectile
00	Other

Ballistic: This device has a 10 hex radius. The projectile of any ballistic that passes through this device's area of effect will have a 50% chance of being diverted on a course that will transect the hex that the device is in. Thus if the attractor is lying on the ground the attack will hit the ground.

Bots, robots: If this device is used there is a 50% chance that the next encounter will be robotic. This device cannot be used to overturn a milieu.

Communications: Any electromagnetic waves transporting data that travel within the 5 kilometer

radius of this black box will be redirected towards the device. This attractor can only redirect radio waves, microwaves, and other standard wave form communications. Whereas lazer communicators are unaffected. This device cannot receive the communications, but it does redirect them.

Creatures: When this device is used, there is a 50% chance that the next encounter will be of the specified type. To determine the creature type attracted, and its effects on the creature, refer to the physical mutation #3, attraction Odor.

Energy: Any energy weapons fired within this artifact's 10 hex radius of effect will have a 50% chance of being redirected towards the energy attractor. Electromagnetically transferred energy sources within a 5 kilometer radius will also be attracted towards this box. Such energy sources, when diverted, will bath the area in intensity 1-10 radiation.

Lazers: Lazer attractors will attract 50% of the lazer attacks within 10 hexes, and all lazer communications within a 5 kilometer radius.

Projectiles: Projectiles within a 10 hex radius have 50% chance of changing direction towards the attractor. Projectiles are low velocity objects like daggers, arrows, rocks, or grenades.

11) auto lockpick

CLASS: Spie
DURATION: 25 uses
WATE: 3 kg
EXPS/VALUE: 2106/220000

The computerized, automated, robotic lockpick is designed to unlock doors without damaging the lock or door, and without tripping any alarms. The auto lockpick must be correctly attached by a spie. This requires a successful PT roll (DD2), and then the auto lockpick has a 90% chance of success. Simply attaching the auto lockpick without casing the door previously will reduce the chance of success to 60%. Random attachment, by a class other than spie, yields a 40% chance of success. The success roll is made by the referee, because failure may open the door, but activate silent alarms.

12) Auto Holster

CLASS: All, combat
DURATION: Unlimited
WATE: 1 kg
EXPS/VALUE: 200/20000

The auto holster is a spring loaded pistol attachment which, when the persona's hand is in the firing position, launches the gun into her ready grip. The auto holster will not release the gun unless it contacts a hand. When using this device the persona can draw faster because several steps of the process are carried out simultaneously. The device gives the persona +5 on her DEX in any quick draw situation. The auto holster can be adjusted to carry out the same process for rifles, special detectors or medi-kits.

13) Auto Brush

CLASS: Nothing
DURATION: 100000 pictures
WATE: 230 gm
EXPS/VALUE: 193/250

The autobrush is a hand held device that sprays chemicals onto surfaces that discolour the material. The autobrush is a glorified paint dispenser. The colour, texture, and the width of each stroke is manipulated by the grip on the brush. This brush is designed for fine arts, and not for commercial overcoating.

14) Autocard

CLASS: Spie
DURATION: Until destroyed
WATE: 0.5 kg
EXPS/VALUE: 2006/220000

The autocard is an illegal device created for the exclusive use of spies. The spie uses this device to reprogram entry keycards for electronic doors, bank machines and debit registers. When using the autocard spies and mechanics will earn a +20 bonus when attempting to bypass electronic security systems.

15) Battery Power Plug

CLASS: All, Mechanic
DURATION: Until destroyed
WATE: 15 kg
EXPS/VALUE: 90/5000

The power plug will attach to a power outlet, and transfer the seemingly limitless energy into equipment designed for batteries. For instance the power plug could be connected between the wall outlet in a building, and the battery holder in a lazer rifle to give the lazer rifle unlimited ammunition. There is a 75% chance that one of the power plug's accesses will be compatible with the outlet of the power source (this includes broadcast power). If none fit, a mechanic may adapt the power plug with a DD6 maneuver. The battery power plug will offer a +15 bonus for the mech when making any battery, or power source PT rolls.

The battery type that the power plug can insert into is limited to one of the 6 battery types listed on Table 48.5, *Power Plug Battery Type*. The power plug will have 1 to 3 extra extension cords, each being 3 hexes in length. Each extension cord will service from 11-20 (d10+10) batteries.

For example a power plug would have a 75% chance of being able to plug into a wall outlet, have 2 extension cords that can each power an artifact that uses up to 15 batteries.

Table 48.5: Power Plug Battery Type

DIE ROLL(d6)	BATTERY TYPE
1	Gas
2	Liquid
3	Solid
4	Plasma
5	Dynamo
6	Magnetic

16) Battery Slut

CLASS: All, mechanic
DURATION: Until destroyed
WATE: 2 kg
EXPS/VALUE: 390/56000

A battery slut is a device which receives any battery type into it, and converts it into 1 of 6 different battery types. Roll on Table 48.6, *Battery Slut Conversion Type* to determine what kind of battery slut converts to. High tech level battery sluts may have several battery types that they can imitate. The battery slut usually hangs from a belt pack, with a cord running from the artifact taking power. The slut will hold 1-20 cells of any kind. These cells must be the same tech level. The battery slut can also be used as a power pack for very efficient toys.

Table 48.6: Battery Slut Conversion Type

DIE ROLL(d6)	BATTERY TYPE
1	Gas
2	Liquid
3	Solid
4	Plasma
5	Dynamo
6	Magnetic

17) Battery Recharger

CLASS: Mechanic
DURATION: Until destroyed
WATE: 20 kg
EXPS/VALUE: 300/20000

A battery recharger will recharge batteries of a certain type back to their full charge. For each battery recharging, a decidie roll must be made. If the decidie roll is less than 10 the battery is permanently dead, and cannot be recharged. If the die roll equals 1, then the battery will explode inflicting a d4 in damage to the recharger.

The battery recharger will be able to recharge 3-18 batteries at once (limited number of holders). The battery recharger must be connected to a major power source. Recharging takes 8 hours. Refer to Table 48.7, *Battery Type Recharged* to determine what kind of batteries are recharged.

Table 48.7: Battery Type Recharged

DIE ROLL(d6)	BATTERY TYPE
1	Gas
2	Liquid
3	Solid
4	Plasma
5	Dynamo
6	Magnetic

18) Bot Neutralizer

CLASS: None, mechanic
DURATION: 100 uses
WATE: 2.3 kg
EXPS/VALUE: 850/50000

The robot neutralizer is the control baton (miscellaneous equipment #27) of miscreant robots. The neutralizer disconnects robots from their power, which brings them grinding to a complete halt, provided that the halt does not severely damage the bot or a member of its base race. The bot neutralizer has a chance of failure equal to the robot's control factor, and this chance cannot be greater than 80%. Thus a robot that has a 25 control factor has a 25% chance of not being affected by the neutralizer. If the robot's control factor is 97, then there is an 80% chance of evading the neutralization. Thus the more domesticated the bot, the easier it is to control. If left alone the robot will regain control of itself after 3 to 300 units.

The device has one complicating effect: if a neutralized robot is subject to the attack again, it will be immediately reactivated. Since the bot neutralizer has an 8 hex radius of effect, robots can be turned on and off each time the device is used. Mechanics will earn a bonus of +15 on any robot related PT rolls.

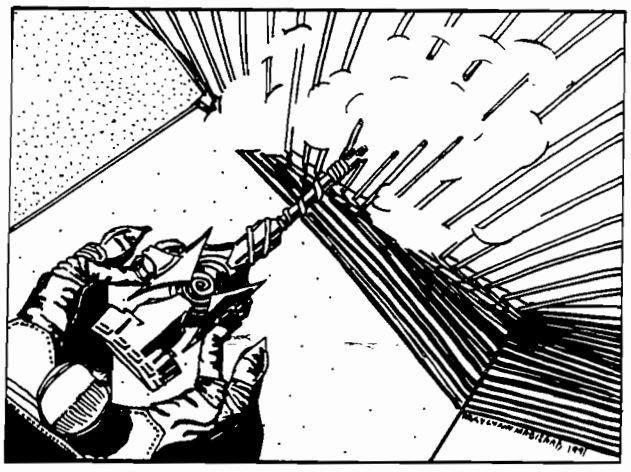
19) Cancellers

CLASS: All
DURATION: 10 uses
WATE: 10 kg
EXPS/VALUE: 900/230000

The canceller magically disperses matter into its useless components. A canceller can disperse 1 hex of matter per use. The wate of the dispersed substance is not important, because personas are usually trying to pass by a barrier. The device has industrial safeguards which only allow the canceller to disperse homogeneous, or simple substances. Complex items such as robots or organics will prevent the cancellor from functioning. Roll on Table 48.8, *Cancelled Substance* to determine what the canceller will disintegrate.

Table 48.8: Cancelled Substance

DIE ROLL	SUBSTANCE CANCELLED
01-20	Gas
21-40	Liquid
41-60	Solid; Metallic
61-80	Solid; Ceramic
81-98	Solid; Plastic
99	Energy (force fields)
00	Other



20) Climate Band

CLASS: All, except nomad
DURATION: 216000 units
WATE: 0.9 kg
EXPS/VALUE: 80/100000

The climate band is a non-combat, personal force field which defends the persona against non-violent meteorological effects. The persona is contained in a form fitting force field that will protect the persona from temperatures between -50°C and +50°C. The climate band will counter any meteorological such as: windchill factor, precipitation, hypothermia, heatstroke, sand storms, etc. A battery set will last five days. This force field can only operate in earth-like atmospheres, and the climate band cannot counter poisonous atmospheres.

21) Climate Portent

CLASS: All, except nomads
DURATION: 10 days
WATE: 10 kg
EXPS/VALUE: 90/10000

The climate portent is a translucent force field that is shaped like a tent. The climate portent can protect its guests from any but the most extreme meteorological conditions. The portent will hold anywhere from 2 to 16 anthropomorph (medium sized) personas. This force field offers no protection from combat attacks, or poisonous gases. The climate portent will only work in earth-like atmospheres.

22) Clothing

CLASS: All
DURATION: Until destroyed
WATE: Varies
EXPS/VALUE: 39/Varies

Clothing includes a complete suit of stuff: socks, pants, shirts, jacket, boot covers, and a helmet net or hat. The clothing is specialized, and its weird nature can be determined on Table 48.9, *Clothing Type*. Special clothing can be replaced by a single cloak (30% chance) in order for it to be worn over bulky armour. Clothing cannot be used in conjunction with powered armour.

Table 48.9: Clothing Type

DIE ROLL	CLOTHING TYPE
01-30	Compucammo
31-35	Computerized
36-55	Displacement
56-75	Jump
76-99	Stealth
00	Other

Compucammo (10000): Compucammo is a sheet of photocell detectors and photocell emitters. The detectors on one side the suit alter the emitters on the opposite side of the suit. This dynamic camouflage projects what is behind the mutant onto the front of the suit making the wearer virtually invisible.

When the suit is activated observers must make a difficult (d20) AWE roll to even notice the persona. If the persona remains motionless and is actively hiding observers must make an improbable (d50) AWE roll. If the wearer engages in combat at all she will be seen with an easy (d10) AWE roll. Compucammo will assist sneaky PT rolls with +25 to the die roll.

Computerized (2000): This clothing will always be a full tuxedo suit. Throughout the suit are detectors which analyze the clothing around the room, and automatically tailor the suit to match the crowd. This is carried out by retractable filaments that adjust the suit's shape, and photo emitters that subtlety alter the suit's colour. This will award the persona with a bonus of +200 on her social standing, and +2 on CHA while wearing the suit.

Displacement (35000): A displacement suit has hologram that projects an image of the wearer a few decimeters away from where she actually is. The suit is activated by the persona during combat and it increases her armour rating by +75.

Jump (1000): The jump suit maintains a safe gravity for the wearer regardless of what her environment is subjecting her to. She will be protected from the effects of gravities varying between 0 and 10 g. If the gravity is being used as an attack on the person she must make a difficult (d20) DEX roll, or be affected the same as everyone else.

Stealth (500): The stealth suit is the classic sneak suit that is worn by spies, commandos and the like. The suit absorbs sound around the persona, making her virtually silent. The stealth suit also absorbs most detection radiations like light, sonar and infrared, making her harder to see in the dark. In darkness the stealth suit will offer a +20 bonus on sneaky PT rolls.

23) communicators
CLASS: All, mech
DURATION: Until destroyed
WATE: Varies
EXPS/VALUE: Varies/Varies

There are several communication transceivers that can be rolled on the Communicator Type Table. They mainly vary in size, which affects transmission range. Rarely will a single communicator be rolled, there will usually be several available to ensure the artifact is useful to the expedition.

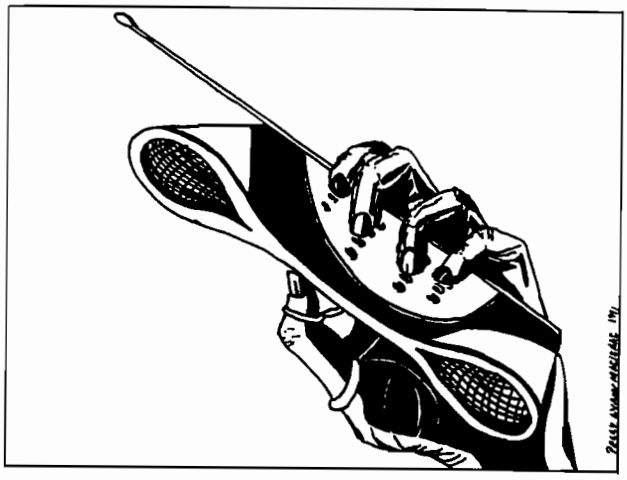
Each transceiver has a 20% chance of being able to transfer computer data and robot talk. There is a 5% chance that the device will be a lazer communicator, which beams invisible light. There is a 1% chance that the transmitter will be telepathic. Telepathic transmitters can choose any mind with range to be the receiver, but the receiver can only transceive if she has a telepathic communicator.

IIII

Table 48.10: Communicator Type

DIE ROLL	TYPE OF COMMUNICATOR
01-14	Dental
18-31	Collar
32-48	Wrist
49-65	Handheld
66-82	Backpack
83-98	Vehicle
99	Spacevehicle
00	Other

Dental (100/300): Dental communicators are very light, no more than 5 gm, and can be capped over one of the persona's teeth. When in the mouth of the persona, she can communicate with her expedition without speaking aloud. The wearer listens to communications via vibrations of her skull that are transmitted along the jaw. These communicators have a 500 meter range, and will number 2 to 12.



Collar (25/200): The collar communicators are small adhesive transceivers that the persona can attach anywhere. The collar communicator has range of a 1 kilometer, a wate of 30 gm, and will number 3 to 30.

Wrist (25/500): Wrist communicators are larger transceivers that can be worn as a bangles on the wrist, as a huge earring, or as a nose ring. They have a 12 kilometer range, a 100 gm wate, and will number from 1 to 10.

Handheld (25/1000): Handheld communicators are the standard transceivers that one would expect to find. These could be radios, or cellular telephones, but either way they can communicate amongst each other. These communicators are slightly programmable, and have multiple channels. Mechanics can engage in security electronic countermeasures (security scrambling of their signals) with a 4DD maneuver. These communicators have a 24 kilometer range, a 0.5 kg wate, and will number 1 to 6.

Backpack (200/10000): The backpack communicator is a powerful, yet portable, radio station. A mechanic using this radio can engage in electronic countermeasures within the range of the backpack. This means that a mechanic can use the backpack communicator to camouflage her communications, jam others, locate transmissions, and be a general terror on the airwaves. The referee will decide the DD of such maneuvers. The backpack communicator will give the any persona a +15 PT

roll bonus on communication maneuvers. The backpack communicator has a planetary range of 100 to 600 kilometers, a wate of 15 kg, and will come with 0 to 9 (d10-1) handheld communicators.

Vehicle (400/20000): A vehicle based communicator will allow the persona to engage in virtually any electronic countermeasures (ECM) that she desires, and mechanics will enjoy a +25 bonus on their PT roll when carrying out ECM maneuvers. The vehicle radio must be powered by a vehicle power plant, or some other power source. It has a planetary range up to 10000 kilometers, and can also broadcast to spacevehicles in orbit. The communicator has a wate of 65 kg. The vehicle communicator will be accompanied by 1 to 6 backpack communicators described in the previous paragraph.

Spacevehicle (600/100000): The spacevehicle communicator is a transmissions lab that allows even the most ridiculous planetary ECM maneuvers to be carried out. The communicator can be used to manipulate voices that have been eavesdropped, and synthesize a new and confusing message.

On a planetary scale the transceiver can communicate with 1 to 6 vehicle communicators, and all the subsidiary communicators that they control. For instance a spacevehicle communicator could monitor, encrypt and manipulate the signals of 4 vehicle communicators, 12 back pack communicators, and 63 handheld communicators. All of this should be included in the value of the spacevehicle communicator.

The communicator has a wate of 200 kg. It can carry out orbital to planetary communications with ease, and it can communicate with another spacevehicle com-municator up to 2 to 12 light years away.

24) Compass

CLASS: Nomad
DURATION: Until destroyed
WATE: 1.5 kg
EXPS/VALUE: 93/250

A compass is a direction maintaining device, or anything that attains a constant direction for reference. This compass will maintain any direction programmed into it, or any of several standard directional indicators. The compass accounts for any deviations in delineation, gravity, pressure, or climate. The compass works underwater, in zero gravity, or in a vacuum. This device will aid a nomad with +12 on any travel oriented PT rolls, and +8 on all her nomadic PT rolls. .

25) Compukit

CLASS: Mechanic
DURATION: As needed
WATE: 3.0 kg
EXPS/VALUE: 40/5000

The compukit is a computerized tool kit that has data sensors in the tools and other special electronic analyzers. The compukit is designed to be used by mechanics, and aids them on their performance table rolls (+20 on PT roll, or drop 2DD).

26) Computers

CLASS: Mechanic, varies
DURATION: As needed
WATE: Varies
EXPS/VALUE: Varies/Varies

Computers are black boxes of information that the persona can access. There are two different types of computers that a persona can get a hold of. These are class computers, and AI computers (artificially intelligent). The first type is the most common, and 85% of computers will be class computers. Neither type of computer requires great technical expertise, and the two types are discussed in the following paragraphs.

Class Computers: Class computers have a wate of 10 kg, and a technicolor keyscreen touch display. They appear to be glorified laptop computers. They have no print out, and they do not talk. The persona uses the machine to access information about her profession. The storage of information is arranged by icons in a haphazard hierarchic manner. No-one is really certain what information the computer is programmed with, how accurate the information is, or how well the persona will access the information. It is assumed that the persona will be adding her own information into the class computer as she advances in experience levels.

Software can be purchased that will assist the persona with particular tasks. If a spie were to buy some safecracking software it may allow her to carry out a certain bypass security maneuver without a hitch. There also might be software that explains how a veterinarian can kill a certain infection.

The class computer can only assist the persona on those maneuvers that are technical in nature. For instance a spie computer may have a list of padlock serial numbers, a few encryption codes, or incomplete instructions on programming a bank machine, but it couldn't assist the persona in martial arts, or stealth maneuvers. So a mechanic's class computer would be useful for virtually all her maneuvers, but a mercenary's class computer would be useful for very few maneuvers.

Class computers aid the persona in her PT rolls. Whenever she uses an appropriate class computer her PT roll bonus will be a random +3 to 30. The bonus is always random, but the player can roll once for every 3 levels of experience that her persona has. Thus a 9th level veterinarian would get 3 rolls on 3d10, taking the highest of the 3 rolls. To determine the class computer type use Table 48.11, *Class Computer*.

Table 48.11: Class Computers

Die Roll	Class Type	Computer Notes	Exps/Value
01-14	Biologist	all PT rolls	900/1100000
15-28	Mechanic	all PT rolls	900/1100000
29-42	Merc	Targeting	900/500000
43-56	Nomad	Charts, maps	900/750000
57-70	Nothing	cash register	1800/350
71-84	Spie	illegal	450/2000000
85-98	Vet	all PT rolls.	900/3700000
99	Knite	Mantras/chapel	999/Special
00	Other		

AI Computers: Artificially intelligent (AI) computers can talk, carry out calculations and intake data all at the same time. The artificial intelligence computers are the thinkers of the inorganic world. The machines can run on positronic brains, nanocircuitry, or organic computation systems. What ever the referee chooses, the computers all have one thing in common. They operate on a Multi-tasking Open Memory system.

The computer system has earned the nickname MOM. This acronym reflects the maternal nature of the computer which is very protective of all anthropomorphs. The title of MOM does not indicate how the referee should run her AI computers. Maternal doesn't indicate that the computer has to masculine or feminine, but it does indicate that the computer is programmed to protect and assist its anthropomorph charges. Evil and manipulative MOM computers do exist. They been subject to a procedure called Safeguard

Terminology Evasive Programming. Evil AI computers are commonly called STEP MOM computers.

There are 6 levels of AI computers, and they all incorporate the MOM series title. The lowest level is a MOM computer, the MOM is a basket ball sized sphere that has a wate of 8 kg. All MOM series computers must have a power source to function. The next computer levels are the grand MOM and great grand MOM. These are abbreviated G^1MOM and G^2MOM. The highest known AI computer level is a G^5MOM. Each progressive level of MOM computer is more powerful than the first, and can handle additional AI peripherals.

The computer will have one roll on Table 48.12, *AI Computer Peripherals* per computer level. These peripherals allow the computer to become a pedantic expert in some finer point of the humanoid world. Each peripheral has a wate of 2 to 16 kg, and a value of 750000. A well equipped MOM computer could have a wate of several hundred kilograms, and spout exacting information about any number of irrelevant topics. To begin programming a MOM series computer is a 25DD maneuver, and the difficulty should be adjusted upwards as the referee sees fit.

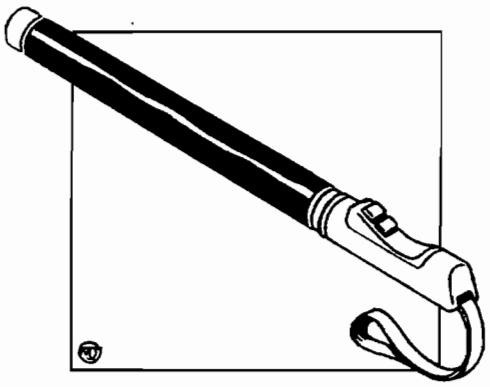
These computers are incredibly complex, and personalities are likely to appear through programming faults. Roll on the referee persona Personality Table, in chapter 8, if you desire your MOM computer to have a personality trait.

MOM Computer Type

Die Roll	AI Level	Computer Model	Wate	Exps/ Value
01-50	1	MOM	8 kg	200/5M
51-70	2	G1MOM	18 kg	400/10M
71-80	3	G2MOM	28 kg	600/20M
81-90	4	G3MOM	48 kg	800/40M
91-97	5	G4MOM	88 kg	1000/80M
98-99	6	G5MOM	188 kg	1200/160M
00	Other			

Table 48.12: Computer Peripherals

DIE ROLL	COMPUTER PERIPHERAL	PERIPHERAL EXPLANATION
01-04	Administration	Maintain records of personnel
05-08	Advisor	Give good sagely advice
09-12	Appraisals	Estimate value of artifacts
13-16	Banking	Monitor a banking system
17-20	Book reader	Reads little golden books
21-22	Building control	Surveillance, lights, doors
23-25	Class computer	+4d10 on PT rolls, see above
26-28	Combat control	Tactical advice
29-33	Communications	Monitors and communicates
34	Compiler	Add 1-4 extra peripherals
35-36	Construction	Manage construction
37-40	Decoder	Break codes
41-44	Detectors	Detects anything
45-48	Diplomacy	Makes diplomatic decisions
49-52	Entertainment	Entertains expedition
53-56	Etiquette	Intersteller etiquette
57-60	History	Knows much of milieu
61-64	Industrial	Operate a plant
65-68	Law	Applies empire law
69-72	Mapping	Maps surrounding area
73-76	Mechanical	Talks with other machines
77-80	Medical	Runs medical equipment
81-84	Navigation	Finds paths
85-88	Printout	Outputs hardcopy (rare)
89-91	Robot	Controls robots
92-93	STEP	Ignore anthropomorp safety
94-96	Translation	Understands languages
97-99	Weapons	Controls ordinance
00	Other	
One roll per computer level		



27) Control Baton

CLASS: All
DURATION: 10 uses
WATE: 2.5 kg
EXPS/VALUE: 631/125000

The control baton is similar in appearance to any marshal's baton, except for two buttons located on the hilt. One button will completely immobilize a suit of powered armour. The other will re-mobilize it. There is a 40% chance that this will work on a specific suit of powered armour. If the baton does work, the persona within the armour is at the mercy of the baton holder.

The control baton disables the armour wearer's physiological connections to the suit. If the persona will regain control of her powered armour, in 5 to 50 units. The armour can be immediately turned off again. The baton will not allow the armour wearer to come to harm, but once safety is reached the powered armour will become a prison. E.g., the armour's hover would not shut off, and drop the persona to her death. The baton has a range of 50 hexes. A mechanic with a control baton will earn a bonus of +15 when making PT rolls involving powered armour.

28) Cords

CLASS: All
DURATION: As needed
WATE: Varies
EXPS/VALUE: Varies/Varies

Cords can be used as rope for climbing, tieing things down, making macrame or whatever. These are special cords, of course, and their values, and wates are listed in the paragraphs following Table 48.13, *Cord Type*. The value listed is the value per hex of cord, while the EXPS value is the maximum regardless of cord length. There will be 3 to 300 hexes of cord.

Table 48.13: Cord Type

DIE ROLL	CORD TYPE
01-33	Alloy
34-66	Grav
67-99	Monofilament
00	Other

Alloy (5/5): Alloy cord is simply stronger than normal cord. It is lighter and more expensive too. Alloy cord has a wate of 0.1 kg per hex of length. The cord can support 750 kg without making any special accommodations.

Grav (5/200): Antigrav rope can be thrown into the air and it will suspend itself and up to 200 kg of wate. The grav rope must contact a solid surface to function, like the ground, and cannot hover in the air unsupported. When inactive and being carried, antigrav rope has a wate of 100 gm per hex in length.

Monofilament (25/150): Monofilament is only a few molecules thick, but all the energy of those molecules are focused on keeping the line together. The very thin wire is extremely dangerous, and will cut into a persona if it is mishandled. The line will inflict 2 to 12 hit points of damage if the persona fails a DEX roll while handling it. Monofilament wire can support 1500 kg in wate without making any special accommodations.

29) Cutters

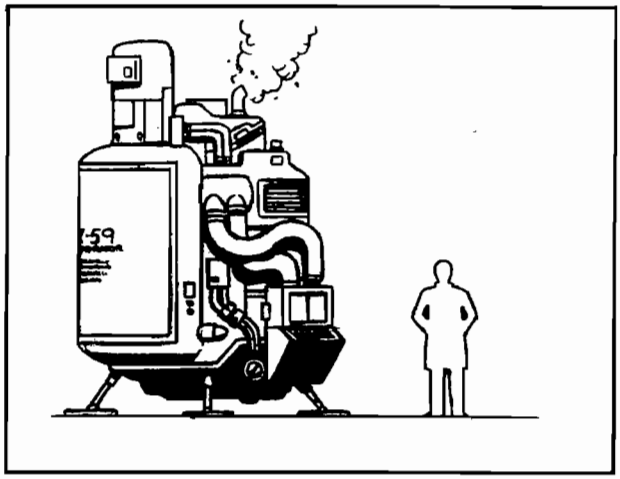
CLASS: Mechanic
DURATION: 216000 units
WATE: 0.6 kg
EXPS/VALUE: 390/Varies

Cutters are special cutting devices which can cut through most known substances. A cutting saw will be able to cut through stone, alloys, or spacevehicle hull metal. The players should be forewarned that the ref will have "unknown" substances somewhere in her campaign. The chance of cutter working on a particular material can be determined by rolling Sphincter dice, as described in chapter 16, Special rolls.

There are four distinct types of cutters. All of them are the same in that their cutting prowess includes safety features that ensure they cannot be used on organic materials. The lazer cutter will slice through a suit of armour, but leave the persona inside unharmed. This is a safety precaution for a device that is designed for industry, and not combat. The cutter type is rolled on Table 48.14, *Cutter Type*. The cutters cannot be used on unwilling targets. Ambushed robots can be damaged by a cutter, inflicting 3 to 30 hit points in damage.

Table 48.14: Cutter Type

Die Roll	Cutter Type	Cutting Range/Depth	Cutting Rate(1 hex)	Cutter Value
01-40	Bucksaw	None/Saw depth	10 units	150
41-75	Power	Must touch/5 cm	6 units	300
76-95	Sonic	10 cm/10 cm	3 units	900
96-99	Lazer	1 hex/15 cm	1 unit	25000
00	Other			



30) Dehydrator

CLASS: None
DURATION: Power source
WATE: 2301 kg
EXPS/VALUE: 2069/10000000420

The dehydrator is an enormous, and enormously valuable, piece of equipment. The dehydrator cryogenically suspends an object, and then ejects up to 99.9942% of its unnecessary molecular components. It also synthesizes a complex memory molecule which can reconstruct the artifact when water is added. The dehydrator then bags the gray powder in a non-descript cellophane bag. The finished product will have a random wate between 1 and 10 grams (d10). See miscellaneous equipment #38, Instant Stuff.

The machine must be attached to a major power plant, and when in use it generates intensity 1-8 radiation in a 10 hex radius.

The dehydrator will safely dehydrate any molecular combination (organic or inorganic) with 99% efficiency. If something goes wrong with an organic sample it will get 1 to 6 physical mutations when rehydrated. If something goes wrong with and inorganic sample the machine will receive a damage roll (see chapter 21, Equipment Damage). A power failure during dehydration will destroy the specimen in the most disgusting manner possible. The device can convert up to 750 kg of matter, and then it must cool down for 12 hours.

31) Detectors

CLASS: All, varies
DURATION: 532000 units
WATE: 3.5 kg
EXPS/VALUE: 1200/950

Detectors are classic devices for leading expeditions to excitement, fun, and danger. All detectors are black boxes, with quite often nothing more than a red light on top, a button on the side, and a grip that ensures its business end is pointed outwards. The detectors only give a binary answer. The detectors will yield direction, and degree, but they do not give type, value or any other useful information about the source.

A lie detector, will simply flash red if a lie is detected. The brightness of the light may depend on the severity of the lie. The ref should be prepared to be innovative, and have fun with detectors. Directional detectors, like mineral detectors, will light up more brightly when pointed in the direction of the source. Movement detectors will display brighter points of light moving above the main red light.

Detectors are 90% efficient. They will discover the mutant, detect the lie, or find the bomb 90% of the time. If a detector is used immediately after it fails a detection roll, there is nothing to keep the item from being detected this time around. Detectors will usually find the closest deposit. Each use drains 30 units of duration. For every combat unit the device is on, a unit of energy is drained. Roll on Table 48.15, *Detector Type* to determine what the persona can find.

Table 48.15: Detector Type

DIE ROLL	DETECTOR TYPE	RANGE
01-05	Alarm	10 hexes
06-10	Batteries	1 kilometer
11-15	Communications	10 kilometer
16-17	Danger	5 hexes
18-20	Detectors	10 hexes
21-25	Energy	100 kilometer
26-28	Explosive	1 kilometer
29-31	Fresh fruit	5 kilometer
32-35	Injury	1 hex
36-40	Lie	1 hex
41-45	Life	1 kilometer
46-50	Metal	1 kilometer
51-55	Mineral	1 kilometer
56-60	Movement	50 hexes
61-65	Mutant	1 hex
66-70	Poison	10 hexes
71-75	Radar	0 hexes
76-80	Radiation	10 hexes
81-85	Robot	10 hexes
86-88	Time anomalies	3 kilometer
89-93	Trouble	75 hexes
94-95	Watches	10 hexes
96-99	Water	50 hexes
00	Other	

32) Detonator Box

CLASS: Mercenary, mechanic
DURATION: Special
WATE: 10.7 kg
EXPS/VALUE: 530/10000

The long range detonator is used to explode bombs from a safe distance. Whenever real time detonation, as opposed to a timer, is required a radio beacon is used. The detonator box uses a radio beacon to set off a detonator which in turn detonates the bomb. This artifact consists of one detonator box, (the transmitter), and 1-10 detonators. The detonators have a wate of 1 kg, and must be attached to the bomb. The detonators will explode like a fragmentation grenade (chapter 45, Grenades and Aerosols) in their own right. The detonator box is responsible for 10 detonators, and hopefully the detonators will be properly marked. If the mercenary pushed a button expecting a bridge to blow up, but a grenade explodes in her backpack instead, it could be deathly embarrassing. The detonator box offers +15 on PT rolls involving demolitions maneuvers.

33) Filters

CLASS: All
DURATION: 10 uses/2 years
WATE: Negligible
EXPS/VALUE: Varies/Varies

Filters protect the persona's sensory organs from short term hazards. The filters last for 10 defences, or for 2 years, before deteriorating. The filters consist of nose plugs, ear plugs, and contact lenses. The filters allow the the sensor to function normally, but will filter out any damaging effects. The filter type is rolled on Table 48.16, *Filter Type*. Each filter is discussed in the following paragraphs. The EXPS and value are given in brackets.

Table 48.16: Filter Type

DIE ROLL	FILTER TYPE
01-40	Ear filter
41-80	Eye filter
81-99	Nose filter
00	Other

Ear filter (190/1000): The ear filter sits safely in the ear, and allows normal function of the ear. The filter changes its structure when subject to any deafening attack. The spongy ear filter will defend against both the decibels, and the vibrations of sonic attacks of any sort. A save vs. mental attack is awarded to completely escape the damage. The persona's MSTR is doubled when attempting a save versus sonic attack, and this value cannot be less than 16.

Eye filter (350/2000): The eye filter is a contact lens that is flash resistant. Whenever the eyes are subject to any blinding attack the contact lenses will go opaque and lower the chance of damage to the eyes. All blinding attacks from flashes, and such, earn a save vs. mental attack. If a save is allowed, the wearer's MSTR will be doubled, this value can't be less than 16.

Nose filter (190/1000): The nose filter allows the persona to shut her mouth, and while breathing through the her nose filter become virtually immune to poisonous gases. The filters effectively double the persona's CON when saving vs. respiratory poison gases. The effective CON cannot be less than 16.

34) Fire Logs

CLASS: All
DURATION: Varies
WATE: 2 kg
EXPS/VALUE: 99/Varies

Fire logs seem a strange item to have on a high technology equipment list, but these logs are unique. They are also preserved in the miscellaneous equipment for posterity. All of the fire log types have a rip cord starter, which ignites them with the pull of a cord. A roll on Table 48.17, *Fire Log Type* will determine the type of fire log, its duration, and value.

Table 48.17: Fire Log Type

DIE ROLL	FIRE LOG
01-25	Wooden
26-50	Coalex
51-75	Glow Pro
76-99	Synthex
00	Other

Wooden (5): A pull of the rip cord produces 2 hours of colourful flame heat.

Coalex (10): A pull of the rip cord releases 8 hours of coal based colourful and warm flame heat. Coalex is unaffected by all but the most severe meteorological conditions

Glow pro (200): The glow pro is a solid cylinder that glows a warm flame coloured light and emits heat to all within a 3 hex radius. The glow pro can be rebagged and relit later. It functions exatmo if necessary, and is good for 5 days continuous burning.

Synthex (500): The synthex fire log is the stealth heater of the fire log industry. It gives off no heat, or light, and warms all within 4 hexes by emitting interference patterns that vibrate molecules. The fire log will function in any kind of atmosphere, and will heat the area of effect for 5 days. If necessary the fire log can be rebagged and relit later.

35) Food Culture

CLASS: All
DURATION: Special
WATE: 1.5 kg
EXPS/VALUE: 103/5000

A food culture is a polydodecahedral shaped (20 sided) colony of fungus on a stick. Although it sounds unappetizing the food culture is sanitary, tasty and very nutritious. The culture can supply a normal (medium sized anthropomorph) persona with the food to survive for 1 day. The food culture will grow back fully in 6 hours, and be ready for breakfast. The culture also contains a resource of water within its spongy matrix, supplying the persona's water needs too. A food culture cannot survive drastic changes in climate. Moving from one planet to another, and even a drastic biome change may kill the food culture.

36) Generator

CLASS: Mechanic
DURATION: Special
WATE: 25 kg
EXPS/VALUE: 45/750

A generator is a big battery that converts fuel to electrical energy. The fuel tank of the generator will hold enough fuel to run 100 to 1000 batteries worth of power. The type of fuel that the generator needs is determined by the referee. Distilled water is an excellent modern day fuel source. The generator will only plug into those artifacts with a generator input (power source), or a battery slut (miscellaneous equipment #16).

37) Hooks

CLASS: All, spie
DURATION: 10 uses
WATE: 0.2 kg
EXPS/VALUE: 103/2000

There are two different types of hooks, molecular, and inertia, both of which can support up to 250 kg of wate at one time. The hooks have handles, and can be used to climb (be aware of their maximum wate capacity). They are also aerodynamic and can be fired from a job rifle (see chapter 46, Guns). Once attached the hook is permanent, unless destroyed or immediately detached. The hook will not detach while supporting a wate in excess of 5 kg.

There is a 42% chance that the hook will be an inertia hook. The inertia hook will not work in lo gravity, but can attach to virtually any horizontal surface (a roof, or ceiling) that it contacts. If the hook is not an inertia hook it will be a molecular hook. The molecular hook will attach to almost any (except plastic and ceramic ones) vertical surface that it comes into contact with.

38) Instant Stuff

CLASS: None
DURATION: Permanent
WATE: 1 to 10 gm
EXPS/VALUE: 400/900000 plus special

Instant stuff comes in transparent a cellophane-like wrapper. The labels of which have long since worn off. Nobody really knows what will be produced when the instant stuff is added to water. Note that the consequences of mistaking instant stuff for food could be disastrous for a hungry persona. When water is added to the instant stuff, a hydrogen oxide attraction reaction (which doesn't exist in our world) is initiated, and the stuff uses the constituent components of these attracted molecules to "reconstruct" its former shape. A roll on Table 48.18, *Instant Stuff* will yield the type of stuff that will be produced.

Table 48.18: Instant Stuff

DIE ROLL	TYPE OF INSTANT STUFF
01-20	Tools; +10 on mech PT rolls
21-80	Concrete; 1 to 4 hundred kg, 1/10 value
81-90	Water; 1 to 4 hundred liters, 1/10 value
91-99	Special; Roll on Toy Table, add value
00	Other

39) Jet Boots

CLASS: All
DURATION: 512000
WATE: 5 kg per boot
EXPS/VALUE: 900/45000

Jet boots appear to be oversized hiking boots with diminutive jet engines attached to the sides. The boots are gyroscopically stabilized so that only the most violent of actions will tip the persona over.

The boots move at 21-30 (20+d10) hexes per unit, and when necessary have a handling class equal to half the persona's DEX. If the persona is attempting peculiar maneuvers, she may have to make a roll on the driving performance table found in chapter 17, Driving. One battery set will last for 5 days of continuous flying. A persona wearing jet boots cannot attack with non-powered type A weapons. An activity such as spearing would certainly tip the persona over. Jet boots do not hover.

40) Jet Backpack

CLASS: None
DURATION: 512000
WATE: 30 kg
EXPS/VALUE: 820/110000

The jet backpack can carry 30 kg of equipment in its hold, and 150 kg of persona in its straps. The jet backpack is flown by body movement, and only type C weapons can be used while flying. The backpack has a maximum speed of between 21 and 40 h/u (20+d20), and can travel continuously for 5 days on one battery set. If the persona is attempting peculiar maneuvers, she may have to make a roll on the driving performance table found in chapter 17, Driving.

41 Joiners

CLASS: Mechanic
DURATION: Special
WATE: Varies
EXPS/VALUE: Varies/Varies

IIII

Joiners are artifacts which join materials together. The joiner may be a device, or a substance. For instance glue, tape and soldering irons are all joiners. Roll on tTable 48.19, *Joiner Type* to clarify the type of joiner that the artifact is. Each joiner is discussed in the paragraphs following the table.

Some joiners make permanent joins. When this occurs it is as though the substances joined were one material since production, and breaking the bond is the same as breaking the solid object. The bonds of non-permanent joiners are more easily broken. Such bonds may be broken on a PSTR roll. The difficulty of the PSTR roll depends more on the strength of the material than on the strength of the bond.

Sonic (90/5000): A sonic joiner, or sonic welder, employs acoustic radiation to cause the molecules of substances to intermingle and meld together. The joiner must contact the substances, and can join things at the rate of 1/2 hex per unit. The joiner's wate is 4.7 kg, and battery life is 21600 units of joining. Any mech using this device will earn a +5 bonus on repair PT rolls.

Table 48.19: Joiner Type

DIE ROLL	JOINER TYPE
01-25	Sonic
26-50	Lazer
51-75	Glue
76-99	Tape
00	Other

Lazer (90/7000): A lazer joiner employs focused lazer light to melt substances together. The joiner has a range of 10 cm, and can join things at the rate of 1 hex per unit. The joiner's wate is 8.9 kg, and battery life is 21600 units of joining. Any mechanic using this device will earn a +9 bonus on repair PT rolls.

Glue (100/400): This is the standard instant setting, stick all chemical, it melts the contact points between the substances together. It can come in a tube, a brush applicator , or an adhesive spray. The glue requires no setting time, and can be applied in a rush at a rate of 10 cm per unit. A standard order of glue is good for 1 hex of application.

The bond will be a permanent one 10% of the time. Glue gives a mechanic a +5 PT roll bonus when making repair maneuvers. Mechanics can also make special maneuvers with this glue, like mixing it so that it sets at a predetermined time, or so that it loses its adhesiveness at a later date.

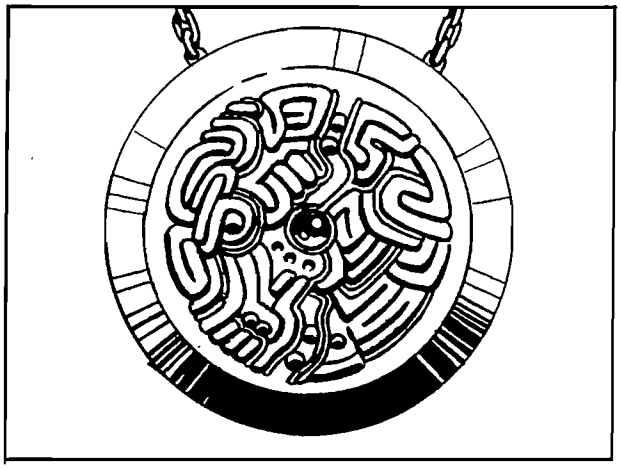
There is a 30% chance that this glue will solely work on organic materials. This will double its value and give vets a bonus of +5 when doing repair PT rolls.

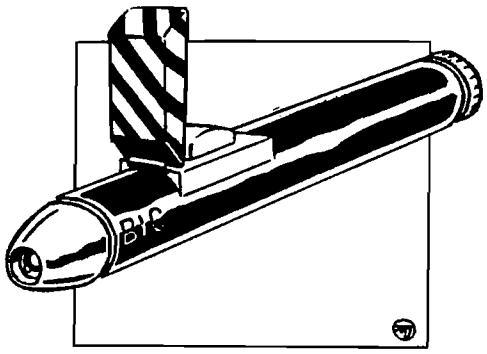
Tape (100/250): The tape is super adhesive and saturated with chemicals that melt it into the compound that it is attached to. Tape is extremely strong, and forms a permanent bond. Tape can be prepared to set instantly, set at a later date, or lose its adhesiveness at a later date. Tape is not re-usable, and one roll is good for 3 hexes of taping. Mechs using tape earn a PT roll bonus of +6 when making maneuvers that require attaching things.

42) Kirlian Talisman

CLASS: Knite
DURATION: Until destroyed
WATE: Negligible
EXPS/VALUE: 200/Special

The Kirlian Talisman is a concentration symbol that allows knites, or anti-knites, to be more proficient at their psionic abilities. A kirlian talisman will give either type of knight +15 on her PT rolls, or -2DD, when practising her abilities. The kirlian talisman can also be used as a weapon against knites of the opposite caste. A thrown talisman can hit a knite, destroying the talisman, and knocking 0-3 points of MSTR off the target. The mental strength lost is only temporary, and 1 point is returned per 8 hours of sleep,. While the target's MSTR is less than 18 she cannot use any of her psionic knite abilities.





43) lazer pen

CLASS: Nothing
DURATION: 10000 sentences
WATE: 90 gm
EXPS/VALUE: Special/29.6

A lazer pen will burn a crisp black line (of variable width) onto any surface, at any angle in virtually any environment (even a vacuum). The pen can write on flesh, but will not damage essential organs such as eyes. The EXPS value of the pen is 2042 for nothings, and 50 EXPS for all other classes.

IIII

44) Lights

CLASS: All
DURATION: 532000 units
WATE: 1, 2, 3, or 4 kg
EXPS/VALUE: 10/Varies

There are several special illumination types covered here. Every special illumination has a normal mode. When used in the normal white light mode the artifact is indistinguishable from a normal flashlight. Both lighting modes drain batteries equally. Each light gets one roll on Table 48.20, *Special Illumination*.

The normal light will will have a range of 16, 32, 64, or 128 hexes (2 to the power of 3+d4). This will also be the range of the light's special illumination. The width of the light beam spreads as it gets further away from the source. The beam width will be less than a hex wide at the light source, and will increase in width by 1 hex per 16 hexes of range. Having terminus widths of 1, 2 4, and 8 hexes. Thus a wall 64 hexes from the light will be lit 2 hex in radius (4 hexes in diameter).

Table 48.20: Range of Lights

DIE ROLL(d4)	LIGHT RANGE	TERMINUS WIDTH
1	16	1
2	32	2
3	64	4
4	128	8

All distances and widths are in hexes.

Table 48.21: Special Illumination

DIE ROLL	SPECIAL ILLUMINATION, NOTES	VALUE
01-20	Lazer, +60 to hit illuminat. targets	2000
21-40	Flash, blinds 3-30 units, inten. 3-18	1000
41-60	Glow, +90 to hit glow. targets	15000
61-80	Infrared, only visible to IR sensors	10000
81-99	Ultravision only UV sensors	20000
00	Other	

45) Locks

CLASS: Mechanic, spie
DURATION: As needed
WATE: 1.0 kg
EXPS/VALUE: 200/Varies

Whoever has rolled this item has a lock for their own use. The device can be attached to whatever the persona desires. If a spie rolls locks, she may in future earn +20 on her PT roll when attempting to bypass that lock type. Roll on Table 48.22, *Lock Type* to determine the lock type and its value.

Table 48.22: Lock Type

DIE ROLL	LOCK TYPE	LOCK NOTES	VALUE
01-16	Normal	Simply a key	10
17-30	Curved	More difficult to pick than a key lock	30
31-44	Magnetic	Non-descript cylinder unlocks lock	90
45-58	Coded	Buttons to push, analyzes sequence, and pressure	180
59-72	Digitprint	Analyzes press of digit	820
73-86	Voice	Analyzes voice, and message	2520
87-99	Card	Special card, analyzes manner inserted	177640
00	Other		

46) Mapper

CLASS: Mechanic, nomad
DURATION: Special
WATE: 400 kg
EXPS/VALUE: 1493/250001

The acoustic mapper, or lazer mapper, is an aerial device which maps the terrain of a planet, in a very detailed manner. The mapper cannot penetrate into buildings, but will identify structures that could not have arisen from the planet's normal tectonic development, e.g., buildings, roads, mines, logging, dredging, canals, dams, irrigation, etc.

The acoustic mapper can map one earth sized world before refuelling. The acoustic mapper can plot an earth sized planet in 10 days. Smaller map sizes are proportionally faster.

47) Mindlink

CLASS: All, mechanic
DURATION: As needed
WATE: 2 kg
EXPS/VALUE: 900/195000

The mindlink is a non-powered interface which allows the persona to transfer information directly from her mind to the proper storage facilities inside computers. The device also allows her to remove information, and to peruse files. The larger the computer, the greater the chance she will be able to plug in. Search, and computation, times are the same as for the regular computer. The mindlink allows the persona to plug in like an illegal terminal. When using a mindlink a mechanic will earn a PT bonus of +42 for computer maneuvers.

48) Money Counter

CLASS: Nothing
DURATION: Until destroyed
WATE: 8 kg
EXPS/VALUE: Special/15000

The money counter is a computerized box loaded with heaps of artificial intelligence, and video sensors. All of which are devoted solely to the counting of money, and estimation of the value of non-technological artifacts.

A money counter is also a safe which can store up to 20 kg of valuable materials. The machine will grind, chunk, and squeak its way through the evaluation. When counting currency the device will always get the correct amount, and will identify significantly different forms of currency, which may be counterfeit, or out of date.

The machine has an 80% chance of correctly estimating the value of artifacts. Correct estimates will be between -9% and +10% of the actual value of the item. Incorrect estimates are assigned random values between 1 and 10000 eps. The money counter is worth 50 EXPS to personas that are not nothings, and 2142 EXPS to nothings.

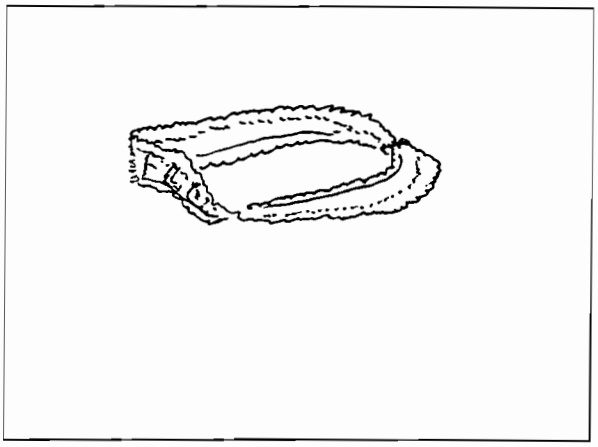
49) Plastic Explosive

CLASS: Mechanic
DURATION: One use
WATE: 1 kg
EXPS/VALUE: 299/2000 per kg

Plastic explosive is an anti-architectural shape charge. Each charge is moldable around its prescribed target, and when detonated will blow the shit out of whatever it is pasted to. The plastic explosive is safe to work with, and can be frozen, or liquified without risk of detonation. The plastic explosive has no effective range, and the detonating persona can stand directly behind the explosion with no fear of damage (says the manufacturer).

It is generally accepted that 1 kg of plastique will blow a 1 hex diameter hole in whatever it is attached to. Flying debris can be a problem for those caught on the wrong side of a charge (say inside a room). Technically the plastic explosive will impart 1000 HPS of damage when it is properly applied, and 100 to 600 HPS when not. If 1000 HPS equals a 1 hex diameter hole, then less damage will produce a proportionally smaller hole.

To properly apply plastic explosive requires a mechanic DD4 maneuver. Detonation of plastic explosives is easily accomplished, yet virtually impossible to achieve by accident. There is a 5% chance that the plastique will be silent, doubling its value. There is also a 15% chance that the plastique will be smokeless, increasing its value by 10%. Usually 1-8 kg (d8) of plastic explosive will be found.



50) Psionic Headband

CLASS: All
DURATION: 1 year
WATE: 0.5 kg
EXPS/VALUE: 590/9900611

The psionic headband helps a persona with her psionic abilities. The psionic headband wraps around the head, and is lies next close to the skin. This psionic amplifier adds 50% to the persona's MSTR when using her MSTR for a mental attack. For psionic defence the headband will double the persona's MSTR. The fortified defensive MSTR of the wearer cannot be less than 15. This is the perfect device for persona's suffering from the defect Psionic Defenselessness, in chapter 58, Mental Mutations. The effects of non-combat mutations are doubled by this artifact.

51) Recorders

CLASS: All
DURATION: 532000 units
WATE: Varies
EXPS/VALUE: 250/varies

A recorder is anything that records data. Most recorders in science record things like seismological information, force, temperature, etc. The types of recorders listed here record audio or video. The artifact will be a video recorder 42% of the time, otherwise a audio recorder is indicated.

Audio: An audio recorder will record any sound radiation that can be picked up by any of the humanoid ears. An audio recorder can record, play and search for certain sounds. The device is so accurate that: sonic attacks can be replayed inflicting half their normal damage; canines will hear recorded noises that humans cannot; and computers may receive acoustic data transfers. The recordings can also be replayed and edited.

The complete audio recorder will have a wate of 4.2 kg, and a value of 900. A smaller less complete version (record only), can be found which has a wate of 140 gm, but must be placed in the larger machine to be played back. Each large recorder will have 1 to 6 of these portable units. There are no tapes to be transferred, all of the information is stored in computer memory, which is limitless.

Video: A video recorder records sound and visual images together for a three dimensional moving picture. The picture can be replayed, edited, and manipulated for a complete finished product. The video unit's wate is 10 kilograms, and it can support up to 10 (roll a d10) remote cameras that have a wate of 300 gm each. The video unit can do anything that an audio unit can do with its audio signals. A video unit is worth 27000 plus 1000 per portable camera.

52) Robot

CLASS: All
DURATION: Special
WATE: Special
EXPS/VALUE: Special/Special

The player who has rolled this artifact has generated a robot for her persona. The bot is generated in complete confidence by the referee, and the robot's abilities should only be alluded to when action is necessary. The robot can be generated as a persona robot would in chapter 5, or the referee could moderate the bot by referring to chapter 11, Referee personas. Regardless of what is created the persona is in control of the robot. The exact robot type should always be kept secret. A robot should be played more like an amicable referee persona than a slave. The robot shouldn't be used by the players to upset the balance of the game, and the referee can avoid this by partly role-playing the robot.

53) Robotic Override

CLASS: Mechanic
DURATION: 5 uses
WATE: 18 kg
EXPS/VALUE: 2006/994000

The robotic override is a specialized computer that can reprogram the purpose, and ownership of a target robot. The device has a range of 10 hexes, and must beam data at its target for 0 to 3 units. A to hit roll (type C) with the device's transmitting beam must be made each unit of the required time. At the end of the transmission the bot must save versus poison, intensity 3 to 30, or it will be under the control of the persona.

Another version of the robotic override requires only one unit of programming, but a type A attack must be made with a pick like device. The baton zaps the bot with the programming info, and the bot must save versus poison (intensity 2 to 20), or be controlled.

Either robotic override can have its poison intensity doubled if a DD8 mechanic performance table roll is successful. All robots get a control factor check every day that they are under control of the device. If they regain control of their own crazed psyche they must be overridden again by the controlling persona. Any mechanic with a robotic override will earn a bonus of +20 when working with robots in any capacity.

54) Rocket Rollerskates

CLASS: None
DURATION: 532000 units
WATE: 4 kg each
EXPS/VALUE: 99/12000

Rocket roller-skates can be used by a persona to skate along the ground at much higher speeds than normal. The skates have a gyroscopically stabilized truck system which helps prevent crashes and allows for sharper than normal turns. The rocket roller-skates can only be used in a pair, and need a smooth surface to function on. A pair of rocket roller-skates have a maximum speed of 31 to 50 h/u (30+d20), and a handling class equivalent to the wearer's DEX. There is a 25% chance that a pair of rocket rollerskates will be a rocket skateboard instead. If the persona attempts particularly challenging maneuvers she may have to make a check on the *Driving Performance* table found in chapter 17, Driving.

55) Scopes

CLASS: Mercenary
DURATION: 250 attacks
WATE: 2 kg
EXPS/VALUE: 300 (Varies)/Varies

A scope is any device which aids a to hit roll. The scope could be a telescopic sight on a rifle, a gyroscope attached to a sword, or an arm sight for a throwing dagger. Each scope has a certain to hit roll benefit, and this benefit applies to either type A, type B, or type C weapons. This is determined on Table 48.23, *Scope Weapon Type*.

Table 48.24, *Scope Type* is used to determine what special effects the scope has. The nature of these effects are described in the paragraphs following the table. If the scope increases range, and it is designed for a type A weapon, roll the scope weapon type again. Remember that scope to hit roll bonuses improve the attacker's final roll, and increase the persona's maximum roll.

Autostrike (-50/2000000): These scopes compensate for virtually any error that the persona can make in combat. The player still rolls to hit, but a hit is a critical hit, and a miss is a normal hit. A weapon jam is still a weapon jam, and a therefore a miss. To hit rolls must still be made to check for critical hits and weapon jams. It would be considered bad campaign strategy to use an autostrike scope against an expedition.

Climate (200/10000): The climate scope compensates for any meteorological conditions that could make combat more difficult, when using this scope the to hit rolls suffer no penalties for precipitation, fog, sandstorms or reasonable winds.

Combat (200/1000 per bonus point): A combat scope can be used in the heat of battle to increase

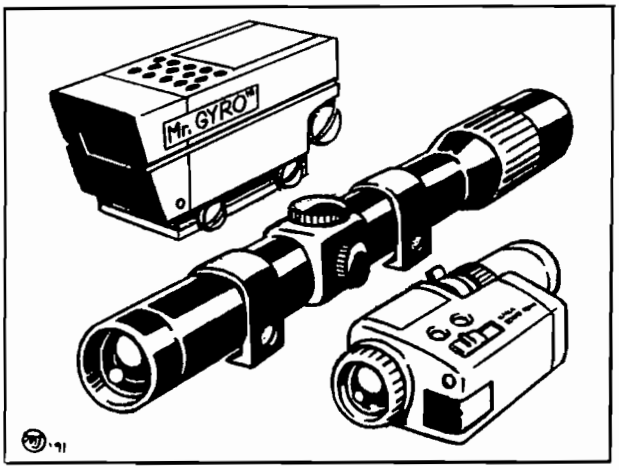


Table 48.23: Scope Weapon Type

DIE ROLL	WEAPON TYPE	EXPS MULTIPLIER
01-02	A	times 10
03-10	B	times 4
11-53	C	—
54-94	D, E, F	—
95-99	Special (Flotto)	times 3
00	Other	

Table 48.24: Scope Type

DIE ROLL	SCOPE TYPE
01	Autostrike
02-11	Climate
13-43	Combat
44-54	Darkness
55-65	Gravity
66-76	Multiscope
77-79	Pacifist
80-87	Range
88-99	Smoke
00	Other

the persona's chances of survival by giving various to hit roll bonuses. The sight uses lazers, and sonar that help prompt the persona to attack at the correct moment. The to hit bonus is rolled on a d4, and is either +30, +60, +90, or +120. The value of this scope is equal to 1000 per to hit bonus. E.g., a scope with +30 to hit is worth 30000.

Darkness (200/600): This is a simple night sight that cancels any penalties for darkness. The scope uses a combination of IR, UV, and whatever else helps darkened attack.

Gravity (200/35000): Computerized stabilizers and gyros balance, and wate, the weapon to, compensate for any changes in gravity.

Multiscope (total/total times 2): This is a combination of several (d4) scopes built into one. The total to hit roll bonus cannot be greater than +120. If more than one scope of the same type is present, then +30 on the to hit roll is given for every extra one. For example, if a multiscope had 3 Darkness sights, it would give +60 to hit in darkness.

Pacifist (350/1000000): The pacifist scope is the non-lethal version of the autostrike scope. It has the ability to determine a target's weak aspects, and turn most any attack into a non-damaging stun attack. The scope will earn a bonus to hit of +20 to 120 (2d6 times 10), but when it hits it will not score damage. The scope will convert the damage into a percent chance to stun the opponent. Each point of damage inflicted will have a 2% chance of stunning the target for 0 to 9 units. The scope can only be used with non-area of effect weapons, like derringers, swords, or full auto rifles.

Range (200/4000): Range scopes reduce the effects of a projectile weapon's decay, by compensating for wind, and gravity effects correctly. The range scope reduces the decay by 3/4. So a weapon that normally has -100 to hit per hex beyond its range would only have -25 per hex when the range scope is used.

Smoke (200/2000): The smoke cutting scope can sight through mist, fog, smoke, or any other fine particulate debris as if it wasn't there.

56) Sincerity Machine

CLASS: All, veterinarian
DURATION: 1 year
WATE: 1 kg
EXPS/VALUE: 230/2000

The sincerity machine is a sublinguistic vocalization analyzer which modifies the speaker's voice such that anything she says sounds nice. The effect is excellent for negotiation, and in general increases the persona's CHA by 3 to 8 (d6 + 2). The sincerity machine can be altered to have a reverse effect which will get the expected reaction. When combined with good looks, and intelligent wording, even coarse profanities can be accepted as compliments. A vet will earn a bonus of +15 when doing maneuvers on conscious personas. This device cannot be used in conjunction with powered armour.



57) Superconductor Suit

CLASS: All
DURATION: Until destroyed
WATE: 0.6 kg
EXPS/VALUE: 50/130000

The superconductor suit is a skintight jumpsuit that the persona wears beneath her regular clothes. The superconductor threads are connected to bio-transceivers. The transceivers pick up nerve impulses, and bypass the regular nerve with superconductor thread, allowing the persona to react faster, and move faster. The suit has a DEX bonus of plus 3 to 8 (d6+2). This device cannot be used in conjunction with powered armour.

Using the device for longer than 1 week at a time will cause the persona to become addicted to the suit. When it is removed the person will return to her regular DEX, and suffer a 0 to 3 point penalty for 1 to 3 days. The referee should remember that virtually any damage taken by the persona will also be taken be the super conductor suit.

58) Support Equipment

CLASS: Mechanic
DURATION: Varies
WATE: Varies
EXPS/VALUE: Varies/Varies

Support equipment is any device which cannot be of any use on its own, but is essential to the performance of other useful artifacts. Chapter 55is devoted to support equipment. The support equipment chapter contains things like batteries, ammo, software and fuel. Roll on Table 48.25, *Support Equipment* supplied here, and then refer to chapter 60, Support Equipment, for more information.

Table 48.25: Support Equipment

DIE ROLL	SUPPORT EQUIPMENT
01-20	1. Ammunition
21-30	2. Batteries; normal
31-35	; multi-cell
36-40	; power pack
41-58	3. Fuel; vehicle
59-60	; spaceship
61-70	4. Manuals; repair
71-80	; instruction
81-84	5. Software; AI
85-89	; Class computer
90	; Spacevehicle
91-99	6. Spare parts
00	Other

59) Targeting Computer

CLASS: mercenary
DURATION: 100 uses
WATE: 20.8 kg
EXPS/VALUE: 395/900000

The targeting computer links up the persona's target, chosen through special binoculars, with the attack of an artillery device. The targeting computer has a 40% chance of being immediately compatible with an artillery piece. If the artillery is not compatible then the mercenary must make a 10DD maneuver before using the targeting computer. If the targeting computer is compatible, then it will either maneuver the artillery on a mobile platform, or it will indicate through the binoculars how the artillery should be properly aimed. Automated targeting is much faster than manual targeting, 1 to 10 units as opposed to the regular 5 to 50 units. Manual targeting cannot be used on a moving target, but when linked with a targeting computer artillery can take on a moving target. The targeting computer will give the attacker no bonus to hit, but it will allow personas otherwise untrained to use artillery. Mercenaries will earn a bonus of +20 on any PT rolls involving artillery when using a targeting computer.

60) Teseract Box

CLASS: None
DURATION: Forever
WATE: Eek!
EXPS/VALUE: 42/Special

A teseract box is a multi-roomed device which appears much smaller from the exterior than it actually is. A teseract box will only occupy 1 hex in space, while its relative dimensions can exceed one hundred 3 by 8 hex rooms. A teseract box will have 100 to 1000 (d10 times 100) rooms arranged in whatever fashion the referee sees fit. This paradox is maintained with the manipulation of time and relative dimension sequencing.

A teseract box can be fitted with a propulsion device. The drives are only taxed with the load of a 1 hex sized box, so incredible distances can be covered by the device. The drive type can only be a special drive (see chapter 52, Spacevehicles) located within one of the teseract box's rooms. A teseract box cannot be moved by any external force.

The teseract box has an incalculable wate, and a pointless value. The value of a teseract box is irrelevant, because no owner will part with hers until she is dead.

The teseract box is more pure fancy than science fantasy, but with the correct drive system (a malfunctioning one), a teseract box can become a source of unlimited adventure. The best part about a teseract box is that the expedition must exit it to carry out whatever stupid business they have. Any items brought into the teseract box must be brought in through the single exterior opening, and that is a normal sized door.

61) Timepieces

CLASS: All
DURATION: Until time runs out
WATE: Varies
EXPS/VALUE: Varies/Varies

Timepieces, or watches, are not essential elements of role-playing, but at least once during a campaign, a persona is going to want a good watch. The watches found here are not just mere timekeepers, but they are calenders, thermometers, and altimeters. There is even a 10% chance of being built into another piece of equipment (like clocks in cars, ovens, etc.). The timepieces are self setting, and conveniently adjust themselves to new planetary systems. After a one day cycle the watch will adjust itself to the new system. Prolonged exposure to another planetary rotation will also reset the calender. All older chronological cycles can be recalled upon request. Roll on Table 48.26, *Timepiece Type* to determine the device's size.

Table 48.26: Timepiece Type

DIE ROLL	TIMEPIECE DESCRIPTION	WATE	EXPS/ VALUE
01-20	Implanted	0	0/75000
21-30	Contact lens	0	1336/10000
31-40	Skin adhesive	0	50/5000
41-50	Nail adhesive	0	50/2000
51-60	Pen [a]	50 gm	5/100
61-70	Wrist[a]	100 gm	3/250
71-80	Table[a]	1.0 kg	5/300
81-90	Wall[a]	2.9 kg	5/300
91-99	Building[a]	10.6 kg	5/300
00	Other		

[a] Should not count as an artifact roll.

62) Visual Aids

CLASS: All, nothing
DURATION: Varies
WATE: 1 kg
EXPS/VALUE: 75/Varies

The visual aids are a host of goggles that help persona's through darkness, smoke, or worse. There are 8 visors that have standard effects, and all are listed on Table 48.27, *Visual Aid*. Refer to the following paragraphs for explanations of the visual aids. Visual aids are often called vizauds.

Table 48.27: Visual Aid Type

DIE ROLL	TYPE OF VISUAL AID
01-10	Binox
11-20	Flexiscope
21-30	Infrared
31-40	Macroscopic
41-50	Microscopic
51-60	NIX M2V2
61-70	Smoke
71-80	Ultraviolet
81-90	X-ray
91-99	ZBGs
00	Other

Binox (75/100): These are electronic binoculars that allow the persona to see further, and with greater detail. The magnification can be adjusted, and the range of major objects will be given.

Flexiscope (75/900): This device is a flexible light pipe that can be attached to any visual aid, or it can be looked through directly. The pipe is 50 cm long, 3 cm in diameter, and allows the user to look around corners, through cracks, etc.

Infrared (75/290): These goggles allow the persona to see warm things in the dark.

Macroscopic (75/2000): Macroscopic goggles use multiple lenses to allow the persona a 180o line of sight. The goggles are especially good for finding things on open planes, and in outer space. They are flash protected. These goggles grant the persona with a +10 on any ambush detection rolls made.

Microscopic (75/1000): These glasses are very much like microscopes attached to the eyes. They allow the persona to zoom in on small areas, and expand the picture several thousand times. Such goggles give the persona +20 on any PT rolls for delicate maneuvers.

NIX Magic Multi-Vision Visor (75/200000): The NIX corporation makes incredibly complex, and comprehensive equipment. The multi-vision visor is so detailed that no one really knows how to use it. All M2V2s will have infrared, binox, and anti-flash screens as standard equipment, but there is also a 17% chance that any needed visual aid will be present, at any given time. Variable visual aids include smoke cutting, x-ray vision, ultravision, macroscopic, and and microscopic. The ability may not work the next time it is needed, but it may work the time after that.

Smoke (75/250): The smoke cutting visor allows the persona to function as though there was no smoke obscuring her vision. The scope works equally well with mist, fog, and other particulate matter. She can still suffocate from the effects of the smoke, but her eyesight won't be hampered while she does.

Ultraviolet (75/500): These goggles allow the persona to see things in the dark.

X-ray (75/15000): The x-ray goggles can be adjusted to see inside things at various depths. They have a range of 1 hex, and can penetrate up to 10 cm of hull metal. These goggles are detectable as radioactive by canines.

ZBGs (42/50000): The abbreviation G stands for glasses, and ZB are the initials of a universally infamous, cool chicken. The glasses always appear as normal glasses, but when they detect the kirlian auras of danger they go opaque (yes they will go black if something is behind the persona). The glasses are special to nothings, and will count as 4242 EXPS.

63) Waste Disposer

CLASS: Nothing
DURATION: Unlimited
WATE: 15 kg
EXPS/VALUE: 859/36000

A waste disposer is a completely safe disintegration device (or so the manufacturers say). Waste is placed into a drawer, the drawer is closed, and the waste is disintegrated with a "poofing" noise. The drawer can handle up to 25 kg of waste at a time

The disintegrator will open the drawer, and eject any living materials, or moving objects. The disintegrator harnesses energy released from the previously disintegrated materials. There will always be just enough energy for the next disintegration. The waste disposer is designed to disintegrate itself if its casing is tampered with.

64) Ref's Own Table

CLASS: Varies
DURATION: Varies
WATE: Varies
EXPS/VALUE: Varies/Varies

Include the ref's own ideas here. This chapter comes no where near to covering even part of what the miscellaneous equipment chapter can represent. For instance there is very little hinting of the corporations or research facilities that must have produced such peculiar gadgets.

Chapter 49
Miscellaneous Weapons

Miscellaneous weapons are the specialized high tech weapons that do not fall into any of the other weapon chapters like bombs, guns, or grenades. The high tech miscellaneous weapons all have some bizarre twist that makes them different from the regular weapons. Even though they are specialized weapons, they are still designed to fit into the personal combat systems described in chapters 26, and 27.

Literally all but one of the devices are killing devices, and using them will certainly result in injury and death. The referee should be very cautious about introducing them into the campaign. The miscellaneous weapons have statistics similar to all other equipment, and the explanation of these stats is covered in the following paragraphs.

Type/Range

Type: Type refers to the weapon type that the weapon falls into. The separation of these weapon types is detailed in chapter 28, Weapons. A type C weapon can make one attack each unit. The delay between attacks is usually due to the weapon's need to recharge, or stabilize, before another attack can be made. Each attack requires a to hit roll.

Many of the miscellaneous weapons are altered versions of more mundane weapon types. When a more mundane weapon is required, the referee should refer to the *Special Weapon* tables.

Range: The range is the effective range of the weapon. This does not reflect the skills of the persona in any way. The weapon's range is limited by wavering bullets, dissipating charges, or decaying material.

If the range is listed as 120 hexes, -230 the weapon has no to hit penalties up to 120 hexes, and then a penalty of -230 to hit per hex beyond that range. This weapon would have -230 to hit a target 121 hexes away, and -460 to hit a target 122 hexes away. Some weapons have a -1000 penalty for any distance beyond their range. This means that the attack literally stops at that distance.

Theatrical combat has no range penalties, and any range effects are optional.

Damage

The damage is the range of hit points that can be removed from a target when the weapon scores a hit. Type C weapons get no PSTR damage adjustment.

Wate/Duration

Wate: The wate is simply the wate of the weapon in kilograms, excluding batteries. This value is added to the persona's wate allowance if she decides to carry the weapon.

Duration: Duration is the amount of use that the miscellaneous weapon can withstand before its battery charge is depleted. The duration will either indicate the number of units that the device can be used for, or the number of uses, before the batteries must be replaced.

EXPS/Value

EXPS: This is the amount of experience points awarded to the user of the weapon, or whoever else, identifies the weapon's nature. See chapter 15 in the rule book, Experience, for more info.

Value: This is the value of the weapon, if it should ever be sold, or appraised. There is no guarantee that a miscellaneous weapon will be sold for its correct worth. The weapon value is not just a monetary measure, but a measure of the weapons worth relative to other artifacts.

Table 49.1: Special Type A Weapons: 01-75

Die Roll	Weapon Type	Value	Wate	Damage
01-04	Axe	10	1.8	d10+2
05-08	Brass knuckles	15	0.3	d3
09-12	Chain	2	2.0	d6+1
13-16	Flail, small	6	0.5	d4
17-20	Flail, large	15	1.5	d8
21-24	Fork	8	1.6	d4+d4
25-28	Hammer	14	3.0	d6+d6+2
29-32	Lance, small	18	10.0	4 by d4
33-36	Lance, large	24	11.0	4 by d6
37-40	Mace, small	8	1.0	d3
41-44	Mace, large	16	2.5	d6
45-48	Morning star	10	1.75	d6+d4
49-52	Orchid	25	0.9	d4+1
53-56	Pick, small	10	1.0	d4
57-60	Pick, large	16	2.2	d10+2
61-64	Pike	5	8.0	d6+d6
65-68	Point	3	0.3	d3
69-72	Scimitar	30	1.2	d8
73-76	Spear	2	2.5	d12+1
77-80	Staff, small	0.5	1.5	d4+1
81-84	Staff, large	1	2.3	d6
85-88	Sword, short	16	0.4	d4
89-92	Sword, medium	20	0.6	d10
93-96	Sword, long	30	1.2	d12
97-98	Sword, combo	50	1.8	d8+d8
99	Sword, double	60	2.4	3 by d6
00	Other			

Table 49.2: Special Type B Weapons: 76-00

Die Roll	Weapon Type	Cost (eps)	Wate (kg)	Range, Rate	Dmg.
01-05	Axe	10	1.75	14,300	d8
06-10	Bolo	15	1.25	10,125	2d3
11-15	Boomerang	10	0.45	20,125	d6+1
16-20	Bow, small[a]	30	0.95	24,120	d6
21-25	Bow, large[b]	120	0.11	24,120	d6
26-30	Bullwhip	25	0.8	2,—	d3+1
31-35	s. Crossbow[c]	120	1.35	25,125	d10
36-40	l. Crossbow[d]	250	2.85	35,120	d20
41-45	Mace, small	8	1.0	15,400	d3
46-50	Object	0.1	0.75	see[f]	d3
51-55	Point	3	0.25	see[g]	d3
56-60	Shuriken	6	0.4	20, 95	d4+1
61-65	Slinge	1	0.15	see[h]	d4
66-70	Spear	2	2.0	10,145	d8
71-75	Staff, small	0.5	1.5	see[f]	d4
76-80	Staff, large	1	2.0	5,220	d6
81-85	Sword	10	2.0	10,150	d4
86-90	Whamm	20	1.75	30,200	d6
91-00	Other				

[a] d12 Arrows,small 1 0.03
[b] d10 Arrows,large 2 0.05
[c] d8 Bolts, small 2 0.04
[d] d6 Bolts, large 3 0.06
[e] d6 Bullets 1 0.1

[f] Maximum range in hexes is equal to PSTR of thrower.

[g] Maximum range in hexes is equal to one half PSTR

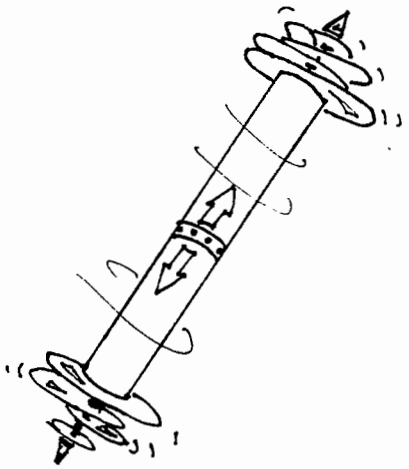
[h] Maximum range in hexes is equal to one and one half PSTR

IIII

Table 49.3: Mescellaneous Weapons

DIE ROLL	MISCELLANEOUS WEAPON
01-04	1. Arm of Ephro
05	2. Black Hole*
06-09	3. Bullet Pen
10-15	4. Compucrafted Weapon
16-19	5. Cryogun
20-21	6. Cutting Lazer
22-25	7. Displacement Gloves
26-31	8. Electro Weapons
32-35	9. Expando Dagger
36-39	10. Flare Gun
40-43	11. Grapple Gun
44-46	12. Grapple Whip
47-50	13. Grenade Launcher
51-53	14. Inertia Weapon
54-57	15. Lazer Bolos
58-60	16. Light Sabre
61-63	17. Mash net
64-67	18. Pyro Pistol
68-71	19. Rocket Assisted Weapon
72-75	20. Rocket Launcher
76	21. Spinning Wheel of Death
77-80	22. Stun Gauntlets
81-86	23. Stun Weapons
87	24. Temporal Disruptor
87-89	25. Toss Garotte
90-95	26. Vibro Weapons
96-98	27. Web Gun
99	28. Whammer
00	29. Ref's Own Table

* Reroll, only counts if rolled again.

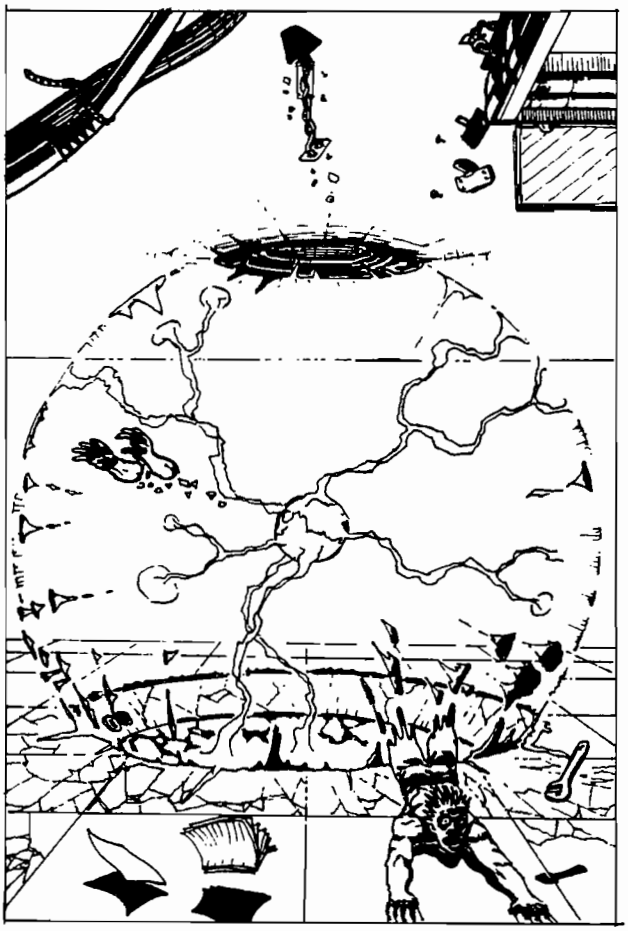


1) Arm of Ephro

TYPE/RANGE: A/—
DAMAGE: 4-24
WATE/DURATION: 30 kg /Until destroyed
EXPS/VALUE: 820/1243941

The arm of efro is a personal robotic combat machine. The device appears as a pole with a spiked ball on each end. The arm will befriend a persona, and will join in combat against her enemies. The arm's only drawback is its tendency to jump the gun, and attack personas whom its owner speaks harshly to, or threatens. Whenever the persona does this there is a 2% chance of the arm will go flying into action.

During combat the arm fights in front of its owner, and increases her AR by 75. The arm attacks twice per unit, has an AR of 900, and can move at 10 h/u (via anti-grav). Unlike other robots this one is destroyed when it reaches 0 HPS. The arm of efro will start with d100 HPS.



2) Black Hole

TYPE/RANGE: Special/Special
DAMAGE: Total annihilation
WATE/DURATION: 108 tonnes/60 moves
EXPS/VALUE: 5700/50000000000

The black hole is quite unorthodox, but it is the most deadly of all weapons. The inactivated black hole appears as a wheeled barbecue-like thing. When its lid is opened everything within a 1 hex radius will be sucked into oblivion, disappearing like spiraling pieces of light. Anything lost to a black hole is lost from both time and space, and can never be retrieved. Pretty serious stuff. When the hole is activated, it appears as a large blob of blackness. This makes it almost undetectable in the dark.

There is some debate as to whether the black part of the black hole is the hole itself, or the area from which light cannot escape. There are very few scientists left who conduct such experiments. The biggest mystery occurs when the black hole is turned off, because the barbecue stand-like thing miraculously reappears. The creators of the black hole have long since forgotten how this lid works, and speculation has arisen as to whether it even contains a black hole at all.

The black hole is under direct control of a controlling device. When the hole is contained in the barbeque-like super gravulator, it can be moved safely at 2 h/u. The wheels of the gravulator must contact the planet's surface, and movement must be programmed into the controller. The controller has 60 moves per battery set, and can store up to 5 moves at a time (2 h/u); otherwise the controller must be programmed every second unit. The controller will have 10 buttons: open, close, and 8 facet hex facings. The deadly black hole is that easy to use.

If the controller should be destroyed, or its battery set run down, the black hole will rest where it is. If the black hole happens to be left on, it will repel the planet's gravity such that its height off the ground increases by 1 cm per day. Ultimately leaving the planet's atmosphere, to be lost forever?

3) Bullet Pen

TYPE/RANGE: C/20 hexes, -200
DAMAGE: 4-24
WATE/DURATION: 0.1 kg/One use
EXPS/VALUE: 200/700

The bullet pen is actually a normal pen. It has a steel nib, and an inkwell, it even writes very nicely. However, when the pocket clip is violently drawn back, the ink ignites, firing the steel nib like a lethal projectile. In this instance the pen is mightier than the sword.

4) Compucrafted Weapon

TYPE/RANGE: A or B/Varies
DAMAGE: Special
WATE/DURATION: Varies/Until destroyed
EXPS/VALUE: 500/Special

Compucrafted weapons are specialized non-powered weapons which are better balanced, use stronger alloys, and are generally more lethal than their normal counterparts.

The weapon type is generated on Table 49.1, *Special Type A Weapon*, or Table 49.2, *Special Type B Weapon* located at the beginning of this chapter. A deci die roll of 01 to 75 will indicate a type A weapon, and a roll between 76 and 00 will indicate a type B weapon. Compucrafted weapons are better than the regular swords, axes, daggers, shurikens, etc, which are found on the tables.

Compucrafted weapons will have a to hit roll bonus of +3 to 300, and a damage bonus of +1 to 8. Thus a compucrafted sword could have a to hit roll bonus of +120, and a damage adjustment bonus of +5. The higher the die rolls, the better the weapon is designed. The weapon's value is equal to its normal cost multiplied by its accuracy (to hit roll bonus).

5) Cryogun

TYPE/RANGE: C/100 hexes, -75
DAMAGE: 4-24
WATE/DURATION: 2.3 kg/10
EXPS/VALUE: 700/21000

The cryogun ejects an energy wave which will super cool those gases that are in contact with a solid object. All targets within a 2 hex radius of the blast's epicenter will take 4 to 24 hit points in damage. The weapon works equally well, and is stressed for use, in a vacuum, underwater, or even a hot desert.

In the 2 hex radius sphere, gases will condense, liquids will freeze, and metals will contract. The targets primarily take damage from these violent effects. The cryogun usually won't kill an anthropomorph, but it will certainly give the persona hypothermia. Florians, insectoids and reptilians are automatically knocked unconscious by this attack.

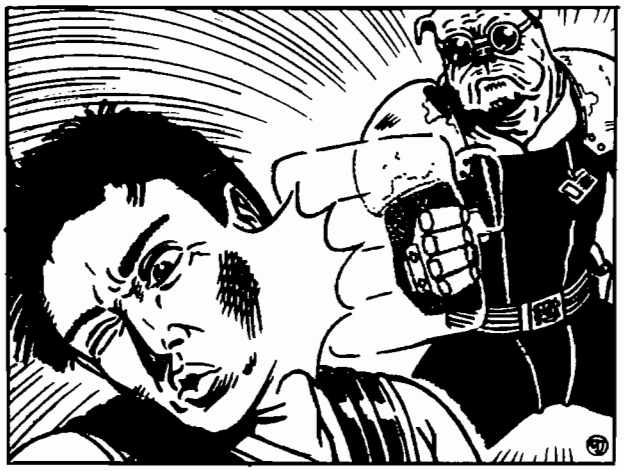
6) Cutting Lazer

TYPE/RANGE: Special/15 hexes, -1000
DAMAGE: Special
WATE/DURATION: 5 kg/20 units
EXPS/VALUE: 795/120000

The cutting lazer is the robot slayer feared by all synthetics, women in powered armour, and any sane referee. The cutting lazer emits a coherent beam of organized light that slices through solid, inorganic matter, like a lazer slices through a vacuum. The mere twist of a persona's wrist can cut a hex-sized hole in hull metal. What defense does a referee's scenario have against a cutting lazer (other than organic walls)? Nothing.

Honestly, an inventive player who's persona has this weapon could solve most scenarios inside of 10 minutes. The only thing to do is to make the weapon difficult to use. The cutting lazer has 20 units of power, and every unit it cuts it will use 1-12 units worth of this energy reserve. The lazer cannot cut more than a 3 hex line per unit. This may be sufficient to complete the job, but when the cutting lazer runs out of power no cutting can be completed that unit.

To have an effect the target must be hit by the cutting lazer. A cutting lazer gets a +250 to hit roll bonus when being used against inorganic targets. A successful hit will simply cut something off. The persona need not roll to hit against prone, or immobile inorganic targets. The damage incurred by inorganics should be at least catastrophic. A cutting lazer will inflict 100 to 600 hit points of damage to robots per successful hit



7) Displacement Gloves

TYPE/RANGE: A/Special
DAMAGE: 1-4
WATE/DURATION: 0.4 kg/10 hits
EXPS/VALUE: 250/600

The principal of displacement gloves is very simple. A force field projects the damaging force ahead of the incoming fist. The displacement gloves change the range of the striking force after each attack, making it difficult for the target to get familiar with the device. There is a +150 to hit roll bonus for punches offered. The bonus is due mostly to the target's confusion as opposed to increased accuracy.

8) Electro Weapons

TYPE/RANGE: A or B/Varies
DAMAGE: d8 + weapon damage
WATE/DURATION: add 0.35 kg/30 hits
EXPS/VALUE: 500/900

Zappers are non-powered weapons with an added electrical charge. The weapon type is generated on the *Special Type A Weapon* table, or the *Special Type B Weapon* table located at the beginning of this chapter. A deci-die roll of 01 to 75 will indicate a type A weapon, and a roll between 76 and 00 will indicate a type B weapon.

The electro weapon attacks the same as its base weapon type, but the electro weapon has an added kick of +2 to 16 hit points of shock damage. When the battery charge runs out, an electro weapon can be used as a normal weapon.

9) Expando Dagger

TYPE/RANGE: A/None
DAMAGE: 4-24
WATE/DURATION: 0.8 kg/—
EXPS/VALUE: 200/300

An expando dagger appears to be a normal dagger, but when it scores a hit thermally activated springs fire barbs into the target's flesh. It's this shredding that inflicts the extra damage. The dagger can only be removed with a successful, difficult (d20) PSTR attribute roll. Removing the dagger in this fashion will inflict another 4 to 24 hit points of damage. Seeing as the dagger is so difficult to remove, spies love to use expando daggers in conjunction with poison. Cooling an expando dagger can safely release the weapon.

10) Flare Gun

TYPE/RANGE: C/40 hexes, -1000
DAMAGE: 2-20
WATE/DURATION: 0.75 kg/1
EXPS/VALUE: 220/110

The flare gun is a pistol shaped survival device that fires a hovering flare 100 hexes into the air. Once aloft the flare is unaffected by normal strength winds, and dutifully notifies potential rescuers of the expedition's location. This is what it is supposed to do, but often the device will be used as weapon instead.

A hit with a flare gun will inflict the expected damage of 2 to 20 HPS. The type and range of a horizontally fired flare are listed for the weapon above. There is a 2% chance per HPS of damage that the flare will stick, inflicting a d6 in damage for every unit it remains stuck. The flare will fall off of the persona within 1-20 units (unless removed

sooner). If the damage kills the persona before the flare is extinguished it will continue to burn a hole directly through the body.

11) Grapple Gun

TYPE/RANGE: C/15 hexes, -1000
DAMAGE: Special
WATE/DURATION: 3 kg/1
EXPS/VALUE: 330/1006

The grapple gun fires a cord attached to either a very sticky blob (appearing as a bunch of grapes), or a vicious metal barb. The sticky thing does no damage, but it will attach to any target it hits. Targeting with a grapple is the same as throwing a grenade, unless the target is an unwilling one. The pointy barb inflicts 4 to 24 hit points of damage, and has a 5% chance per hit point of damage of sticking. The grapple will be the vicious barbed kind 60% of the time. Grapple guns also have built-in winches that can lift up to 130 kg at up to 3 h/u. Recoiling an unattached grapple will move it at 6 h/u.

12) Grapple Whip

TYPE/RANGE: B/1 hex, -1000
DAMAGE: 2-5, special
WATE/DURATION: 0.3 kg/—
EXPS/VALUE: 200/400

A grapple whip can be used as a regular whip, snapping away for 2-5 of HPS damage per hit, or it can be wrapped around a target to inflict crushing damage (the same to hit roll is required). The grapple whip must be successfully wrapped around a target before it can begin to crush. This is represented by a successful to hit roll. The initial hit will inflict no damage. A second to-hit roll must be made to ensure that the whip will stayed wrapped around the target. The second to hit roll is made at +100. If it is successful it will inflict 4 to 24 HPS of damage. The attacker can then let go of the whip, and it will contract and crush of its own volition. No more to hit rolls are required, and the constricting whip will inflict 4 to 24 HPS of damage each unit. The maximum size of the target is 150 cm in circumference—medium sized and smaller.

The grapple whip will contract until it is released by the release button, until it is cooled drastically, or until it closes a loop (amputating something in the process). The hit location of the grapple whip may be very important.

A target won't understand the significance of the grapple until it starts to crush. A successful hard PSTR attribute roll (d30) can wrestle the grappling whip away. The difficulty of the attribute roll increases in difficulty each unit. The grapple whip can take 50 HPS in damage before breaking.

13) Grenade Launcher

TYPE/RANGE: C/90 hexes, -125
DAMAGE: 0
WATE/DURATION: Varies/10
EXPS/VALUE: 350/4500

This is a pump activated, gauss powered grenade launcher. This device can be mounted on a rifle, or held like a pistol for the same effect. The wate of the rifle mount is 2 kg, and the paw held pistol is 4 kg. The grenade launcher can hold 3 grenades at once. The grenade must have a wate between 0.5 kg and 2.0 kg. The wate requirement can be less stringent as the grenade launcher increases in tech level. The grenades are entered unarmed, but they attack as normal grenades when fired. This weapon is pump activated, and requires batteries to function. There is a 5% chance that a grenade launcher will come with a cache of grenades from chapter 45, Grenades and Aerosols.

14) Inertia Weapons

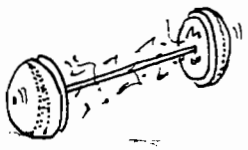
TYPE/RANGE: A or B/Varies
DAMAGE: 10 + triple weapon damage
WATE/DURATION: 0.9 kg/10 hits
EXPS/VALUE: 300/700

Inertia weapons drastically increase their wate the moment they contact a solid surface. This wate change doesn't affect their ability to hit, but when they do hit, they inflict lethal damage. The base damage per hit is 10 hit points, plus three times the base weapon's normal damage. The weapon type is generated on the *Special Type A Weapon* table, or the *Special Type B Weapon* table located at the beginning of this chapter. A deci die roll of 01 to 75 will indicate a type A weapon, and a roll between 76 and 00 will indicate a type B weapon. An inertia weapon will have 10 hits per battery set.

15) Lazer Bolos

TYPE/RANGE: B/30 hexes, -100
DAMAGE: 3-18
WATE/DURATION: 1.0 kg/Until exploded
EXPS/VALUE: 700/1300

The lazer bolo is thrown like a heavy soft ball. Soon after it is released it immediately separates into two semi-spheres, with a crackling, screaming lazer connecting them. A hit will normally do 3 to 18 hit points of damage, and the bolo will slam shut. The lazer bolo will be too hot to use (touch) for 3 units after throwing. There is a 5% chance per point of damage that the bolo will explode, inflicting an additional 5 to 30 hit points of damage. The bolo is destroyed when it explodes. There will usually be 1 to 8 lazer bolos.



16) Light Sabers

TYPE/RANGE: A/0
DAMAGE: Varies
WATE/DURATION: 12 kg/Varies
EXPS/VALUE: 475, special/Varies

Light sabres are energy swords which can be retracted back into their hilts. There are three different kinds of light sabre, each having its own damage, duration, and value. Roll on Table 49.4, *Light Sabre Type* to determine the strength of the weapon.

Solid light sabres are very important for knites. These light sabers are usually of unknown age, and have a limited number in the known universe. Any solid beam light sabre will have been previously owned by either a knite or anti-knite. Touching a light sabre will award a bonus 1-1000 EXPS to the knite. However, if the previous knite fought for the opposite side of the kirlian force the light sabre will also get one killing attack on the holder (whether charged or not). This will only happen if the light sabre is touched by a qualified knite. Knites in training can be profoundly influenced by touching a light sabre.

Table 49.4: Light Sabre Type

DIE ROLL	BEAM TYPE
01-45	Clear
46-90	Shimmering
91-00	Solid

Clear (9000): A clear beamed light sabre is more of a force field club than a light sabre. It attacks like a blunt weapon, inflicting 2 to 12 hit points when a hit is scored. The beam is transparent, and appears as a shimmering heat wave, although it is not warm. The clear light saber has a duration of 500 units.

Shimmering (12000): This light sabre's beam looks like an indecisive coloured wave of light. This

sabre has cutting ability equivalent to a sword, and will inflict 4 to 24 hit points in damage when it hits. The shimmering light saber will last for 1000 units.

Solid (30000): The solid, glowing beam of this light sabre is the true scythe warrior's weapon. Each time this device attacks there is a 5% chance per point of damage of an amputating attack. The amputating attack does no extra damage, but if the knite makes a PT roll (DD = AR/100) a random body part will be excised from the target. Use the hit location tables to determine what is amputated. The light sabre is a clean weapon, and unless the target is disemboweled or beheaded, the amputation inflicts no further damage.

17) Mash Net

TYPE/RANGE: B/3 hex, -1000
DAMAGE: 2-20 each unit
WATE/DURATION: 3 kg/—
EXPS/VALUE: 350/700

The mash net is a cousin of the grapple whip. The mash net functions like a regular net, for shielding, but can also be used as a lethal entangling weapon. A successful to hit roll will indicate that the target has been entrapped in the net. In the first unit the persona cannot act in any capacity, and every unit after the first, the target will take 2 to 20 hit points of crushing damage. The net is composed of a high tensile heat activated memory metal. Once in contact it begins to close and crush its victim. The net can only crush medium, or smaller sized, victims.

The victim may make PSTR attribute rolls in an attempt to free herself, but the difficulty level starts at hard (d30) and increases in difficulty every unit. The mash net will keep contracting until the persona is dead, and her body cooled, at which point the net re-opens. The net's contraction can be halted by immediate cooling.

18) Pyro Pistol

TYPE/RANGE: C/95 hexes, -125
DAMAGE: 3-30
WATE/DURATION: 1.9 kg/10
EXPS/VALUE: 750/2000

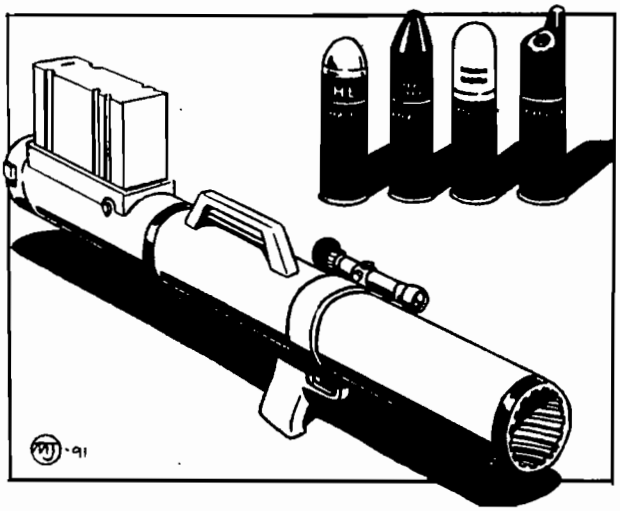
The pyro pistol releases an energy wave which superheats gases that are in contact solid objects. All targets within a 2 hex radius of the blast's epicenter will take 3 to 30 HPS damage. The weapon works equally well in the following environments: vacuum, underwater, or even an arctic tundra. Within the 2 hex radius sphere, gases expand violently, liquids will boil, and metals will warp and sag. The targets primarily take damage from these violent effects.

The pyro pistol doesn't kill anthropomorphs outright, but it certainly gives the persona a dose of heat stroke. Ursidea are automatically knocked unconscious by this attack.

19) Rocket Assisted Weapons

TYPE/RANGE: B/Range times 3, same
DAMAGE: 15 + 2 times damage
WATE/DURATION: 2 times/One use
EXPS/VALUE: 300/1000

These are rocket assisted non-powered (but powered now) missile weapons. The arrows, boomerangs, and daggers, are indistinguishable from regular throwing weapons until the micro boosters take over. The boosters are activated when thrown, and the weapon goes screaming through the air at its target. Rocket assisted weapons are launched as normal Type B weapons, but the booster rockets triple their range, and increase their damage (15 + 2 times damage). The weapon type is rolled on the *Type B Special Weapon* table found at the beginning of this chapter.



20) Rocket Launcher

TYPE/RANGE: C/200 hexes, -20
DAMAGE: 6-60, or grenade effect
WATE/DURATION: 10 kg (ammo 1 kg)/One use
EXPS/VALUE: 230/5000 (plus grenade value)

IIII

The rocket launcher is a shoulder-mount directing-tube that unleashes a long range rocket. When the rocket hits, it will inflict 6 to 60 hit points of damage to everything in a 5 hex radius of effect. This is an area of effect weapon, and the firer only needs to choose a target hex. If the device is directed at a solitary target there is a to hit roll penalty of -300 to hit, but a direct hit will inflict triple damage on the target. If a persona has rocket launcher skill she will not suffer the -300 solitary target penalty.

The rocket launcher itself can hold 1-4 rockets for launching at one time. So a rocket launcher holding 3 rockets could attack for 3 consecutive units before having to reload. There is a back flash in the hex immediately behind the firer and anything caught within it takes 1 to 10 hit points of damage. The rocket launcher will malfunction with a kilodie roll of 40, or less. A malfunction will occasionally indicate a premature rocket explosion.

The rocket launcher does not merely launch boring old shrapnel rockets, but can release any of a host of exotic warheads. There is a 25% chance that the blast's radius, damage, and effects will be determined by something from chapter 45, Grenades and Aerosols. The rocket launcher is a killing weapon, and the *Bomb Type* table is an abridged list of the lethal grenades and aerosols. It is recommended that the referee use the *Bomb Type* table in chapter 44, Bombs, to choose the rocket's exotic warhead.

The rocket launcher can also have a special rocket type. There is a 42% chance of the rocket launcher having a special rocket type. Roll on Table 49.5, *Special Rocket Type* if a special rocket is indicated. The special rocket types are explained in the paragraphs following the table.

Table 49.5: Special Rocket Type

DIE ROLL	ROCKET TITLE
01	Autostrike
02-16	Crawl
17-32	Decoy
33-48	Delay
49-64	Memory
65-80	Passenger
81-96	Spaceship
97-99	Vehicle
00	Other

Autostrike (5000000): A special targeting sight allows the firer to aim at solitary targets without the -300 to hit roll penalty. A hit with the rocket launcher will inflict triple damage (solitary target damage), and a miss will still hit the target hex (area of effect damage).

Crawl (50000): The sight programs a computer in the rocket. The rocket hops out of the launcher and crawls towards the target at 15 h/u. This helps it evade radar and anti-missile systems. A to hit roll must still be made.

Decoy (10000): After leaving the launcher, the rocket splits into d4 harmless decoys. The decoys will reduce the effectiveness of anti-missile equipment by giving the attacker +100 to hit per decoy.

Delay (25000): A to hit roll is made and the rocket is launched. It will arrive at the target hex

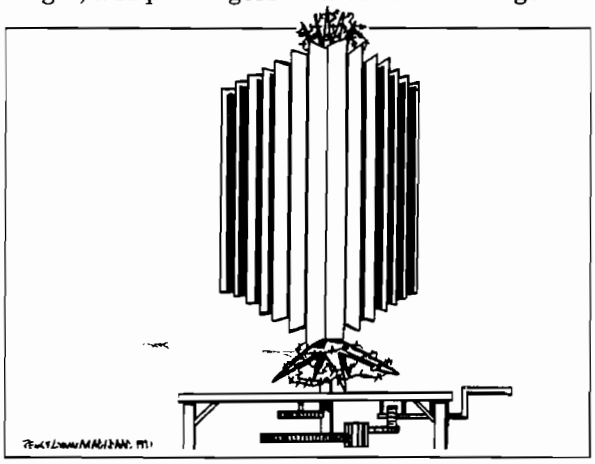
d20 units after it was fired. The rocket takes a long safe route, and can't be shot down.

Memory (75000): The target location is photographed with a special sight, and the rocket will remember the path from the target hex to the firing location. The sight must be kept active until from the target hex to the launch site. When fired the rocket will go round corners, up stairs, stop and wait for an elevator and then continue on to the target. It will follow the path of the launcher exactly. A to hit roll is required to ensure that nothing accidentally gets in the way of the rocket. The rocket launcher can also be fired normally

Passenger (5000): The rocket can hold up to 1.5 kg of cargo. The cargo will be protected inside the rocket, and it will land safely at the target hex. Often the passenger will be a grenade, and it can easily be rigged to detonate on landing. This would be a DD2 mechanic maneuver, or a DD12 mercenary maneuver.

Spaceship (15000): This is a personal spaceship mini-missile launcher. This missile can be fired normally exatmo and inatmo. The rocket will be effective at damaging space vehicles if a to hit roll is successful. Spacevehicle mini missiles are described in more detail in chapter 25, Spacevehicle Combat.

Vehicle (20000): The heat seeking missile can lock onto the heat signature of a vehicle, and will hit in 0-3 units after firing. A successful to hit must be made. The vehicle will be damaged as a solitary target, and passengers as area of effect targets.



21) Spinning Wheel of Death

TYPE/RANGE: B/150 hexes, -1000
DAMAGE: 5-50, for 2-5 units; then 10-100
WATE/DURATION: 12 kg
EXPS/VALUE: 500/3200

The spinning wheel of death appears to be nothing more than a miniature card table with a crank. Sitting on the table is an oversized top. The bulk of the top is composed of razor sharp slats arranged like vertical venetian blinds. The handle of the top goes through the table and is covered with horrid needles and barbs.

The spinning wheel of death must be cranked for four units before it can be released. Once released it will fly into the air, hovering for 1 to 4 units. During this time the device picks a target. The spinning wheel of death has a heat seeking unit which will randomly pick a target from the terrain on the opposite side of the crank (firer), and then scream in for the kill. If no targets are present in the prescribed area, the wheel will attack a random target on the board (yes, possibly even the firer). Once a target is picked, the wheel gets a roll to hit at +200. Referee personas (aliens, etc.) are automatically hit if the wheel chooses them.

Damage from the spinning wheel of death is first inflicted by the gnarly stem of the top as it grinds into the target. The handle will burrow for 2-5 units, inflicting 4 to 40 HPs of damage each unit. When the bulk of the wheel (the venetian blind-like slats) hits the target, the victim takes an additional 10 to 100 hit points of damage. Only then will the wheel grind to a halt. Once it has stopped spinning the flying wheel can be returned to its launcher and used again. Hit location makes no difference to the damage, but survival may be dependent on this. Referee personas are automatically killed by this weapon.

22) Stun Gauntlets

TYPE/RANGE: A/—
DAMAGE: 0
WATE/DURATION: 0.3 kg/15
EXPS/VALUE: 250/1900

The stun gauntlets are the ultimate non-lethal weapon. A benign force field ensures the target receives no damaging forces, and at the same time a central nervous system over-load is launched. The neural shock is capable of stunning the target. Any target hit by a stun gauntlet must save vs intensity 3 to 18 poison or be stunned. The target will remain stunned for 2 to 12 minutes. The stun gauntlets appear as glowing gloves.

23) Stun Weapons

TYPE/RANGE: A or B/Varies
DAMAGE: Normal & stun
WATE/DURATION: 0.3 kg/20
EXPS/VALUE: 350/1000

The stun weapons inflict regular damage, plus an electrical shock designed to stun the target. The intensity of the poison attack is 2 to 20. If the persona fails the saving throw she is stunned for 1 to 20 units. The weapon type is generated on the *Special Type A Weapon* table, or the *Special Type B Weapon* table located at the beginning of this chapter. A deci die roll of 01 to 75 will indicate a type A weapon, and a roll between 76 and 00 will indicate a type B weapon.

24) Temporal Disrupter

TYPE/RANGE: C/20 hexes, -100
DAMAGE: Age 3 to 36 years
WATE/DURATION: 4 kg/7 attacks
EXPS/VALUE: 475/100000

The temporal disrupter is a chrono accelerator that causes any targets within the area of effect to age drastically and instantly. The firer chooses a target hex, and all within a 2 hex radius of effect are aged 3 to 36 years. This effect is permanent, and the targets will suffer what ever aging penalties apply with this attack. Consult chapter 13, Health, for more information about these effects. Referee personas will also suffer 1 HPS in damage per year aged. This damage will be inflicted to those personas where the long term effects of aging is unimportant. A malfunction will this gun will age everything in a 1 hex radius 3 to 36 years.

25) Toss Garotte

TYPE/RANGE: B/25 hexes, -170
DAMAGE: Special
WATE/DURATION: 0.25 kg/-
EXPS/VALUE: 290/600

The toss garotte is another one of those hideous memory metal weapons. It looks a lot like a pie-plate without a center. The opening is approximately 25 cm in diameter. The device is generally placed over the head, and around the neck in a surprise action. The garotte can also be tossed at the target. A hit with the weapon doesn't mean that it has sailed over the target's head; a variety of things can happen. A hit location roll will determine what the garotte has wrapped around. It may have looped around a leg, over an arm, or even around the neck. The torso is unaffected by this attack.

The garotte will quickly tighten inflicting 2 to 8 hit points of damage each unit. The target will lose consciousness after 5 units, due to pain, oxygen deprivation, and nerve damage. The device inflicts no more damage after 5 units, unless the persona

regains consciousness. The garotte will amputate whatever appendage it is wrapped around in a further 1-4 units. Cooling will release the garotte.

The toss garotte cannot be freed by force rolls since it quickly cuts into the skin. The garotte can withstand 30 hit points in damage before breaking. Any damage taken by the garotte will also be taken by the victim. The referee may give the persona 1 to 4 toss garottes.

26) Vibro Weapons

TYPE/RANGE: A/—
DAMAGE: 20 plus normal
WATE/DURATION: 1.3 kg/25 units
EXPS/VALUE: 500/1000 + normal

Vibro weapons are non-powered thrusting and striking weapons which vibrate at an ultra high frequency. This aids both their ability to score a hit and to inflict damage. Vibro weapons earn +100 on the to hit roll, and get +20 on damage. The weapon type is generated on the *Special Type A Weapon* table, or the *Special Type B Weapon* table located at the beginning of this chapter. A deci die roll of 01 to 75 will indicate a type A weapon, and a roll between 76 and 00 will indicate a type B weapon.

27) Web Gun

TYPE/RANGE: C/20 hexes, -1000
DAMAGE: None
WATE/DURATION: 1.75 kg/5
EXPS/VALUE: 375/900

The web gun is a glue sprayer with a 1 hex area of effect. A successful hit will stop the target in her tracks by either gluing her down to the ground, or by gluing all her limbs together. The web gun will work on any target less than 750 kg in wate. Only a bizarre (d1000) PSTR roll will free a webbed persona.

The fine threaded glue will set after 0 to 3 units. Anything passing through the webbed hex, or touching the webbed target, before the web has set will also get entangled. Once the web is set and hardened the target is wrapped in a nice cocoon. Once trapped in a cocoon only outside help may free the victim. Chiselling, acid, or cutters will make short work of the web, but the persona can't move to free herself. Saliva can loosen the web just enough to breath.

28) Whammer

TYPE/RANGE: B/35 hexes, -100
DAMAGE: 3-36
WATE/DURATION: 1.0 kg/As needed
EXPS/VALUE: 750/1050

The lazer frisbee is thrown more like a discus, from a specialized charger. The lazer frisbee will return to its firer regardless of whether a hit is scored or not. The whammer will return in 0 to 3 units, and must be caught (easy DEX roll) by the persona. The whammer disk is recharged as the persona throws it.

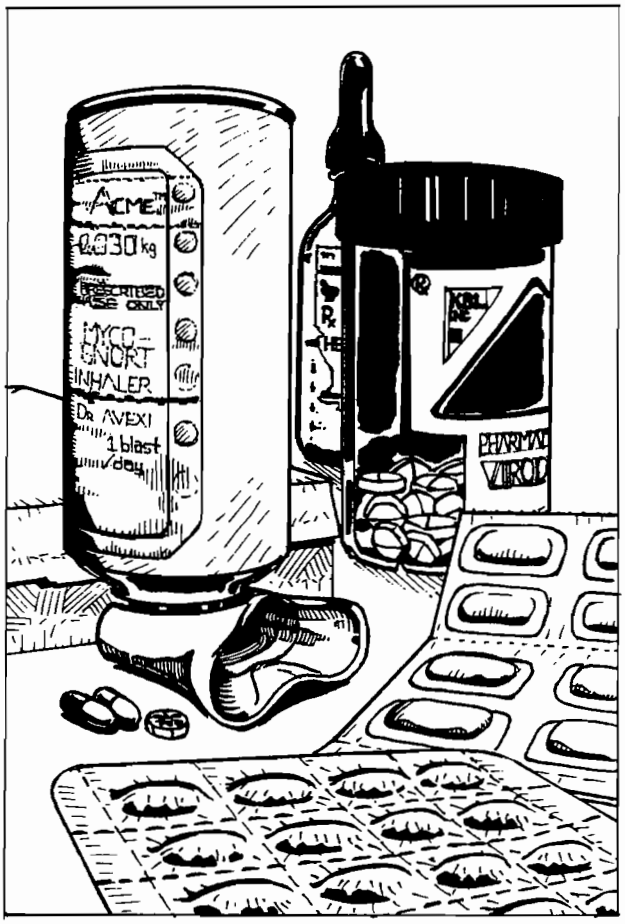
29) Ref's Own Table

TYPE/RANGE: Special
DAMAGE: Special
WATE/DURATION: Special/Special
EXPS/VALUE: Special/Special

The ref's own table of miscellaneous weapons is sure to grow as the referee and players come up with sadistic new ways to vanquish their mortal enemies. Items to consider when creating new weapons are all the statistics listed above, plus what happens when it malfunctions, and how tough is it really going to be.

IIII

Chapter 50
Pharmaceuticals



The pharmaceuticals described in this chapter are fantastic miracle substances capable of diagnosing, preparing, and administering the proper remedy. They can do wonders, but they can also have deadly side effects when not used under the most competent of medical supervision.

Pharmaceuticals are found in groups of doses called a prescription. A prescription may consist of pills, injections or liquids. A prescription will normally have a negligible mass.

Overuse of a prescription may result in addiction to that specific pharmaceutical type. Addiction to pharmaceuticals is very rare considering the vicious side effects that will ultimately accompany their use. If the ref is sadistic enough to addict a persona, or a player is stupid enough to get her persona into such a mess, it is up to the ref to supply channels to support the persona's habit.

The pharmaceuticals have many parameters, and some guidelines for generating them should be followed. In the immediately following paragraphs the pharmaceutical attributes are described. After these paragraphs are the steps to creating a pharmaceutical. These parameters can be rolled before the pharmaceutical type is determined.

Pharmaceutical Generation

1) Table 50.1, *Prescription Application*: Pill, injection, colour
2) Table 50.3, *Prescription Racial Producer*: correct metabolism?
3) Table 50.4, *Prescription Markings*: How well labelled?
4) Table 50.5, *Side Effects*: How does the drug harm?
5) Table 50.6, *Pharmaceutical Type*: The whole point.

Duration

This note describes the length of time that the drug's effect will last. The onset is instantaneous, and the body will return to normal at the end of the duration. Remember that side effects may have a longer duration than the pharmaceutical's effect. A "Permanent" duration indicates a permanent change in the taker's body. All other durations are given in normal time ranges. Those drugs that have a range of times listed for a duration must be rolled each time a dose is applied.

Doses

This is the number of doses that will usually be found with the prescription. A dose represents the number of times the prescription can produce its indicated effect. This could represent the number of pills, injections, or spoon fulls that the persona has access to in the prescription. The dosage of a prescription cannot be extended in any way unless a veterinarian has made a specific maneuver. None of the drugs listed here require multiple doses for a single effect. For instance a disease curing drug need only be taken once to attain the full effect, and not once a day for 2 weeks.

The number of doses varies with the markings that accompany the prescription. Each dosage has a list of 4 ranges, like 1-4, 2-8, 3-12, and 4-16. These ranges are Fully labelled, Incomprehensible, Mislabelled, and None. The ranges refer to the quality of the prescription labelling, and the worse the labelling the more doses that will be available. The prescription markings are discussed under Prescription Markings in this chapter.

Purity

Purity is simply the chance that the substance has no side effects. Purity can be checked for each dose taken, or one roll can reflect the entire prescription. Purity is usually equal to the tech level of the pharmaceutical. A tech level 10 pharmaceutical has a 10% chance of no side effects. To determine the tech level of any artifact, including pharmaceuticals, refer to chapter 56, Tech Level.

EXPS/Value

EXPS are the experience points granted for identifying the prescription. The substance's purpose can either be determined by using the veterinarian performance tables, or by imbibing the pharmaceutical (and correctly guessing the effect). If a prescription has more than one dose EXPS will only be granted once for identifying the nature of the prescription.

The value is nothing more than an indicator of the drug's relative worth. The value represents the value of a single dose. If a prescription has 3 doses then it is worth 3 times the given value. The value of pharmaceuticals can change according to the market's needs. Unidentified pharmaceuticals are equally worthless, or valuable depending on requirements.

The *Pharmaceutical Type* table indicates the general purpose of the prescription, refer to the heading for more information.

1) Prescription Application

The prescription application simply refers to the manner in which each dose is applied, ingested, injected, or in some way administered to the body. A roll on Table 50.1, *Prescription Application* will determine how the pharmaceutical is administered into the body. Those application types marked with an "asterisk" will require a roll on the *Prescription Colour* table. The *Alien Coat Color* table (chapter 6, Aliens) offers a greater variety of colours.

Table 50.1: Prescription Application

DIE ROLL	APPLICATION TYPE
01-14	Bronchial spray-nasal spray, aerosol
15-19	Derm-patch applies to skin
20-32	Injection*
33-48	Liquid*-eye drops, oral dropper
49-64	Lotion*
65-82	Pill*
83-98	Suppository-nasal, oral etc.
99-00	Other

* Indicates roll on Table 50.2

Table 50.2: Prescription Colour

DIE ROLL(d12)	PRESCRIPTION COLOUR
1	Black
2	Blue
3	Gold
4	Green
5	Grey
6	Pink
7	Red
8	Silver
9	Tan
10	Yellow
11-12	Striped (roll d10 twice)

2) Prescription Racial Producer

There are many different persona races in **EXP**, and to make the pharmaceutical situation a little more interesting we have incorporated the physiologies of the various races. The racial producer indicates which of the persona races that the pharmaceutical was intended for use. The effects of using a pharmaceutical designated for another race are not complex. When using chemicals designated for another race, the persona will automatically suffer a side effect.

Pharmaceuticals that are compatible with an alien metabolism can be imbibed by any alien, but with an automatic side effect. Pharmaceuticals not compatible with aliens will only have a side effect (unless a poison) when ingested by aliens.

Robot pharmaceuticals are better described as spectacular motor oils, or bizarre fuels. "Liquid programming" is another label for robotic materials that cause pharmaceutical effects. For example, a robotic injection would appear more like a pneumatic dagger than a hypodermic needle.

Alien and robotic pharmaceuticals automatically act as poisons on all other races.

To determine the racial metabolism that a prescription was designed for use the *Racial Producer* table. If the scenario does not suit the generation of random racial producers—a space station populated only by felines—this pharmaceutical specification can be ignored.

Table 50.3: Racial Producer

DIE ROLL	PRESCRIPTION RACE
01-18	Human, PSH
19-26	Aquarian
27-34	Avarian
35-42	Canine
43-50	Equine
51-58	Feline
59-66	Florian
67-74	Insectoid
75-82	Reptilian
83-90	Rodentia
91-98	Ursidae
99	Alien
00	Robotic

3) Prescription Markings

The only safe—only sometimes—pharmaceuticals are those filled out by the local pharmacist. Unfortunately the druggists that filled out these prescriptions have not only been dead for thousands of years, but probably spoke a long since deceased language.

To account for such occurrences a roll on the *Prescription Markings* table is made. This will indicate how useful surviving prescription labelling is. If the roll indicates "none", all labelling has been removed or destroyed. "Mis-labelled" indicates that something other than the original prescription markings are on the labelled container

Table 50.4: Prescription Markings

DIE ROLL	PRESCRIPTION MARKINGS
01-05	Fully labelled
06-35	Incomprehensible
36-45	Mis-labelled
46-99	None
00	Other

4) Side Effects

Very rarely can pharmaceuticals be expected to invade the physiology of an organism, and achieve the desired effect, without some form of side effect. A side effect is an undesirable change in the body's chemistry that arises from taking a pharmaceutical.

Each pharmaceutical type has a purity value. This is the percent chance of no side effects occurring per dose taken. A cure with a purity of 18 would have an 18% chance of having no side effect when taken by the prescribed race. Any doses taken by races other than the one designated by the racial producer will automatically yield a side effect.

A roll on the *Side Effect* table will determine what side effect the persona will sustain. The side effects themselves are not lethal, but their consequences can be. The ref can roll a new side effect each time one occurs, or have a specific one prepared for that pharmaceutical.

The duration of the side effect is decided by the ref. Of course, some guidance is given here. Pharmaceuticals that enact permanent changes in the taker will have side effects that last for 1-10 days. Those pharmaceuticals with none permanent durations shall have side effects that last for 1-10 minutes.

If the side effects counter the desired effect of the pharmaceutical, TOUGH LUCK. This could be considered an allergic reaction to the chemicals which renders the pharmaceutical useless. Proper administration of pharmaceuticals by vets can reduce the chance of side effects. Side effects are not the end of useful pharmaceuticals. The personas get a save vs. intensity 5-30 poison (5d6) in an attempt to throw off the undesired effects.

Table 50.5: Side Effects

DIE ROLL	SIDE EFFECT
01-04	Amnesia, T
05-08	Aphrodisiac, P
09-12	Blindness, T
13-16	Colour deviation, P
17-20	Confusion, T
21-24	Deafness, T
25-36	Extroverted personality, P
37-40	Feebleness, T
41-44	Hallucinate, T
45-48	Hunger, P
49-60	Insanity, P
61-64	Lethargy, T
65-68	Nausea, T
69-72	Paralysis, T
73-76	Shakes, P
77-80	Sleep, T
81-84	Unconscious, T
85-88	Verbal dyslexia, P
89-92	Vomit, T
93-00	Other

T=TEMPORARY: 1 TO 10 MINUTES
P=PERMANENT: 1 TO 10 DAYS

Table 50.6: Pharmaceutical Type

DIE ROLL	PHARMACEUTICAL TYPE
01-10	1. Cure
11-20	2. DNA
21-40	3. Narcotic
41-50	4. Heal
51-60	5. Inoculation
61-65	6. Mutation
66-75	7. Mutation effect
76-85	8. Periodic intumescent
86-95	9. Permanent intumescent
96-99	10. Poison
00	11. Ref's Own Table

1. Cures

DURATION: Permanent
DOSES: 1-4, 1-6, 1-8, 1-10
PURITY: TL% (TL 8=8% purity)
EXPS/VALUE: 100/varies

A cure is not an inoculation, and therefore does not reduce the chance of future contraction of a disease. A cure will simply arrest the process of a disease, or poison, but it will not heal damage that has already happened. Cures restore no damaged attributes, or reduced hit point totals. Refer to Table 50.7, *Cure Type* to see what kind of cure is present. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

Table 50.7: Cure Type

Die Roll	Cure Effect	Value
01-10	Cellular decay; arthritis, +10% to life span	250000
11-20	CNS restore; Paralysis, palsy.	750000
21-30	Disease; Virus, pest, bacteria.	250000
31-40	Insanity; Any type.	1000000
41-50	Mental control; Any mental trespass.	300000
51-60	Mutation; Eliminate the latest mutation.	2000000
61-70	Poison; Chemical, venom.	50000
71-8	Radiation; Radiation sickness.	50000
81-90	Temperature stress; Hypothermia, heatstroke.	1000
91-95	Ubiquitous; Any problem; defect, poison, etc.	7000000
96-00	Other	

2. DNA

DURATION: Permanent (no immediate onset)
DOSES: 1-2, 1-3, 1-4, 1-4
PURITY: TL% (TL 20=20% purity)
EXPS/VALUE: 100/2000000

DNA is a pharmaceutical capable of replacing lost limbs or organs, and reactivating non-functioning ones. A dose of DNA activates the growth centers of remaining cells at the site of missing, or inactive, body parts. The type of body part replaced can be determined on Table 50.8, *DNA Type*. The repair is accelerated, and will be complete in 10 to 100 hours. The DNA will replace any missing, damaged, or malfunctioning organ or limb, but it will be especially effective at replacing the part rolled on the table.

Table 50.8: DNA Type

DIE ROLL	DNA TYPE
01-33	Sensory; Returns the use of any sensory organ
34-66	External; Replaces or repairs organs/limbs
67-99	Internal; Replaces or repairs any internal organ
00	Other

The repaired, or replaced, limb will resemble that of the base race rolled for the drug. The organ, or limb will function absolutely normally on another race type, but it will have a strange cosmetic effect. A DNA dosage may also activate any previously nonfunctional body part—like a mutated extra ear, or limb.

Any unnecessary dose of DNA will yield the persona an automatic side effect from the *Side Effects* table. A purity roll will also be required to avoid the outgrowth of a non-functioning limb, or organ. The type of new growth, and its location are determined by the referee. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

3. Narcotic

DURATION: Varies
DOSES: 1-11, 2-20, 1-8, 4-24
PURITY: 1/2 TL% (TL 20=10% purity)
EXPS/VALUE: -5/50

Narcotics represent drugs that have been made for illicit recreational use, and those regular pharmaceuticals that have gone sour. The narcotics are not grouped by any name or class, but by how they affect the psycho motor system of the user. To determine how the user's mental state is affected roll on Table 50.10, *Narcotic Effect*. Table 50.9, *Narcotic Effect Duration* is used to determine how long the narcotic effect lasts. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

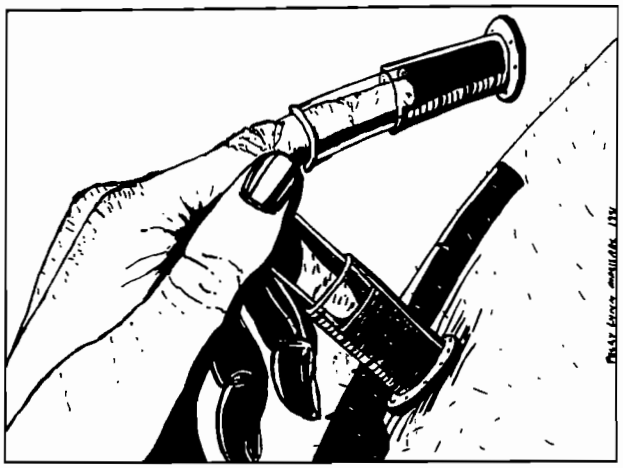
The narcotic also reduces several of the persona's attributes. AWE, DEX, and INT all receive a penalty of 1 to 6 (d6) for the duration of the narcotic effect. It is up to the referee whether or not a narcotic attribute reduction will kill the persona. Persona's will have their MSTR halved while under the effect of a narcotic. Knites definitely will avoid such excursions into the chaos of the mind.

Table 50.9: Duration of Narcotic Effect

DIE ROLL	DURATION OF EFFECT
01-25	1-100 Minutes
26-50	10-1000 Minutes
51-75	4-48 Hours
76-99	1-4 Days
00	Other

Table 50.10: Narcotic Effect

DIE ROLL	NATURE OF EFFECT
01-25	Euphoria, hallucinations.
26-50	Euphoria, hallucinations, outbursts of action.
51-75	Calmness, dullness, lethargy, hallucinations.
76-99	Calmness, dullness, hallucinations, narcolepsy.
00	Other 1/2 MSTR, and -d6 from AWE, DEX, INT



4. Heal

DURATION: Permanent
DOSES: 1-8, 3-18, 1-6, 3-30
PURITY: 3 x TL% (TL10 = 30%)
EXPS/VALUE: 100/Varies

Heals are pharmaceuticals that repair physically damaged tissues. The results of the healing process are reflected by a change in the persona's hit point total. Heals never alter the persona's hit point maximum, but will improve the present total. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

A heal may have two functions, most heals will only repair hit points, but some will heal damaged attributes in addition to hit points. To determine what a heal repairs a roll must be made on Table 50.11, *Damage Heal Type* and on Table 50.12, *Attribute Heal Type*.

Heals that indicate a % hit point total work in the following fashion: they return the persona the given % of their hit point max. So a persona with a HPS max of 50 using a 40% heal would immediately be raised to 20 hit points. If the described persona has more than 20 hit points when the dose is taken, the heal has no effect.

The other type of heal repairs a preset number of hit points. A 20 hit point heal would return 20 hit points to a persona regardless of her hit point total. However, the persona's hit point total can never exceed her hit point max by taking heals.

Those heals that can repair attributes in addition to HPS totals will repair 1-6 (d6) points of attribute per dosage. Attributes cannot exceed their original values by the use of heals. E.g., a persona who lost 3 points of CHA (15 down to 12) from a recent burn, just happens to inhale a bronchial spray which heals 50% HPS, and CHA. A d6 roll indicates that 4 points of CHA are to be returned to the user. So the persona gets the four points, but only returns to her previous CHA of 15, not a new CHA of 16.

All heals are worth 100 EXPS. Those heals that also repair attribute values are worth 100 to 600 times more than the HPS heal value. So the healing pharmaceutical used in the latest example has a value of 40000000 (100000 for the HPS heal, times 400 for the 4 points of CHA).

Table 50.11: Damage Heal Type

DIE ROLL	HPS REPAIRED	VALUE
01-05	10%	100
06-10	20%	1500
11-15	30%	2000
16-20	40%	50000
21-25	50%	100000
26-30	60%	2000000
31-35	70%	4000000
36-40	80%	8000000
41-45	90%	12000000
46-50	100%	15000000
51-99	5-100 HPS	200000 per HPS
00	Other	

Table 50.12: Attribute Heal Table

DIE ROLL	HPS REPAIRED	REPAIR DESCRIPTION
01-80	NONE	HPS heal only
81-83	PSTR	Repairs aging damage
84-86	INT	Reverses brain damage
87-89	DEX	Arthritic damage
90-92	AWE	Cataracts, hearing loss
93-97	CHA	Scars, voice trouble
98-99	CON	Lung damage, etc.
00	HPS max	

5. Inoculation

DURATION: Permanent
DOSES: 1-2, 1-4, 1-1, 1-6
PURITY: TL% (TL10 = 10%)
EXPS/VALUE: 100/Varies

Inoculations are not cures, and taking an inoculation will only increase one's resistance to further attacks of the inoculated ailment. A roll on Table 50.13, *Inoculation Type* will reveal what the pharmaceutical inoculates against, and how this inoculation is to be run by the referee. Multiple inoculations will result in a side effect, and no additional protection. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

Table 50.13: Innoculation Type

DIE ROLL	INOCULATION TYPE
01	Aging: 2 years equals 1 year
02-10	Disease; Double CON vs disease.
11-20	Insanity; No more insanity.
21-30	Mental attacks; Double MSTR vs mental attack.
31-40	Mental mutations; No additional mutations.
41-50	Paralysis; Double CON vs stuns, paralysis.
51-60	Physical mutations; No additional mutations.
61-70	Poison; Double CON vs poison attacks.
71-80	Radiation; Double CON vs killing radiation.
81-90	Sleep; Taker requires sleep no more.
91-99	Unconscious; Half DSS % roll.
00	Other

6. Mutation

DURATION: Permanent
DOSES: 1-2, 1-4, 1-1, 1-6
PURITY: 1/4 x TL% (TL12 = 3% purity)
EXPS/VALUE: 250/Ref's decision (2000000)

This bizarre pharmaceutical will give the persona a single mutation from either of the mutation lists. There is also a chance that the persona will have a skin/coat colour change as a side effect. The colour deviations are a permanent side effect specific to this pharmaceutical, and appear after the mutant's first night sleep. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

Physical mutations will grow in after 4-48 hours, and mental mutations will be ready to use immediately. To make the effects of these chemicals a little more challenging, the player will not know what mutation her persona has until she deduces it, or happens across it accidentally. Refer to Table 50.14, *Drug Mutation Type* for the drug's effects.

The mental and physical mutations are rolled in their respective chapters 58and 59. The colour of thee skin/coat colour change can be rolled on the *Pharmaceutical Colour* table, or the more extensive *Alien Coat Colour* table (chapter 6, Aliens).

Table 50.14: Drug Mutation Type

DIE ROLL	MUTATION TYPE
01-20	Physical and colour change.
21-40	Mental and colour change.
41-60	Physical, mental, and colour change.
61-70	Physical only.
71-80	Mental only.
81-90	Physical and mental only.
91-00	Other

7. Mutation Effect

DURATION: 2-200 Hours
DOSES: 1-4, 1-6, 1-1, 1-10
PURITY: 1/3 x TL% (TL12 = 4% purity)
EXPS/VALUE: 300/Ref's decision (2000000)

Personas taking a mutation effect pharmaceutical will quickly get some idea that their body and/or thinkspace has changed, and possibly a hint as to what way. The persona will function identically to a mutant—setting off detectors—for the duration of the effect. Physical mutations will explode from the mutant's body in minutes, and mental mutations will begin with a tremendous headache. The pharmaceutical may even cause a skin/coat colour alteration. The new colour will last as long as the mutation effect lasts, and is rolled on the *Pharmaceutical Colour* table. The type of mutation effect is determined on the below table, and is used in conjunction with the mutation tables, and the *Pharmaceutical Colour* table.

Table 50.15: Mutation Effect Type

DIE ROLL	MUTATION TYPE
01-20	Physical and colour change.
21-40	Mental and colour change.
41-60	Physical, mental, and colour change.
61-70	Physical only.
71-80	Mental only.
81-90	Physical and mental only.
91-00	Other

8. Periodic Intumescent

DURATION: 10-60 minutes
DOSES: 1-6, 1-10, 1-4, 1-12
PURITY: TL% (TL12 =12% purity)
EXPS/VALUE: 250/200000

Periodic intumescents are also known as boosters. They increase the value of a persona's attribute for the duration of effect. Which attribute is increased depends on the roll generated on Table 50.16, *Periodic Intumescents*. The attribute is doubled 90% of the time, and tripled the remaining 10% of the time. These temporary values can easily exceed race restrictions, but cannot exceed the biological maximums. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

Note that the effects are carried out on the present value of the attribute. E.g., HPS total of 20 will be increased to 40 or 60.

Some of the extreme attribute values may allow for special abilities that are otherwise unheard of. Personas with very high AWES may be able to sense through materials that would normally block vision, or hearing. High MSTRS may be able to sense kirlian auras, or have the odd knite detection ability. Spectacular CHAS could awe the general populace with glorious orations.

TAble 50.16: Periodic Intumescent

DIE ROLL	ATTRIBUTE INCREASED	BIOLOGICAL MAXIMUM
01-15	MSTR	None
16-20	PSTR	29
21-30	INT	25
31-40	DEX	25
41-55	CHA	None
56-70	AWE	None
71-85	CON	25
86-95	HPS	None
96-99	Racial abilities	None
00	Mutations	None

9. Permanent Intumescent

DURATION: Permanent
DOSES: 1-2, 1-4, 1-1, 1-6
PURITY: TL% (TL2 =2% purity)
EXPS/VALUE: 200/2000000 per point

Pharmaceuticals which increase attributes are the most sought after of all the exotic substances in this chapter. The attribute increaser chemicals have one catch. The catch is that they only increase the maximum value of the persona's attribute, and she must work very hard to raise her attribute to the increased level. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

Periodic intumescents expand the maximum range of the persona's attribute, but the persona must wait for age modifiers, heals, or periodic intumescents to raise the attribute to its new level. Periodic intumescents, although not permanent, will recede to the attribute's higher level (provided that the attribute has no damage outstanding).

An increased HPS MAX must wait for pharmaceutical, or natural healing to reach the new hit point total. If a persona has taken an injection that increases her DEX by 2 points she would not immediately enjoy the increased attribute. If her previous DEX were 14 she would not have a 16 DEX until she somehow improved her DEX. She could do this with a periodic intumescent (#8), a heal (#4), or through aging. If none of these avenues are immediately available the referee can arrange a training program for the persona. This could be mental exercises, balance practise, or exercise.

Both racial ability, and mutation enhancement come into effect automatically. When increasing racial abilities felines can see further in the dark, dogs can sniff radiation better, equine can run faster, etc. The same general effect applies to heightened mutations for their duration, range, area of effect, etc.

Permanent intumescents should be so rare that multiple use should not be a problem. If personas attempt to employ them—from the same prescription—repeatedly, there are dire consequences. For each additional dose taken there is a cumulative 25% chance that there will be a poison effect, in addition to side effects, and attribute increases.

Table 50.17: Permanent Intumescent

DIE ROLL	ATTRIBUTE INCREASED	AMOUNT INCREASED
01-15	MSTR	1-3
16-20	PSTR	1-2
21-30	INT	1-3
31-40	DEX	1-2
41-55	CHA	1-4
56-70	AWE	1-2
71-85	CON	1-2
86-95	HPS MAX	+10-30%
96-99	Racial abilities	+10-40%
00	Mutations	+10-40%

10. Poison

DURATION: Varies
DOSES: 6-60, 4-40, 7-70, 3-30
PURITY: 1/10 TL% (TL10 =1% purity)
EXPS/VALUE: 200/Varies

Poisons are pharmaceuticals that have gone completely sour, or are poisonous substances mistaken for pharmaceuticals. The effects of poison are very, very bad. Personas can very easily die from the effects of poison. Poisons can be one of the greatest deterrents for keeping personas from using drugs indiscriminately. The underlined dosage is the most frequent amount appearing, and the value refers to the value of a single dose.

Personas expect to get a save vs. poison, but since this is a drug administered directly into the system no save is awarded. If a save is to be awarded the intensity of the poison is 6 to 36 (6d6).

The ref, and personas, should remember that when any attribute of a persona is reduced to zero the persona is irrevocably dead (except CHA). None of the poisons directly kill, but their effects on the system of the persona can be lethal.

Table 50.18: Poison Type

DIE ROLL	POISON TYPE	POISON EFFECT
01-10	Blindness	Permanent; Cannot see.
11-20	Comatose	1-4 weeks; Lose 1 DEX per week.
21-30	Death	1-4 hours; Appears dead, lose 1 attributes per hour.
31-40	Insanity	Permanent; Roll on RPC personality table.
41-50	Lethargy	2-16 days; 1/2 move and other actions.
51-60	Nausea	2-12 days; 1/4 all stats for duration.
61-70	Paralysis	Permanent; Unless medically repaired, 1-4 limbs.
71-80	Reduced stat	Permanent; Reverse effect of pharmaceutical #9.
81-90	Unconsciousness	Permanent; Only medically revivable (DD10).
91-99	Vomiting	3-18 days; Lose 1 CON day, can die.
00	Other	

11. Ref's Own Table

DURATION: Varies
DOSES: Special
PURITY: Special
EXPS/VALUE: Varies/Varies

The ref's own table could contain a host of miraculous new drugs, or a gaggle of weird side effects. Ref's own table is what gives a campaign its personal spice and originality. When preparing pharmaceuticals, the referee should consider all of the statistics listed above.


PEGGY LYNN MARSHALL 1991

Chapter 51
Random Junque

The title of this chapter is completely self explanatory. The tables contained in here are filled with lists of completely useless equipment. It is almost certain that these artifacts have existed in every society in one form or another.

Random junque is useless equipment, but if the persona can somehow make use of if during the campaign, then that is fantastic. There should be copious EXPS awards for players that turn nothing into something. Random junque is not entirely worthless, it has a random value of 1 to 10, and each piece of random junque has a 10% chance of having a spare part useful to a mechanic.

To generate random junque the player makes one roll on Table 51.0, *Random Junque*, and then refers to the designated table type. Random junque does not count as a roll for players generating start up Toys.

Table 51.0 Random Junque

DIE ROLL	JUNQUE TYPE
01-07	1. Appliances
08-14	2. Armour
15-21	3. Books
22-28	4. Clothing
29-35	5. Fiddle junk
36-42	6. Foodstuffs
43-49	7. Furniture
50-56	8. Live Stock
57-63	9. Materials
64-70	10. Musical instruments
71-77	11. Personal
78-84	12. Sports equipment
85-91	13. Stationery
92-98	14. Weapons
96-98	15. Miscellaneous
99-00	16. Ref's Own Table

Table 51.1: Appliances

DIE ROLL	APPLIANCE TYPE
01-04	Blender
05-08	Clothesdryer
09-12	Clotheswasher
13-16	Coffee maker
17-20	Computer console
21-24	Crock pot
25-28	Dishwasher
29-32	Disk drive
33-36	Electric can opener
37-40	Food dehydrator
41-44	Food processor
45-48	Freezer
49-52	Fridge
53-56	Juicer
57-60	Meat grinder
61-64	Meat slicer
65-68	Microwave
69-72	Oven
73-76	Television
77-80	Toaster
81-84	Trash compactor
85-88	Typewriter
89-92	Vacuum
93-96	Waffle iron
97-00	Other

Table 51.2: Armour

DIE ROLL	ARMOUR TYPE
01-06	Chainmail; Fireplace screen
07-12	Concrete
13-18	Cured hide; Suede furniture covers
19-24	Furs skins; Animal rug, fur coat
25-30	Garbage can lid
31-36	Helmet ; Bucket, lampshade
37-42	Leather
43-48	Net ; Curtain
49-54	Padded; Rugs, down jacket
55-60	Plant fibre; Fungus
61-66	Plate armour; Metal garbage can
67-72	Ring mail
73-78	Scale; Link fence, link chains
79-84	Shield; Wood floor
85-90	Splint; Garbage can lid, street sign
91-96	Studded; Concrete
97-00	Other

Table 51.3: Books

DIE ROLL	BOOK TYPE
01-10	Book of Imperial Ethics
11-20	Colouring
21-30	Comic
31-40	Hardcover-How to, crochet, swim
41-50	Little Golden
51-60	Magazines
61-70	Pamphlets
71-80	Paperback
81-90	Revelations 1-6
91-00	Textbook

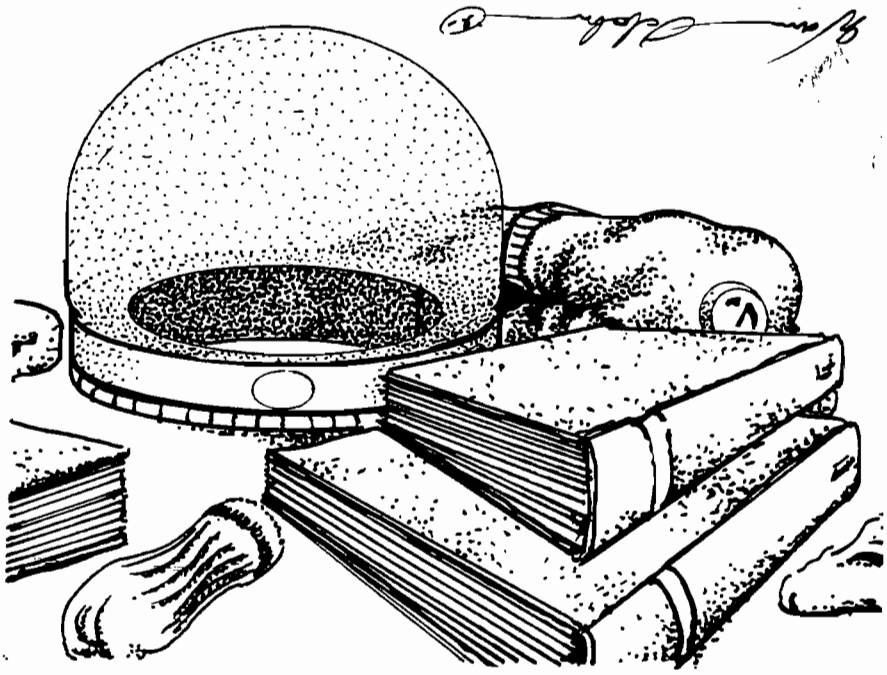


Table 51.4: Clothing

DIE ROLL	CLOTHING TYPE	DIE ROLL	CLOTHING TYPE
01-02	Apron	51-52	Longjohns
03-04	Bathrobe	53-54	Mouthgard
05-06	Belts	55-56	Pajamas
07-08	Beret	57-58	Pants
09-10	Boot	59-60	Pea jacket
11-12	Bowler	61-62	Poncho
13-14	Coat	63-64	Rainsuit
15-16	Down jacket	65-66	Shirts-blouse
17-18	Facemask	67-68	Shoes
19-20	Gi	69-70	Skirts
21-22	Girdle	71-72	Slacks
23-24	Glasses	73-74	Socks
25-26	Gloves	75-76	Sombrero
27-28	Habit	77-78	Suspenders
29-30	Hat	79-80	Sweat suit
31-32	Hats	81-82	Sweater
33-34	Hoop skirt	83-84	Swimsuit
35-36	Jacket	85-86	Ties-bow, neck
37-38	Jockstrap	87-88	Toga
39-40	Jumpsuit	89-90	Top hat
41-42	Kilt	91-92	Toque
43-44	Kimono	93-94	Trenchcoat
45-46	Knee-pads	95-96	Tuxedo
47-48	Lederhosen	97-98	Undergarments (fe/male)
49-50	Leg warmers	99-00	Zoot suit

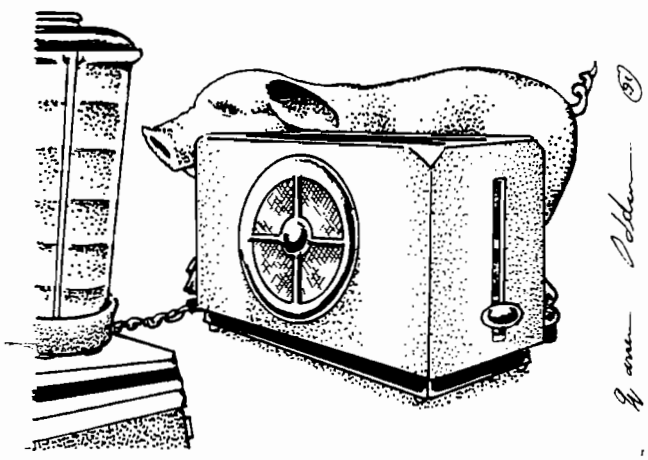


Table 51.4: Fiddle Junk

DIE ROLL	FIDDLE JUNK
01-10	Magnetic
11-20	Pet rock
21-30	Phosphorescent
31-40	Puzzles
41-50	Silly putty
51-60	Slinky
61-70	Snow ball
71-80	Squeaky toys
81-90	Things that go whiz and click
91-00	Worry stone

Table 51.5: Foodstuffs

DIE ROLL	FOOD STUFF
01-10	Candy*
11-20	Cookies
21-30	Fruit*
31-40	Fungus*
41-50	Gum
51-60	Insect*
61-70	Meat*
71-80	Nut*
81-90	Vegetable*
91-00	Other, live

*indicates roll on subtable 6A

Table 51.6A: Foodstuff Container

DIE ROLL	FOODSTUFF CONTAINER
01-10	Canned, gas
11-20	Canned, liquid
21-30	Canned, solid
31-40	Dried, solid
41-50	Fresh, solid
51-60	Fresh, liquid
61-70	Frozen, gas
71-80	Frozen, liquid
81-90	Frozen, solid
91-00	Other

Table 51.7: Furniture

DIE ROLL	FURNITURE TYPE
01-04	Bathtub
05-08	Bed
09-12	Bench
13-16	Bookshelf
17-20	Card table
21-24	Carpet
25-28	Chair
29-32	Curtain
33-36	Cushions
37-40	Desk
41-44	Drawer
45-48	Folding chair
49-52	Foot rest
53-56	Futon
57-60	Hammock
61-64	Ironing board
65-68	Lamp
69-72	Lawn chair
73-76	Loveseat
77-80	Shelves
81-84	Sink
85-88	Sofa
89-92	Stool
93-96	Table
97-00	Welcome mat

8) Livestock

Roll alien description, size, habitat, reproductive strategy, food preferences etc, but do not include any useful attributes. It will be a weak, dumb, slow and useless piece of livestock. The livestock will constantly make a noise rolled on Table 51.8, *Livestock Noise*.

Table 51.8: Livestock Noise

DIE ROLL	LIVESTOCK NOISE
01-04	Barfing
05-08	Barking
09-12	Baying
13-16	Burping
17-20	Crackling
21-24	Growling
25-28	Grunting
29-32	Gurgling
33-36	Hissing
37-40	Howling
41-44	Humming
45-48	Meowing
49-52	Mewing
53-56	Moaning, pain
57-60	Moaning, pleasure
61-64	Mooing
65-68	Oinking
69-72	Popping
73-75	Ruffling
76	Sniffling
77	Snorting
78-80	Suckling
81-84	Whimpering
85-88	Whining
89-92	Woofing
93-96	Yapping
97-00	Other

Table 51.9: Material

DIE ROLL	MATERIAL TYPE
01-10	Bricks
11-20	Concrete mix
21-30	Linoleum
31-40	Lumber
41-50	Manure
51-60	Plastic lumps
61-70	Plasticene
71-80	Straw
81-90	Tin
91-00	Other

Table 51.10: Musical Instruments

DIE ROLL	MUSICAL INSTRUMENT
01-05	Accordian
06-10	Banjo
11-15	Castanets
16-20	Conductor's baton
21-25	Cymbals
26-30	Drums
31-35	Electric guitar
36-40	Electric organ
41-45	Harmonica
46-50	Kazoo
51-55	Lazer harp
56-60	Nose flute
61-65	Nose harp
66-70	Piano
71-75	Saw
76-80	Spoons
81-85	Triangle
86-90	Tuba
91-95	Tympanis
96-97	Violin
98	Washboard
99-00	Whistle

Table 51.11: Personal Items

DIE ROLL	PERSONAL TYPE
01-04	Analegic Ointment
05-08	Backscratcher
09-12	Brush
13-16	Comb
17-20	Cosmetics
21-24	Daipers
25-28	Deodorant
29-32	Electric toothbrush
33-36	Furpoo
37-40	Hair dryer
41-44	Hair curlers
45-48	Hair net
49-52	Mirror
53-56	Nail clippers
57-60	Nail file
61-64	Perfume
65-72	Razor
73-76	Shampoo
77-80	Soap
81-84	Talcum
85-88	Toilet paper
89-92	Toothbrush
93-96	Tweezers
97-00	Other

Table 51.12: Sports Equipment

DIE ROLL	SPORT EQUIPMENT
01-25	Ball
26-30	Ball hoop
31-35	Climbing paraphenalia
36-40	Exerbike
41-45	Hurdles
46-50	Ice skates
51-55	Implement-racquet, club, stick, pole
56-60	Protection-use hit location charts
61-65	Roller skates
66-70	Rowing machine
71-75	Shirt
76-80	Shoes
81-85	Skis
86-90	Starting blocks
91-95	Treadmill
96-00	Weights

Table 51.13: Stationary Supplies

DIE ROLL	STATIONERY TYPE
01-04	Brushes
05-08	Chalk
09-12	Chalkboard
13-16	Clamp
17-20	Compass
21-24	Crayons
25-28	Dividers
29-32	Elastics
33-36	Eraser
37-40	Glue
41-44	Holepunch
45-48	Letter opener
49-52	Paint
53-56	Paper
57-60	Paperclips
61-64	Pen
65-68	Pencil
69-72	Pencil sharpener
73-76	Protractor
77-80	Ruler
81-84	Scissors
85-88	Stapler
89-92	Staples
93-96	Tape
97-98	Three hole punch
99	Thumbtacks
00	Other

Table 51.14: Weapons

DIE ROLL	WEAPON TYPE
Type A Weapons	
01-04	Axe
05-08	Brass knuckles-gauntlet, handweight
09-12	Chain-rope, hose, golf club
13-16	Dagger-ice pick, scissors, screwdriver
17-20	Flail-nunchakas
21-24	Fork-pitchfork, rake
25-28	Hammer
29-32	Lance
33-36	Mace-wrench, bat, pipe, hammer, pan
37-40	Morning star-ball and chain
41-44	Orchid-broken bottle, spiked gauntlet
45-48	Pick-board and nail, T-square, hoe
49-52	Pike-pole
53-56	Scimitar-saw
57-60	Spear-pole, staff & point
61-64	Staff-bostick, bone, cane, 2x4, club
65-68	Sword
Type B Weapons	
69-71	Axe
72-75	Bow
76-77	Bolo
78-81	Boomerang-right angle
82-85	Bullwhip-chain, rope, towel
86-89	Crossbow
90-93	Object-rock, bottle, lunchbox, brick
94-97	Sling
98	Shuriken-glass, tin can lid
99-00	Whamm-dish

Table 51.15: Miscellaneous Junk

DIE ROLL	MISCELLANEOUS JUNK	DIE ROLL	MISCELLANEOUS JUNK
01	Baby car seat	41	Keys
02	Backpack	42	Kitty litter
03	Bag opener	43	Kleenex
04	Baseball cards	44	Lens cap
05	Bathrobe belt	45	Letter holder
06	Birdcage	46	Letter opener
07	Bolts	47	Light bulb
08	Book binder	48	Light-candle, lantern, torch
09	Book holder	49	Mirror
10	Book mark	50	Mobile
11	Bottle opener	51	Nails
12	Boxes-wooden, metal, plastic	52	Needle
13	Buttons	53	Nuts
14	Calender	54	Oil
15	Calling cards	55	Pencil holder
16	Can opener	56	Pet license
17	Claim tag	57	Picture frame
18	Clock radio	58	Plastic xmas tree
19	Coaster	59	Pocket protector
20	Coat hangers	60	Pole
21	Coin holder	61	Pop bottles
22	Container-wine, skin, bag, sack	62	Pot
23	Cornucopia	63	Pouch
24	Cushion	64	Purse
25	Dog tags	65	Puzzle piece
26	Duotang	66	Quiver
27	Fishing pole	67	Robe
28	Flower pot	68	Roof tiles
29	Garbage bags	69	Sack
30	Ghetto blaster	70	Shoe horn
31	Headphones	71	Shoe stretcher
32	Hinges	72	Shoestring
33	Hose	73	Shovel
34	Hose nozzle	74	Sock hanger
35	Hubcaps	75	Spike-nail
36	Indoor retractable clothesline	76	Spool of thread
37	Insoles	77	Sprinkler
38	Ironing board cover	78	Stickers
39	Jars-plastic, glass, pyrex	79	String
40	Key ring	80	Tap

Table 51.15: Miscellaneous Junk Continued

DIE ROLL	MISCELLANEOUS JUNK
81	Tassles
82	Thumbtack
83	Tinderbox
84	Tire
85	Tire valve
86	Tire wrench
87	Toilet seat
88	Toilet seat cover
89	Tread
90	Tree decorations
91	Tripod
92	Un-welcome mat
93	Vedi-kits
94	Watch winder
95	Wind shield wiper
96	Window frame
97	Wire spool
98-00	Other

16) Ref's Own Table

The ref's own table for random junque should consist of those useless things that are found in the culture that she is creating. It may be a bit cynical, but this system is created with the belief that their will always be waste, incompetence and corruption available to waste corporate, and government dollars on useless items. Another thing to consider is whether or not it is worth having a ref's own table for random junque. There are lots of things to prepare for the referee already, and unless random junque is really offering something humorous to the milieu then may she should go do something else.

IIII

Chapter 52
Spacevehicles

Spacevehicles is a subsection of vehicles. Although many times more sexy, and useful, than vehicles, spacecraft are nothing more than a means of getting from one place to another.

Spacecraft have the ability to exit planetary atmospheres, and sail off into the wild black yonder. The spaceships are able to do this because of specially sealed hulls, super powerful engines, and highly specialized drives that cover enormous distances in one action.

The spacecraft generated in this chapter can vary from garbage outcasts of 1000 planet armadas to the priceless result of some race trying to escape its gravity well. Ships can be found, stolen, rented, lent or inherited by the expedition. The ships can be used to achieve a specific campaign goal, or just to expand campaign horizons. Either way access to a spaceship increases the level of fantasy to galactic proportions.

The introduction of a spaceship will occur whenever the ref sees fit. The campaign could start with a launch countdown, or could end with a glorious escape from one's own hideous planet. Most likely spaceships will come and go. Expeditions will exchange the technology for adventure, and occasionally their hides for technology.

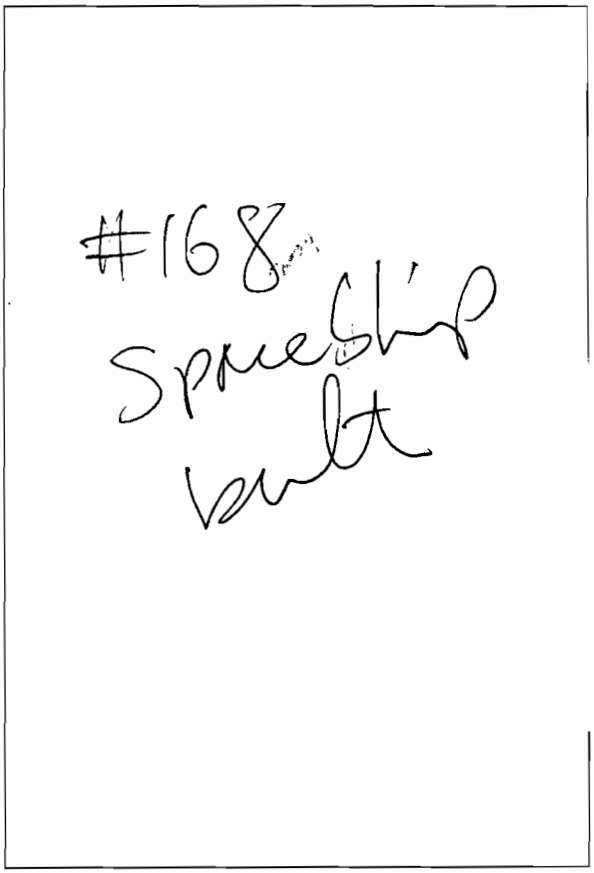
The spacecraft are neither accurate in detail, nor in aerospace specifications. The ship design system creates random spacecruisers that have the basic necessities of space travel: a hull, drives, computers, and life support. The design of the ship layouts, both external, and internal, are left to the ref, or players.

The integral sections of ship generation are listed here: hull, drives, fuel, computers, defences, attacks, required crew, and cargo allotment. The spacevehicle generation system has many other incidentals that appear along the way.

1) Hull

This is the first basic assumption that is made about spacecraft—they have hulls. For spaceships that never experience planetary gravities, any sort of shape—that the drives don't tear apart—would be acceptable. However some of the spacecraft in this chapter are designed for operation in and out of the atmosphere, and the way to assure the safety of the shipboard components is to contain them within an airtight hull. This hull is sealed off from the vacuum of outer space, often called exatmo.

The hull has three basic factors: size, composition, and strength.



IIII

Hull Size: The hull size determines the amount of internal equipment that the ship will be able to support. Roll once on Table 52.1, *Hull Size*. How much space a tonne displaces can be considered irrelevant, if all the ships are created on the same system.

Table 52.1: Hull Size

DIE ROLL	DISPLACEMENT IN TONNES
01-10	2-8
11-30	3-18
31-50	4-40
61-80	40-400 (4d10 x 10)
81-90	401-1400 (400 + kilodie)
91-95	1500-6000 (1000 + 5d10 x 100)
96-98	6000-36000 (6d6 x 1000)
99-00	Other

Hull Composition: A roll on Table 52.2, *Hull Composition* will determine what the spacecraft's hull has been manufactured from. Most ships will be composed of metal, plastic, and ceramic alloys. Some hulls sport smart metal (Harrison), or organic steel, both of which repair themselves and require no refitting.

Table 52.2: Hull Composition

DIE ROLL	HULL TYPE
01-90	Alloy; hull metal
91-00	Smart metal; organic steel

Hull Strength: Hull strength is simply the hull's ability to avoid damage to the ship's interior components. This aspect of the hull is so similar to an armour rating that the hull is actually given one. Roll on Table 52.3, *Hull Strength* to determine the ship's AR.

Special Hulls: The hulls of a spacevehicle can be altered to the needs and whims of the players. Extravagance costs extra, and some examples of extravagance are listed here. Spacevehicles may have double hulls, so attacks must penetrate two armour ratings before damage can be inflicted. A hull could also be streamlined to decrease atmospheric fuel consumption by one half.

Table 52.3: Hull Strength

DIE ROLL	HULL AR
01-10	800
11-30	900
31-60	1000
61-80	1100
81-90	1500
91-95	2000
96-98	2500
99-00	Other

Hull Features: The ref must consider several additional features about spaceship hulls. These are airlocks, cargolocks, and datalocks (hardpoints).

Airlocks: An airlock allows passengers, and small cargo, to enter/exit the ship whether the ship is in, or out of, an atmosphere. An airlock takes up no space inside the ship, but requires 5 tonnes of cargo space. The airlock is free to be located anywhere on the spacevehicle. A ship can have 1 airlock for every 5 tonnes of unallotted cargo space. So a ship with a 15 tonne cargo hold could support 3 airlocks anywhere on its hull.

Ships with less than 5 tonnes of cargo space cannot have an airlock. This doesn't mean the ship cannot be entered; it only means that the ship can only be entered while in atmosphere.

Cargolocks: A larger ship may prefer a cargo lock. The cargo access sizes represent the amount of cargo which can be moved through the opening at one time. For instance a 50 tonne cargo lock on a 2000 tonne cargo hold could move 50 tonnes of cargo per hour, day, or what ever. A cargolock is not pressurized, and only allows access to the cargo

bay while the ship is in atmosphere. A cargo lock can only be found on larger spacevehicles, and requires 50 to 500 tonnes of cargo space.

Cargo airlocks are enormous airlocks that can only be found on gigantic spacevehicles. The cargo airlock can be used while exatmo to move cargo, or other spacevehicles into and out of the cargo bay without causing depressurization. A cargo airlock requires 500 to 5000 tonnes of cargo space. Both cargo locks, and cargo airlocks, must be attached directly to the cargo bay.

Datalocks: Datalocks are much more straightforward than airlocks. Datalocks are electronic accesses to the exterior of the hull. A data lock is required for every single external contraption that needs access to the exatmo—guns, missiles, viewing screens, and airlocks all need datalocks. A ship will come supplied with 10 datalocks per level of computer.

2) Drives

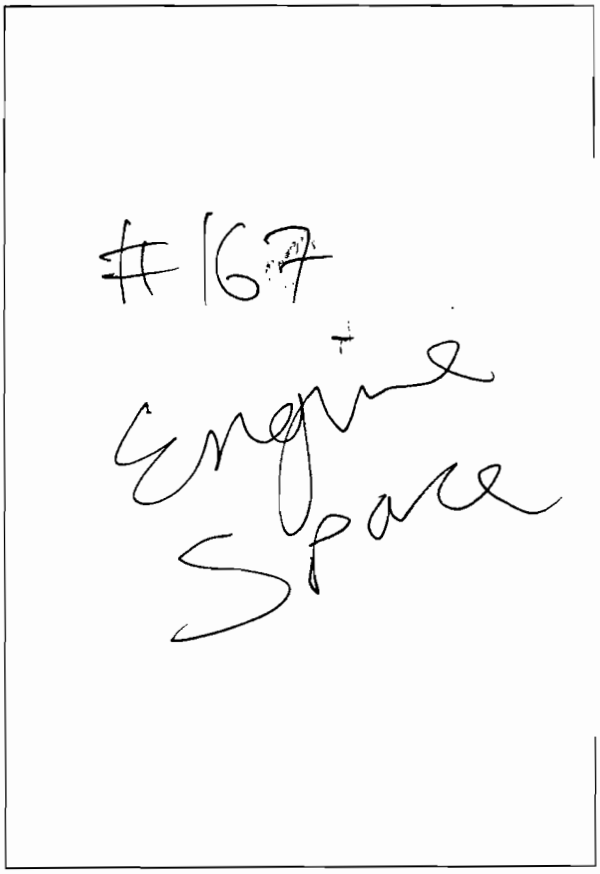
Like any vehicle a spacevehicle needs engines to travel from one point to another. Spacecraft aren't near so provincial as to call their power sources engines. The term "drive" is applied to the power source, propulsion system, and whatever else is required to make the star traveller move.

Drive Types: The starships have three different types of drives, which may, or may not, be found on all spaceships. The first is the Inatmo drive, for in-atmospheric (inatmo) maneuvering. A ship that does not have an inatmo drive cannot enter a planet's atmosphere. All ships are equipped with an exatmo drive. This is the drive that maneuvers the ship while out of planetary atmosphere (exatmo). Although exatmo drives can move the ship around at great speeds, they are still no match for the vast expanses of deep space. To avoid limiting space travel to only generation starships, or cryogenic suspension, several special drives are available. These drives make space travel more efficient, and fun.

To determine what combination of drives a ship has, roll on Table 52.4, *Drive Type*. Then to determine exactly what type of drives are present refer to the drive type headings under Inatmo, Exatmo, and Special.

Table 52.4: Drive Type

Die Roll	Drive Types	Type of Spacevehicle
1	Exatmo only	spacecruiser
2	Exatmo, and inatmo	spaceship
3-4	Exatmo, and special	starcruiser
5-6	Exatmo, inatmo, special	starship



Exatmo Drives: Exatmo drives will either be one of two types, fusion or gravetics. Both are equally efficient at moving the ship around in outer space. Neither will function within the atmosphere, but a fusion drive used within the atmosphere has special effects. The velocity, and power level of the drives are described under drive level in this chapter.

If used inatmo a fusion drive will have the effect of a thermonuclear explosion on the surrounding atmosphere. Sadistic personas that wish to use the fusion drives as a weapon should be discouraged first by the cruelty of such an action, and second by those dangers that are presented to the ship. A description of these dangers is left to the referee, but a few examples are: a nuclear attack to the ship; probability of a fuel blowout; accidental grounding; etc.

Inatmo Drives: These are the in-atmospheric drives of the ship. No spacecraft can enter into an atmosphere safely, without inatmo drives. Roll on Table 52.5, *Inatmo Drive* to determine what drive type the craft has. All of the inatmo drives function equally well, and all can move about safely within the atmosphere, and gravity-well, of any planet.

IIII

Table 52.5: Inatmo Drive Type

DIE ROLL(d8)	DRIVE TYPE
1-3	Anti-grav
4	Balloons
5	Chutes
6	Jets
7	Props
8	Other

Antigrav: Nothing more than anti-gravity units which suspend, and maneuver, the ship above the planet's surface.

Balloons: Once in the atmosphere, balloons will automatically billow out, and fill themselves with a computerized mixture of gases. The ship is maneuvered about by altering the buoyancy of the various balloons.

Chutes: This spaceship ejects an enormous collection of kites, and parachutes, which computers control to maneuver the ship—while fuel supplies last. The spaceship can employ prevailing winds to lift off.

Jets: A multitude of fuel burning jets maneuver the ship in atmosphere. They act like retro rockets that can maneuver a ship in outer space.

Props: Large airscrews, located about the ship operate at various power levels to attain maneuverability.

Special Drives: Special drives are the stuff of all science fiction space operas. Even spacecraft that can manage the speed of light, would still require decades to travel from one star to the next. This would obviously make for a lack of variety in space faring role-play. Because of the logistics of 2000 year space flights, science fiction authors have invented many types of special drives. These drives allow them to tell stories that move from planet to planet, and still have less than a hundred main characters. The most famous of these magical drives are listed on Table 52.6, *Special Drive*.

Table 52.6: Special Drive Type

DIE ROLL	SPECIAL DRIVE
01-26	Bloater
27-34	FTL
35-42	Hyper
43-44	Psi-flip
45-70	Time-slip
71-74	Transmat
75-99	Warp
00	Other

Bloater: : A bloater drive expands the ship, and its contents by increasing the space between its molecules. The expansion continues until entire planets, and stars, can pass between the molecules without danger. This "bloating" continues until the destination point is near the ship's hull. The ship then begins to deflate around its new destination point, arriving there without moving.

FTL: Faster than light travel plays havoc with many paradoxes. All such minor problems aside, FTL travel is a rather efficient way to get from point A to point B, and then from point A to point B again as the light catches up (many decades later).

Hyper: Also known as "jump" drives.

Psi-flip: The most fantastical of all the special drives, the psi-flip transports the ship, and contents to the location thought of by the controller. Only the most precise mental image can be translated into motion. This requires at least an 18 MSTR, or a specially mutated persona. Once the mind pilot has convinced her mind that she is actually somewhere else, the psi-flip drive sets out to correct the present reality.

Time-slip: Another one of the mystically bizarre space travel devices is the time slip. This drive system drops its payload into time limbo (whatever that is). Once in this reference it scans through past/future time frames until it finds one where the stars and planets of the universe are better aligned for for its travel purposes. The drive then re-enters the original space time, but at its desired location.

Transmat: A transmat is also known as a probability drive. It depends on the probability that at least one of the electrons of one of the drive's molecules will be on an extreme orbital somewhere near the desired location. Once this occurs it is just a matter (no pun intended) of reorienting the rest of the ship's molecular parts with the vagrant orbital electron particle.

Warp: Warp drives operate under the premise that the space between two points can be folded up, and that the ship can pass through the fold traveling only a fraction of the previously required distance, but covering an enormous distance.

Drive Size: The size of a ship's drives are determined in part by a die roll, and in part by the size of the hull. Each of the three drive types will occupy 1-10% of the ship's hull space. Thus a spaceship with an inatmo, and an exatmo drive would roll one d10 for each. Let's say a 100 tonne ship's inatmo drive occupies 8% of the hull, and its exatmo drive occupies 4% of hull space. The inatmo drive weighs 8 tonnes, and the exatmo drive weighs 4 tonnes. The entire drive system for this ship occupies 12 tonnes of hull space.

Drive Level (Performance): The d10 roll made to determine the size of the various drives also determines their performance level. The more hull that the drive occupies the better its performance is. So the d10 roll not only determines what fraction of a spacecraft's hull is filled with drives, but it indicates how fast, and/or powerful, the drives are.

Table 52.7: Drive Size and Level

Drive Type	Fraction of Hull	Drive Level	Effects of Level
Inatmo	1 to 10%	1-10	1 mach per level; 1 g inatmo per level
Exatmo	1 to 10%	1-10	0.1 C per level; 1 g orbit per level
Special	1 to 10%	1-10	1 light year per level

Roll a d10 for each drive type the spacevehicle has.

Inatmo Drive Level: For each level of inatmo drive the spacevehicle can travel 1 mach in atmosphere, and can maintain maneuvers in up to 1 gravity. An inatmo drive like the one above (8%) would be considered a level 8 drive for that ship. The inatmo drive could operate in an 8g gravity well, and travel up to mach 8 in the atmosphere. A level 8 drive could generally out power, but not necessarily outmaneuver, a level 7 drive.

Exatmo Drive Level: The exatmo drives also have their drive level determined by the d10 size roll. A exatmo drive can travel at 1/10 the speed of light per drive level. The spacevehicle can maintain an orbit around a planet with 1g per drive level. An exatmo drive which occupies 4% of hull space would be capable of maintaining a forced orbital around a 4 g planet, and travel in a vacuum at speeds up to 4/10 the speed of light.

Special Drive Level: Special drives are also rated with levels 1 through 10, depending on their % of occupied hull space. The special drives are what turn insurmountable distances into science fiction pulp. All of the special drives function identically, and each is capable of covering one light year per level per day of game time. So a starship with level 6 special drive could travel 6 light years in one day's jump, slip, warp or whatever. This one day's travel is considered one "use" of a special drive, no communication can reach the ship, and the trip cannot be aborted safely.

The special drives can be subject to alterations by the campaign's referee. The time required for a use could be changed from one day to one week, and the distance travelled could be changed from light years to astronomical units, or parsecs.

Budding physicists may wish to consider are problems like the paradoxes of the special drives, and the exponential power requirements of such systems. For the most part these considerations are left to the improvisational talents of the referee (read cop out).

3) Fuel

Fuel may seem like a trivial issue for a gallant expedition out to save the universe, but even the most magnanimous cause must pay attention to fuel consumption.

Fuel Type: To determine the fuel type, roll on Table 52.8, *Fuel Type*. If more information about the fuel types is required refer to chapter 54, Vehicles. A space-vehicle will have one fuel type, and one fuel compartment that is accessed by each of the drives as their needs see fit. The different drive types have different fuel capacity requirements, and different rates of consumption.

Table 52.8: Fuel Type

DIE ROLL	FUEL TYPE
01-20	Gaseous
21-60	Liquid
61-80	Solid
81-90	Plasmoid
91-92	Nuclear
93-94	Magnetic
95-96	Dynamo
97-99	Broadcast
00	Other

Fuel Storage: To compute what fraction of hull space is occupied by fuel storage, use Table 52.9, *Fuel Storage*. Each % of hull capacity that is devoted to fuel storage is equal to one month worth of fuel. Thus a starship that runs off of solid fuels with the following fuel storage allotments: 8% inatmo, 9% exatmo, and 3% special, would have 20 months of fuel. In a 100 tonne spacevehicle the 20 months worth of fuel would be stored in a container occupying 20 tonnes of hull space.

Table 52.9: Fuel Storage

DRIVE TYPE	FUEL STORAGE
Inatmo	d10%
Exatmo	d10%
Special	d6%

Fuel Consumption: Fuel consumption must be converted to a standard unit, because one tonne of fuel won't meet the same requirements from one ship to another. Another problem is that some fuel types represent fuel storage, while others represent self contained power plants, collecting cells, or magnets.

Table 52.10: Fuel Consumption

DRIVE TYPE	TIME USED	FUEL USED
Normal travel consumption		
Inatmo	minute	day
Exatmo	hour	day
Special	one use	month
Combat consumption		
Inatmo	unit	day
Exatmo	unit	week

Under no circumstances will a special drive be able to operate with less than one month of fuel available.

Refuelling is left to the design of the referee. Some fuel types may be innocuous materials which are easily obtained from the local gas giant, or water planet, but others may require professional installation work.

Several problems of fuelling are left to the imagination of the referee (read cop-out): does broadcast power work off of radio waves? If complications with fuel are arising the referee should not be afraid to consult the sphincter dice described in chapter 16, Special Rolls.

4) Computers

A ship's computers are its most important asset. The special hulls, and drives, that make space travel possible would not be manageable without the electronic overview of the ship's computers.

The bigger the ship, the larger a computer that is needed. The level of a computer, like that of all other major spaceship systems, is determined randomly on a d10. The higher the level of the computer the more complicated the software it can manage. The die roll also represents the percentage of hull capacity that is occupied by the computer. So a 200 tonne starship with a level 4 computer would have 8 tonnes of computer equipment on board. The 8 tonnes of computer includes all the wiring, transducers, terminals, and interfaces, as well as memory and processor.

A computer requires life support, and will be stored within the computer center (bridge). All of the ship's functions are maintained in this section, and all personnel requiring computer access will operate there. This is essentially called the bridge. Interaction with the ship's computer is entirely decided by the referee. It is assumed that there is tremendous artificial intelligence potential in a ship's computer. The expedition may interact with the computer via terminals, or voice interaction however the ship's computer is intended to be user friendly and relevant software will be accessible by any relevant personas. A personality for the ship's computer is recommended.

All ships require a computer and crew. The required crew is listed in the spacevehicle crew section of this chapter. Crew members can only be replaced by computer software, and in some cases only by computer software and a robot.

Software In General: A starship's computer only comes equipped with the basic components necessary to operate the ship, and the computer requires the constant attention of the ship's personnel to operate.

There is no limit to the amount of software that a ship's computer can handle, but there is a limit to its effectiveness. The effectiveness of software is determined by the computer level of the

spacevehicle. The referee is free to present the software in any fashion that she sees fit. Software may appear as hardware that attaches itself to the ship's computer, or the referee may force mechanics to make high DD performance table rolls to down load the software. Any attempts at programming a spacevehicle's computer should start at DD20 plus the computer level,. The DD should be adjusted upwards depending on difficulty of the maneuver.

All additional software is considered a luxury, and is determined randomly. The referee goes down the software list rolling once for each program. The chance of having a program in the ship's computer depends on the computer's level, and the complexity of the program. The chance is multiplied by the computer level. Thus a level 3 computer would have a 60% chance of an astrogation program.

The value of software purchased for the ship's computer is determined as follows: (1000000/ chance of software) x computer level. Thus an astrogation program for a level 6 computer would have a value of 300000.

Crew Replacement Software: This software is devoted to reducing the number of personnel that are required to operate the spacevehicle. If such essential personnel is still present the software will be devoted to assisting them in their task. This topic is also discussed under spacevehicle crew in this chapter.

For example, medical software will have the knowledge and interfaces for operating medical equipment, an will be able to advise a veterinarian on the proper medical procedures. This bonus is represented as a -1 DD on the performance table per computer level. So a medical program being run by a level 6 computer will would reduce vet PT rolls by 6DD. This bonus is the same for any other class related programming. To earn the the PT roll bonus the activity must be taking place on the spacevehicle, or while in direct communication with it.

Table 52.11: Crew Replacement Software

Title	Chance	Explanation
Astrogation	20	Replaces an astrogator
Gunnery	10	As good as a gunner
Mechanical	5	Mechanical status
Medical	5	Operates medical equip.
Pilot aid	3	Non-pilot may use ship
Relations	5	Operates a relations bot

Defensive Software: This is software devoted to protecting and disguising the spacevehicle. Offensive software is very rare, since only the least sane of entities will actively engage in combat in such a hostile environment as outer space. The software will operate on its own, or assist mercenaries, or mechanics, in carrying out the described maneuvers with a DD bonus equal to the computer's level.

Table 52.12: Defensive Software

Title	Chance	Explanation
Anti hijack	20	On ship tactics
Anomaly	8	Hide in exatmo
Armada	10	Appear as an armada
Brig	50	Control doors from bridge
Cammo	3	Hide on planetary surface
Gun control	5	Airlock guns
Maneuvers	20	Fancy evasive maneuvers
Mimic	3	Appear as another ship type
Surveillance	20	Eavesdrop during combat

Miscellaneous software: This software can be virtually anything that can be imagined for a ship's computer. If the software is relevant to a personas PT roll she can earn a DD bonus of +1 per computer level. For instance a nothing making a general performance table roll to successfully cater a fancy dinner would earn a DD bonus if etiquette, diplomacy, or entertainment programs were on board. Many of the software devices list a class in which they will assist. If this is the case any persona of that class will earn a DD bonus equal to the spacevehicle's computer level when working within its environment.

Table 52.13: Miscellaneous Software

TITLE	CHANCE	EXPLANATION
Administration	10	Maintain personnel records etc. (nothing)
Advisor	5	Give good sagely advice
Appraisals	5	Estimate value of anything (nothing)
Banking	5	Manage a banking system (nothing)
Bioassayer	2	Tissue analysis (biologist)
Book reader	12	Reads little golden books (mech)
Chapel	5	Assists prayer (knite)
Communications	30	Monitors any communications (mech)
Decoder	2	Breaks codes (spie, mech)
Detectors	25	Detects anything (mech)
Diplomacy	4	Gives diplomatic advice
Entertainment	10	Entertains guests
Etiquette	15	Interstellar etiquette(nothing)
Forensics	2	Crime investigation (biologist, spie)
Fuel control	10	Add 10% to fuel (mech)
History	1	Knowledgeable computer
Industrial	5	Manage a plant
Law	5	Applies empire law (nothing)
Library	10	Operates as a class computer (all)
Mapping	15	Planetary mapping (nomad)
Mechanical	10	Self maintaining (mech)
Medical	10	Operates medical equipment (vet, biologist)
Navigation	5	Calculates best starpath (nomad, mech)
Printout	4	Glorious technicolor holo-prints
Programming	1	Programming at DD8 base (mech)
Robot	1	Controls robots (mech)
Translation	15	'#$%"*&' = 'self explanatory'
Weapons	4	Can control ordinance etc. (merc, mech)
Xenobiology	3	Identifies aliens (vet, nomad)

5) Defences

A ship's defences are composed of both the ship's computer, and machinery within the hull of the ship. For instance life support is considered a defence, and it consists of a sealed hull, air generators, air cleaners, and the pumps necessary to move the air throughout the spacevehicle. There are various types of defences available, and these are listed in order of increasing protection on Table 52.14, *Defences*. How these defences function in combat is described in chapter 38, Spacevehicle Combat. Refer to the *Defences* table to determine what type of protection the ship has. Each type of defence is checked once as the referee goes down the list.

All spacevehicles will automatically have life support, gravity, and armour to protect the spacevehicle and its contents. More involved defences are dependant on the roll of deci dice. A spacevehicle with a level 5 computer would have a 15% chance of electronic counter measures, 10% chance of shields, and a 5% chance of guns and active defences. These defences are detailed in the paragraphs following the table.

IIII

Table 52.14: Defences

DEFENCE TYPE	CHANCE OF DEFENCE
1) Life support	Automatic
2) Gravity	Automatic
3) Armour	Automatic
4) ECM	3 x computer level
5) Shields	2 x computer level
6) Guns	1 x computer level
7) Active	1 x computer level

1) Life Support: Life support is the environmental maintenance of atmosphere for organic, and delicate inorganic equipment. Life support is maintained in the computer bay, cargo hold, drives, and fuel storage.

Life support generally involves an oxygen/air atmosphere, which is hospitable for all personas. Exotic alien life supports may have fluid atmospheres or poisonous ones. If life support is interrupted, all creatures and artifacts not equipped for exatmo will be destroyed. The effects of depressurization are described in chapter 19, Special Terrain. The deadly effects of exatmo can be prevented by vac suits (chapter 42, Armour).

2) Gravity: The ship's gravity system elaborately maintains a constant 1g of gravity throughout all cabins and walkways of the ship. This gravity system is more effective than meets the eye. It always maintains 1g, whether warping across the cosmos, or banking at mach 8 within the atmosphere. A loss of the gravity system will cripple a spaceship by eliminating its high g maneuvers. Many of a ship's high g maneuvers would squash the its occupants into a puddle. The ravages of high-g may be reduced by acceleration couches.

3) Armour: Armour is nothing more than the strength of the exterior hull. Before any of the ship's internal components can be damaged, the ship's hull must be damaged. The process is similar to the body armour worn by personas. The ship's hull doesn't have to be punctured to transmit damage into the interior of the ship, as forces and energy waves can be conducted through the hull. The armour rating of the space vehicle should have been determined when the hull strength was determined earlier in this chapter.

4) ECM: Electronic counter measures are employed by the ship's computer to create false images of the ship, to confuse incoming missiles, to interfere with the firing computers of other ships, and to ensure that there is no long range tampering of the computer system. ECM increases the AR by 200 points per level of computer.

Defensive ECM can be used to defend against controlling attack ECM. There is a 15% chance per

computer level that defensive ECM can break off attack ECM. Only when a ship has both attack and defence ECM can electronic countermeasures be used simultaneously for attack and defence.

5) Shields: Defence shields are force fields which surround the ship, and absorb damage that would otherwise be delivered to the hull. Force fields can absorb 100 points of damage per level of exatmo drive. When the force fields are being used, fuel is absorbed at the rate of 1 day per unit.

6) Gun: A gun does not sound like an entirely defensive device, but sometimes a good offence is the best defence. In the perspective of space-vehicle combat a mere gun would be an ineffectual weapon. However when defending the ship against intruders, a gun mounted in the airlock can be most effective. If the player has rolled 'gun' for her spacevehicle each airlock will be mounted with a gun rolled in chapter 46, Guns. The guns can be fired both outside of, or inside of, the airlock, whether inatmo or exatmo. The gun cannot fire both inside of and outside of the airlock simultaneously. The gun can be fired remotely, via visual link from the bridge, or it can be left to the control of a gun program imbedded in the computer.

The gun has an unlimited supply of ammo. To hit rolls are made with a the persona's bonus non-proficient (if fired manually from the bridge), or with no adjustment at all (if fired by the program). The gun can be knocked out if it is sufficiently damaged. The gun's armour rating is the same as the one listed for the strength of the hull.

7) Active: Active defences can only be used against incoming attacks such as: missiles, artillery fire, and mines. Active defences fire their own missiles, waves of shrapnel, energy blasts, lazer arrays, or crystalline discharges in an attempt to destroy, prematurely detonate, or disturb the course of incoming attacks.

All of the different active defences function equivalently, so the ref may choose whichever she sees fit. Active defences have an 8% chance, per level of computer, of thwarting any individual incoming attack (attack types 4-7). A spacevehicle with active defences will have of 10 non-reuseable active defences per 50 tonnes of ship. Thus a 500 tonne spacevehicle with a level 8 computer would have 100 active defenses, each with a 64% chance of stopping an incoming attack. Replacement of active defences is done when the spacevehicle is refitted.

6) Attacks

A ship may have attacks for a variety of reasons: they are pirate scum; they need to defend against pirate scum; the weapons are left over from an age of warfare; etc. The attacks that a ship has are determined randomly, on Table 52.15, *Attacks*. All spacevehicles can be used to forcibly board another spacevehicle. The referee goes down the list rolling once for each attack type. So a space vehicle with computer level 4 would have a 20% chance of ramming, a 16% chance of ECM, etc. The attack types are described in the paragraphs following the table.

Table 52.15: Attacks

ATTACK TYPE	CHANCE OF ATTACK
1) Boarding	Automatic
2) Ramming	5 x comp. level
3) ECM	4 x comp. level
4) Grenades	3 x comp. level
5) Bombs	2 x comp. level
6) Artillery	1 x comp. level
7) Naval Artillery	1/2 x comp. level

1) Boarding: The boarding program allows a spaceship to engage in unauthorized docking with another craft. The ships are maneuvered airlock to airlock, at which point the attacking ship's (or maybe the defending ship's) crew must breech the airlock, and attack the ship from within. A ship can only avoid being boarded if it can outrun the offending spacer. A ship attempting to board may only do so in exatmo. The boarding spaceship has a 4% chance per level of computer of successfully docking with another craft. The spaceships must

jostle for position for 1-4 minutes (on combat fuel consumption) before docking is again attempted.

Pirates, and almost all mercenaries, prefer boarding to all other attacks for two reasons. First the contents of the ship can be gathered relatively unharmed. This allows for more loot, and more hostages. Secondly boarding is considerably more fun.

2) Ramming: Ramming is a form of boarding which has no safeguards for either craft. A ramming spacevehicle will smash into the hull of another ship, and then slide along the hull until the two airlocks are lined up. Like boarding, this procedure can only be done while exatmo. The chance of successful ramming depends on the to hit roll of the attacking ship. Ramming vessels have a 12% chance of successfully connecting with an airlock per computer level. Ramming ships are damaged, refer to chapter 38, Spacevehicle Combat for more information about ramming.

A ramming ship need not find an airlock if the proper equipment is on board. Ramming allows the attacking vessel to lock onto the target ship, open its own air lock, and cut through the target ship's hull.

3) ECM: Electronic countermeasures are used to confuse a targeted ship's defences, or to electronically interfere with another ship's performance. Attack ECM can confuse a ship's defences by making it appear as though several attacks are coming at once, lazer attacks are missile attacks, missiles have different courses, etc. When ECM is used in this fashion, the attacking computer gets +150 to hit per level of computer.

Attack ECM can also be directed at the target starcraft in an attempt to disable its capacity to maneuver, maintain power, control gravity level, etc. ECM control attacks can be directed at the following ship systems: drives (drop them by 1-4 levels; minimum is 1); fuel (hamper fuel access and reduce capacity by 10-60%); computer (drop the effective computer level by 0-3); robots (attempt to remotely control robots on the ship; persona robots get a save). Any of these maneuvers have a 3% chance per level of computer of being successful. A failed attempt cannot be tried again, and controls broken by defensive ECM cannot be re-connected.

ECM can be used either defensively, or offensively, at any time, but one system cannot simultaneously fulfill both requirements.

4) Grenades: Grenades are special ship combat weapons that are delivered via small missiles, or space mines.

A spaceship can only outrun an attacking ship's missiles if it has an exatmo drive 3 levels higher than the attacker's. Thus a ship with level 7 fusion drive could only outrun the missiles of a ship with a level 4, or lower, exatmo drive. These missiles cannot be outrun while inatmo. Grenade missiles cannot survive re-entry into the environment.

Grenade mines can only be used if the target ship's path can be plotted, and the mines dropped along its path. Mines can be used to strafe the ground when inatmo, but not for ship to ship combat.

The grenade type is rolled on the *Grenade Type* subtable, found in chapter 45, Grenades and Aerosols. A ship will have 1-10 mines/missiles per tonne of ship. Two grenade missiles can be launched, and controlled, per level of ship's computer. Five grenade mines can be dumped per unit per level of computer. Grenade attacks must score a hit on the spaceship's hull before they can inflict damage.

5) Bombs: The bomb type is rolled on the *Bomb* table in chapter 44, Bombs. Bombs do not have to penetrate the hull to do damage. Missile bombs will have a 20% chance per level of computer of hitting, unless deterred by ECM, or active defences. This missile type can be fired at any target within sensor range. A starship will have 1-2 bombs per 500 tonnes of ship. Mine bombs function the same as mine grenades, but need only have the ship pass by to inflict damage.

6) Artillery: Artillery attached to a spaceship must be operated by a gunner, or by special software. The artillery is rolled on the *Artillery* table. A gunner rolls to hit the target ship. A gunner will get +100 to hit per level of computer. A gunnery program will get +50 to hit per level of computer. A starcruiser that has artillery will automatically get one big

gun. There will be 0-1 additional artillery pieces for every 750 tonnes of ship.

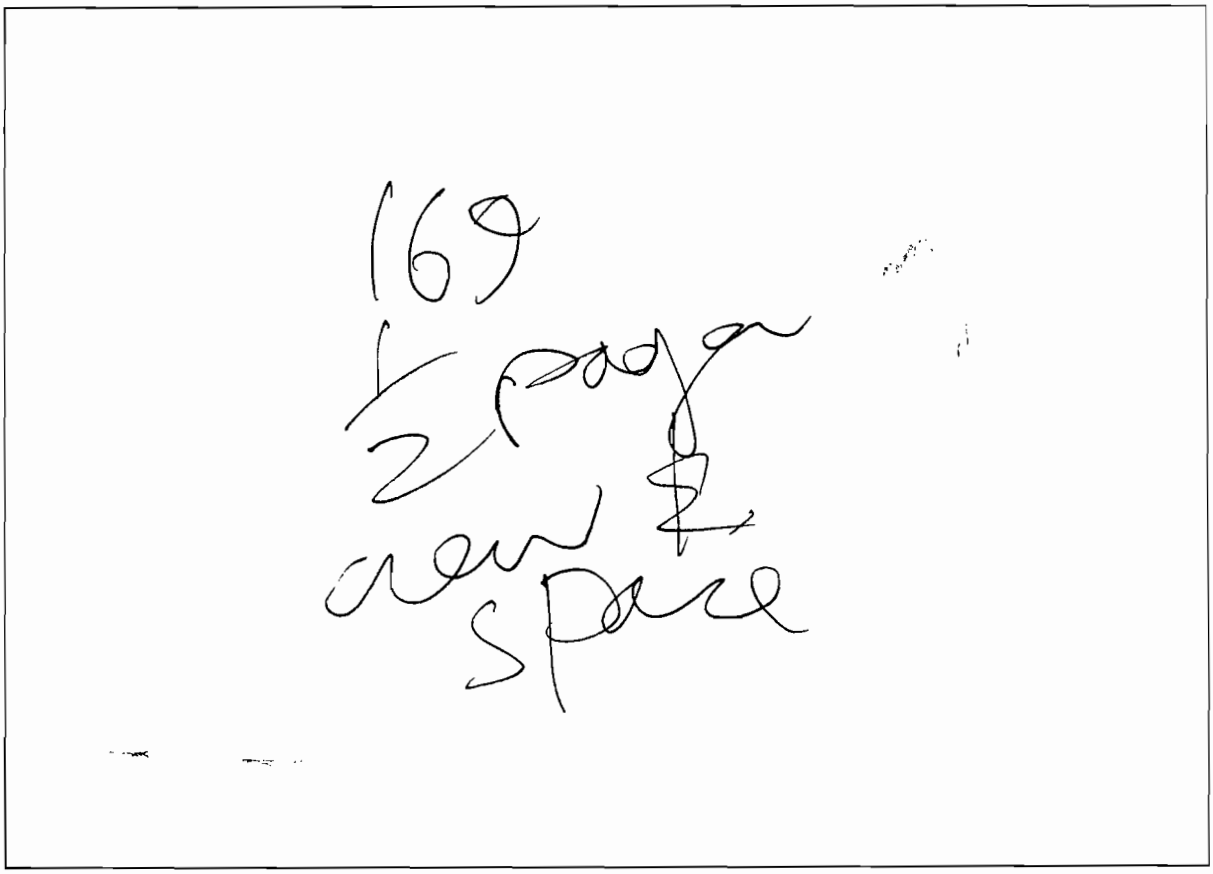
7) Naval Artillery: Naval artillery requires two gunners, and a gunnery program. Very often naval artillery will go unused on a spaceship. When naval artillery hits, it destroys whatever component of the ship it has hit, and kills all crew in that area. There will also be a massive hull puncture exposing all unsealed bulkheads to the vacuum of space. Shields can deter naval artillery.

Naval artillery gets +200 to hit per level of computer. Naval artillery can only be fired in outer space. The type of artillery can be rolled on the *Artillery Type* table. Naval artillery has different specifications than regular artillery. The damage is tripled, and the maximum range is increased 100 fold. Firing naval artillery requires one day of fuel.

7) Crew

Spaceships vary in size from small craft to city sized leviathans. They can have fantastic drives that flit across the stars, and computers that weigh tonnes. Yet by far the most important element is the crew. This definitely does not limit the referee from designing self thinking spacecraft, or robot maintained vessels, but the spacecruisers are still nothing more than vehicles. The ships do not instinctively migrate from star to star. Crew, and cargo, are the crux of space travel. This section deals with the crew.

The crew of a spaceship can be aliens, people, or robots. What each ship must have is an essential skeleton crew to maintain each system computer. The essential crew on any ship consists of the pilot, the astrogator, and the engineer (mechanic).



IIII

Pilot: The pilot is the overseer of all the ship's functions. She is responsible for the execution of planetary maneuvers, star system maneuvers, combat maneuvers, ship procedures, and general ship authority. All of these tasks require the intimate co-operation of the ship's computer, and the pilot.

Without a pilot the ship is essentially grounded, orbiting space junk, or stuck in deep space. No ship can, unless having a mind of its own, be activated without a pilot. Pilots can be qualified in any of the following ways: a mechanic with piloting skill, and a level (EXPS) equal to 10 minus the spacevehicle's computer level; a nothing with commercial pilot skill; or a referee persona specifically trained by some school, or college.

Astrogator: The pilot seems to know everything, but the complexities of the special drives are a case of their own. The astrogator is responsible for safe programming of the ship's computer with the co-ordinates, and precautions, that are prerequisite of the special drives.

Without an astrogator the chance of special drive failure is increased 200 times. Normally the cumulative errors of the computer, and the astrogator result in a 1 in 1000 chance of a special drive error (42 on kilodice). When such an error occurs, the crew may find itself stranded in deep space, out of time sequence, or whatever other mishap the special drives may provoke. When used by a self proclaimed astrogator a roll less than 200 on kilodice will indicate special drive failure.

A qualified astrogator is a mechanic with navigation skill; a nothing trained in astrogation; or some other qualified referee persona. To replace an astrogator, the computer must have special astrogation software. This special software will guide the special drives with only a 2 in 1000 chance of failure.

Mechanic: Considering that a ship can have tonnes of drives, enormous amounts of hull, and complicated airlocks there must be a lot which can go wrong. It is the responsibility of the ship's mechanic to monitor the computer's maintenance programs, to program repairs, and to occasionally pick up the wrench herself.

Without a mechanic things simply start to go amiss. Even with a mechanic on board there is a daily 1 in 1000 chance that a ship will have some malfunction that will completely cripple the spacecraft. Such a breakdown will require 1-6 days of intensive work by the mechanic to repair the damage. If there is no mechanic monitoring the computer's maintenance software, the daily chance of a crippling malfunction is doubled, until in about 10 days the spaceship simply gives up. To replace a mechanic, would require mechanical software programs, and a maintenance bot.

Additional Crew: There are several other crew members that are essential when certain conditions arise on the ship. These examples are just basic ones, and hopefully the ref can think up others to hopelessly clutter the ship with referee personas.

Gunner: Gunners are needed to operate any of the combat equipment: artillery, naval artillery, mines, active defences, missiles, and shields. A gunner is easily replaced by a gunnery program whether this program is used for mines, shields or artillery doesn't matter. None of the listed equipment will function without a gunner, or a software replacement. A qualified gunner is any mercenary with extraplanetary vehicle skill.

Combat robots of any type can replace a gunner without the need of a gunnery program. Combat robots can operate one active combat device for every 4 points of intelligence.

Ship's Doctor: A veterinarian is required whenever luxury guests (those travelling in cabins) are on board. Guests without proper medical attention are almost certain to have some ailment become acute while in deep space. A vet can only be replaced by medical software combined with a medical bot.

Ship's Steward: Another crew member required on guest laden starships is a ship's steward. The steward changes linen, washes clothes, and generally makes space travel bearable for guests. Without a steward, guests will certainly be in bad temper, and may even rebel during the trip. A qualified steward is any Nothing with a steward-like skill. A steward can be replaced by a relations

bot, a domestic bot, or a hobbot.

Administrator: One optional crew member which may be actively shunned by the personas, is the ship's administrator. The ship's administrator will arrange docking papers, interpret cartage laws, balance accounts, designate cargo allotments, and will generally be the ship's legal advisor. Without a ship's administrator the personas will be forced to involve themselves with such shipping inanities. The ship's administrator is any nothing, and can be replaced by an analog bot, a transport bot, or a relations bot.

Diplomat: The last optional crew member to be noted is the diplomat. The diplomat is trained at being excruciatingly polite, even to the most horrific of alien species. A diplomat will attempt to keep the crew, the guests, (and especially the personas) from offending rarely encountered cultures. A diplomat can only be replaced by etiquette or library programs, and a relations bot.

8) Cargo Allotment

Cargo is any tonnage that is not occupied by drives, fuel, or computers. The cargo allotment cannot be immediately counted as cargo space, there are several other spacevehicle features which occupy cargo space. These are: cold storage, work spaces, cabins, and corridors. The remaining space is cargo space, it indicates how much goods can be transported, and what type of hull access is allowed.

Cold Storage: Cold storage is for cryogenic suspension of organic material less than 250 kg in wate. The freezers will maintain life, with no drain on life support, and will continue to function after life support has failed. Cold storage will work until the box itself is destroyed. Each cold storage space occupies 1/4 tonne of hull space.

Work Spaces: Work spaces are even more mandatory than the essential crew. 500 kg of hull space must be allotted to every member of the working crew.

U: Cabins are somewhat of a luxury, but it is impossible to have guests (other than in cold storage) without cabin space. Each cabin requires one tonne of hull space, and can comfortably house two persons.

Corridors: Corridors only apply to main passageways that connect cabins. Utility corridors use no significant amount of hull space. Cabin corridors require 200 kg of hull space per map hex (2 meters) of passage.

Cargo Space: All remaining cargo space is honest to goodness cargo space. A ship may have one airlock per 5 tonnes of cargo space, a cargo lock (in atmosphere only) requires 50 to 500 tonnes of cargo space, a cargo airlock requires 500 to 5000 tonnes of cargo space. For more information on hull access see the heading HULL in this chapter.

9) Special Stuff

There is some equipment and architecture that is specific to spaceships, and should be covered here.

External Drives: The nature of external drives should be com-pletely self explanatory. Either the exatmo, the inatmo or both drives have been constructed on the exterior of the hull. This innovation allows hull space that was previously occupied by drives to be converted to cargo space. The drawback of this system is that the drive units are subject to attack during combat. External drives can either be accessed directly through the hull, or via the airlock. Special drives can never be external.

Vac Suits: A spacecraft will have one civilian vac suit per crew member, and one civilian vac suit per state room. There is a 10% chance that there will be an industrial vac suit. If the spacevehicle has external drives, cargo airlocks, or any other excuse for the mechanic to exit the ship an industrial vac suit will always be supplied. For more information about vac suits refer to chapter 42, Armour.

Gravity Couches: Gravity couches are chairs specially designed to save the body from damage during high-g maneuvers. They are composed of force absorbing materials, and restraining belts. Grav couches are only needed when the starship's gravity system has failed. Passengers and crew not in grav couches during high-g maneuvers will almost certainly be killed. Grav couches are optional.

Emergency Equipment: Most space-vehicles will have some form of automated emergency equipment. Fire fighting is carried out by the ship. Minor air leaks will be repaired by the ship. In the event of uncontrollable depressurization, raging fire, or radiation hazards the ship may automatically contain the problem by closing off bulkheads.

Other emergency procedures are left to the work of the crew, or their robotic replacements. Such emergency procedures are: major hull repair; radiation clean up; and safety of passengers. Passengers are especially susceptible to depressurization, but it is up to them to get into the vac suits or life bloats.

Life Bloat: A life bloat will maintain 4 passengers (up to 250 kg in wate each) in cryogenic suspension for an indefinite length of time. The cryogenic suspension will begin when the balloon-like life bloat is subject to exatmo. There will be one life bloat for every four luxury passengers.

Sick Bay: The sick bay is primarily the vet's place of operation, and personal respite. A sick bay can hold four patients per tonne of cargo space. Any major medical system will be found in this section of the ship. All ships with vets will have a sick bay. There is a 20% chance that ships without vets will have a sick bay in waiting.

Food Machine: The food machine will generate nutritionally balanced meals for several different races. The palatability of such foodstuffs is determined by the referee. Most food machines maintain algae-like, or fungal, cultures containing the basic hetero-trophic food groups. One tonne of machine is required for every 10 eaters supported. Because of their potential for comic relief all ships will have a food machine. Food machines are also known as compu-cooks, and auto chefs.

Robots: Robots are actually a fairly common occurrence on starships. This is only if the presence of robots is suitable to the referee's milieu. The bots may be on board to replace crew, to aid crew, or even as guests. There is a 5% chance of a random robot being on the spaceship for whatever reason the ref desires. If one robot is cruising through the ship's halls, there is a 5% chance of a second robot, and so on.

In addition to these colourful mechanical passengers there are robots which are designed to replace the functions of various crew members. The referee rolls once for each bot type on Table 52.16, *Ship Robots*. The chance of a ship sporting a particular robotic replacement depends on the level of the spacevehicle's computer, what sort of software the computer supports, plus what ever adjustments are appropriate for that type of robot. The chance of a ship with a level 5 computer, and 50 tonnes of cargo space having an analog bot (robot type A) is 55%.

A ship may have a whole host of robots, and the relevant ones should be prepared to the last detail as a referee persona bots. Insane robots on a space ship could add to the mysteries of a campaign, or scenario.

Table 52.16: Ship Robots

BOT TYPE	BASE CHANCE PER COMP. LEVEL
A) Analog bot	1%, +1% per cargo tonne
G) Combat bot	1%, +10% per attack level
C) Industrial	0%, +20% per cargo lock
K) Maintenance	5%, double if maint. software
I) Medical bot	2%, double if med. software.
D) Relations bot	6%, double if etiqu. software.
L) Transport bot	2%

10) EXPS

The EXPS value of a spacecraft is impossible to assess. The general award that is granted for an earned spaceship is one complete level of experience. Nothings are automatically propelled to zero level of their desired class. The problems do not arise when awarding the experience level, but when determining whether a ship is an earned one or not. An earned starship is one in working condition, and successfully controlled by the personas on board.

11) Value

A spacevehicle's value depends on several basic components: hull, drives, computer, etc. The exact value of a ship will probably always be in dispute. Wear and tear may have reduced a ship to worthlessness in one culture, while another will pay dearly for anything that can get into orbit. To determine the general value of a starcruiser use Table 52.17, *Basic Ship Value*. The hull value is multiplied by the armour rating of the hull. So a 100 tonne ship with an AR of 700 would have a base value of 70000000. If the same ship had a level 5 special drive it would be worth an additional 125000000. Spacevehicles are very valuable.

Table 52.17: Basic Ship Value

SHIP COMPONENT	COMPONENT VALUE
Hull, normal	1000 per tonne x AR
Hull, special	5000 per tonne x AR
Drives, inatmo	10000 per tonne x level
Drives, exatmo	100000 per tonne x level2
Drives, special	1000000 per tonne x level3
Fuel	25000 per month
Computer	900000 per level2, plus software
Defences	100000 per level (each defence)
Attacks	100000 per level (each attack)
Cargo space	1000 per tonne

12) Operation and Refitting Costs

The only operational costs of a spaceship are the crew's wages, and the fuel. The frequency of repairs is detailed under the ship's mechanic in this chapter. Repairs carried out by the mechanic cost nothing, and are completed properly. Replacing drives, upgrading computers, etc. cost the amount listed under value for the particular device. The cost of the part will include installation and labour.

General refitting is necessary for alloy hulls. Refitting will be required after extended travels of any sort, or after any combat engagement. Refusal to regularly refit a ship will increase the cost of further refitting, and increase the chance of a mechanical failure. The refitting will cost between 0.01% and 0.1% (rolled on a d10) of the ship's total value. If the refitting costs were .05% of the ship's value then a spacevehicle with a value of 500000000 would cost 250000 to refit.

IIII

Chapter 53
Treasure



Virtually anything can be considered treasure. The type(s) of treasure dealt with in this chapter are those substances whose physical nature are the prime properties in determining their worth. An obvious example is gold—although it has many valuable chemical properties, it has has been highly prized for centuries for its rarity.

To use an example more gaming related, a fusion pistol has a value of 200000 because it is a deadly, violent, and efficient weapon; but a sliver of orgone crystal may be worth 500000 for no readily apparent reason. Therefore the nature of treasure is heavily dependant on the scenario. Something may be common and worthless in your particular scenario, yet be awarded great value in the treasure system (or vice versa). When this occurs it is up to the ref to use her imagination to accommodate the circumstances.

Treasure with very high value can also drastically affect the outcome of a campaign, and the ref is expected to use creative means to alleviate the problems that arise from this.

One problem which may arise when using the treasure system is the possible bizarre results of the random rolls. For example, a treasure could be a groin ornament made of water and quartz which is sewn on. Such is the roll of the dice, and the ref must use her ingenuity, and possibly a little humor to deal with such a weird occurrence.

The format of the treasure may also cause problems. Treasure is not only gold or jewels, but includes antiques, information, and bizarre jewelry (as above). In many cases, the treasure must be cashed in before its value can be divided amongst the personas in the expedition.

Personas that insist on discarding valuable antique chairs, expensive lamp shades, and other such seemingly trivial items are only making themselves poorer at the ref's amusement.

The referee should have fun with this chapter. The items that the personas can acquire are down right silly and that should be the tone of treasure, and the whole game for that matter. Serious referees will have trouble with this chapter, and like anything else if it it causing you trouble throw it out. Treasure is notorious, especially ornaments, for having many rolls leading to very little in the way of toys. Remember that everyone needs practise rolling dice, and the more you roll the luckier you are.

How To Roll Treasure Value

The treasure value consists of two parts: the Base Value, and the Base Value Multiplier. The Base Value is determined by a deci dice roll (see Base Value Table), and can vary from 1 to 1000000 (yes one million).

The Base Value Multiplier is also rolled on deci dice, and the number generated (between 1 and 100) is multiplied by the Base Value to determine the actual value of the treasure. For example, a deci dice roll of 38 indicates, via the table, a Base Value of 10. A second deci dice roll of 21 yields a Base Value Multiplier of 21. Thus the value of the treasure is 210. During times of economic recession, the treasure Base Value Multiplier could be reduced to a d10, and during times of economic boon, perhaps a kilo-die.

If the persona rolls a "toy" on the *Base Value* table (96-99), refer to the *Toy Type* table (chapter 46), and roll for a regular toy. A toy that has been obtained via the treasure table cannot count as a last roll. Therefore if a spie gets a gun as a treasure-generated toy, she may still continue rolling up toys.

Table 53.1: Base Value of Treasure

DIE ROLL	BASE VALUE
01-10	Random junk: does not count as roll.
11-20	1
21-40	10
41-60	100
61-80	1000
81-90	10000
91-95	100000
96-99	Random toy: cannot count as last roll.
00	1000000

Base Value Multiplier
01-100 (rolled on deci dice)

Treasure Value Equals
Base Value x Base Value Multiplier

Treasure Format

Presently, treasure is nothing more than a value awaiting some form. The treasure formats give the treasure some tangible, identifiable character. Format is rolled on Table 53.2, *Treasure Format*.

Table 53.2: Treasure Format

DIE ROLL (d6)	TREASURE FORMAT
0-1	1. Substance
2	2. Crystal/gem
3	3. Ornament
4	4. Information
5	5. Specialized random junk: relics
6	Other or Mixed: roll twice (d6-1)

1) Substance Treasure Format

Table 53.3, *Treasure Substance Type* is surprisingly short. It is composed of those elements and minerals most commonly considered valuable. Whether the materials are valuable due to scarcity or other factors depends on the ref. The list of substances can and should be added to by the ref.

The treasure's wate is also up to the ref, of the five formats listed the substance format should be the heaviest. When the value of the substance is truly exorbitant (hence large wates), the ref may wish to present the substance in the form of a mine, a factory, or some other such source of massive wealth.

Table 53.3: Treasure Substance Type

DIE ROLL (d20)	SUBSTANCE TYPE (d6) 1-3	4-6
1	Bone	Linoleum
2	Clay	Oxygen
3	Copper	Paint
4	Copper	Paper
5	Cotton	Plant
6	Dirt	Plastic
7	Electrum	Platinum
8	Electrum	Platinum
9	Enermium	Plutonium
10	Foam	Polyester
11	Foodstuff	Rock
12	Glass	Rubber
13	Gold	Silver
14	Gold	Silver
15	Granite	Spice
16	Helium	Water
17	Herb	Wax
18	Lead	Wire
19	Linen	Wood
20	Other	Other

Table 53.4: Crystal Treasure Type

DIE ROLL (d20)	CRYSTAL TYPE
0-1	Agate
2	Amethyst
3	Azurite
4	Coral
5	Diamond
6	Emerald
7	Garnet
8	Jade
9	Jasper
10	Obsidian
11	Onyx
12	Opal
13	Pearl
14	Quartz
15	Ruby
16	Sapphire
17	Topaz
18	Turquoise
19	Mixed (d20-1 twice)
20	Other

2) Crystal Treasure Format

Crystals is a generic term imprecisely used to include gems, crystals and other shiny baubles. Crystals are less descriptive than other formats because they are objects commonly associated with treasure and fortune.

How the crystals are presented is the responsibility of the referee. Whether it is one valuable gem, or a collection of many less valuable ones depends on the scenario that has been created. The ref should remember that wate is not the only value determinant of a crystal, and that it may possess other valuable properties. Very valuable crystals should have some history attached to them; if they do not some should quickly develop. To determine the crystal type roll on Table 53.4, *Crystal Treasure Type*.

3) Ornament Treasure Format

Ornaments are trinkets designed to adorn the body of the wearer. Regardless of the value of the ornament, it will always consist of a single object. E.g., one ring worth 1000, not ten rings worth 100 each. Valuable ornaments will almost certainly have a history, and perhaps even a name.

The ornaments are described by what body part they were designated to adorn (refer to Table 52.5, *Ornament Location*), and how they are attached to the body (refer to Table 52.6, *Ornament Application*). The composition of the ornament can be rolled on the substance and/or the crystal table, according to Table 52.7, *Ornament Composition*. The ref must remember that an ornament is valuable because of the way that it has been assembled, and ransacking it for its primary

elements may render it worthless—tearing the diamond from a diamond ring, for instance.

This system can only provide a general idea of the nature of the ornament. Final details are left to the artistic imagery of the referee.

Table 53.5: Ornament Location

DIE ROLL (d24)	ORNAMENT TYPE
1	Abdomen
2	Ankle
3	Biceps
4	Calf
5	Ears
6	Eyes
7	Foot
8	Forehead
9	Fur
10	Groin
11	Hair
12	Hand
13	Head
14	Hip
15	Knee
16	Lips
17	Mouth
18	Neck
19	Nose
20	Pectoral
21	Thigh
22	Wrist
23	Mixed
24	Other

Table 53.6: Ornament Application

DIE ROLL (d8)	APPLICATION TYPE
1	Applied (make up)
2	Fitted (rings, bracelets)
3	Pinned
4	Sewn
5	Strapped (chained)
6	Stuck (sticky)
7-8	Others

Table 53.7: Ornament Composition

DIE ROLL (d6)	ORNAMENT COMPOSITION
1-2	One substance
3	One crystal
4-5	One substance/crystal
6	Other

4) Information Treasure Format

Valuable information should consist of pointless facts which in no way affect the campaign or scenario at hand, but which are potentially saleable to some referee persona, data bank, or newspaper.

Information could be personal messages, corporate plans, or top secret intelligence. The wate (kg) of the information is decided by the referee—info worth millions scrawled on the back of a napkin is convenient for the personas, but is susceptible to various tragedies. How the information is stored is determined by a roll on Table 53.8, *Information Storage*. Nine times out of ten the information will be in a coded form.

Table 53.8: Information Storage

DIE ROLL (d6)	STORAGE TYPE
1	Spoken
2-3	Written, parchment (book, notes)
4	Written, other (engraved, plastic)
5	Computer storage
6	Other

5) Specialized Random Junk (Relics)

Specialized random junk is rolled on the *Random Junque* tables (chapter 51), and accorded whatever value was determined by the treasure system. The object can be a luxury piece of random junk: an antique; a souvenir (owned by some important someone); or commodity shipment consisting of many units of random junk.

Go to the random junk tables, and determine what the persona is getting. If the treasure is worth less than 50 eps then roll another treasure, but do not discard the first one.

IIII

Chapter 54
Vehicles



A vehicle is essentially any machine designed to help personas get from point A to point B. The vehicles designed in this chapter are of the mindless, planet bound variety. The vehicles are mindless when compared to robots, and planet bound when compared to spaceships. This point is not meant to encroach on the referee's artistic license (because intelligent spacefaring Edsels may be the basis of her campaign), but to merely point out that the vehicles generated in this chapter will not turn out like that.

Vehicles are much more common than spaceships, and in most campaigns the planet's surface, and atmosphere, will be polluted with vehicles. Because of this vehicular profusion, it is recommended that the referee create several vehicle types to be re-used frequently. Like the spaceship creation system, the vehicle creation system does not lend itself to on-the-spot toys.

The vehicle system is designed with anthropomorph personas in mind. This means that the seating and vehicle mechanisms are fashioned for use by anthropomorphs. The referee can use the vehicle system to create vehicles for aliens, or robots, but this chapter will immediately accommodate them.

Since this vehicle creation system is bizarre at the very least, what is considered a basic vehicle should be considered. A basic vehicle will almost certainly come with an engine, a body, a braking system, a steering device, and some space to harbor passengers. Other items that should be included are: windscreens, roof, signal lights, instrument panels, and doors. From the second list any of the items can be eliminated because of terrain, purpose of vehicle, or performance capacity. If the ref tries to eliminate any of a vehicle's essential requirements, a very good explanation is necessary.

1) Primary Format

The primary format of a vehicle indicates those parameters that it was originally manufactured with. The die roll determines the vehicle's basic design immediately after manufacture (whether it was produced by hand or by assembly line). Roll once on Table 54.1, *Primary Format* to determine the vehicle's basic structure. This basic form decides: the number of passengers, cargo space, size, wate, and general description of the vehicle.

Each format type has several subcategories, each of which gives a more specific description of the vehicle. Imaginative players, and refs, are not restricted to the vehicle type rolled, these are supplied merely to give some idea of the purpose

and dimension of the vehicle rolled.

Table 54.1: Primary Format

DIE ROLL	FORMAT TYPE
01-19	1) Cargo
20-60	2) Leisure
61-80	3) Passenger
81-99	4) Self powered
00	Other

# of Passengers: The number of passengers refers to the number of seats that are present to safely carry personas. design of the vehicle, and the number. Obviously more passengers can be crowded in, but seating them will have to be determined along the course of role-playing. The seats are built to support the frames of humanoid personas.

Cargo: Cargo can be listed as a flat number, and this is the number of tonnes that the vehicle can safely transport. If cargo is listed as 'per pass' then there is that amount of cargo space per passenger that the vehicle was designed for. A 4 passenger vehicle with a 10 kg per pass. cargo listing would have 40 kg of cargo space. Exceeding cargo space should increase DD on the driving performance table.

Wate: The vehicle wate is simply a guideline that indicates the vehicle's unloaded wate. The referee must adjust the wate depending on what is attached to the vehicle.

1) Cargo Primary Format: Cargo vehicles have a basic design that is devoted to the transport of things other than passengers. Roll on Table 54.2, *Cargo Vehicle Type* to determine the size of the cargo vehicle. The passenger portion of this vehicle is secondary to the cargo space. The passenger cabin may, or may not, have access to the cargo hold.

Table 54.2: Cargo Vehicle Type

Die Roll	Primary Format	# of Pass	Cargo (tonnes)	Wate (tonnes)
01-25	Pick up	1-2	1.5	4
26-50	Van	1-2	2.5	7
51-68	1/4 Tonne	1-2	5.0	8
69-84	1/2 Tonne	1-3	10.0	9
85-94	1 Tonne	1-3	15.0	10
95-99	Semi-trailer	1-4	25.0	12
00	Other			

2) Leisure Primary Format: The leisure vehicle is the kind of vehicle which we are most familiar. These are privately owned vehicles that are designed for commuting to work, pleasure touring, or simply for parking in front of the house. They designed primarily for passenger travel, and have little space allotted for cargo. Roll on Table 54.3, *Leisure Vehicle Type* to determine the dimensions of the leisure vehicle.

Table 54.3: Leisure Vehicle Type

Die Roll	Primary Format	# of Pass.	Cargo (kg)	Wate (tonnes)
01-16	Motorcycle	1-3	10/pass.	0.15
17-36	Mini	1-4	15/pass.	0.6
37-52	Sports car	1-6	20/pass.	1.0
53-72	Sedan	1-6	25/pass.	1.5
73-88	Yacht	1-8	30/pass.	2.0
89-99	Van	1-10	35/pass.	6.0
00	Other			

3) Passenger Primary Format: The passenger vehicles are anthropomorph cargo vehicles. They have many seats, and reasonable cargo space for the passenger's belongings. Roll on Table 54.4, *Passenger Vehicle Type* to determine the size of the vehicle.

Table 54.4: Passenger Vehicle Type

Die Roll	Primary Format	# of Pass.	Cargo (kg)	Wate (tonnes)
01-38	Van	8-13	30/pass.	6
39-66	Short bus	1-30	40/pass.	8
67-84	Bus	81-100	50/ pass.	10
85-92	Dbl deck	101-120	40/pass.	12
93-99	Stretch bus	101-120	40/pass.	12
00	Other			

4) Self Powered Primary Format: These are the engineless modes of transportation that the persona can use to get from one place to another. Self powered vehicles function the same as all other vehicles, except they employ gear systems, pulleys and elastics to power the vehicle. These are not your ordinary self powered vehicles since they can attain tremendous speeds. Roll on Table 54.5, *Self Powered Vehicle Type* to determine the type of powered vehicle.

Table 54.5: Self Powered Vehicle Type

Die Roll	Primary Format	# of Pass.	Cargo (None)	Wate (kg)
01-24	Cycle	1-4	—	10 per pass.
25-34	Fly cycle	1-2	—	20 per pass.
35-56	Hang glider	1-3	—	25 per pass.
57-78	Pogo stick	1-2	—	2.0 per pass.
79-99	Skate board	1-2	—	1.5 per pass.
00	Other			

2) Secondary Use

The secondary use of a vehicle is far more relevant to the vehicle's present state. This roll indicates the major adaptations carried out on the vehicle after its initial manufacture. For instance a leisure vehicle may be designed for high performance, a military attache vehicle, or purely for recreation. The adaptations not only indicate haphazard adjustments, but changes which are reflected throughout the entire vehicle. Roll once on Table 54.6, *Secondary Use* to determine what the vehicle's secondary format is.

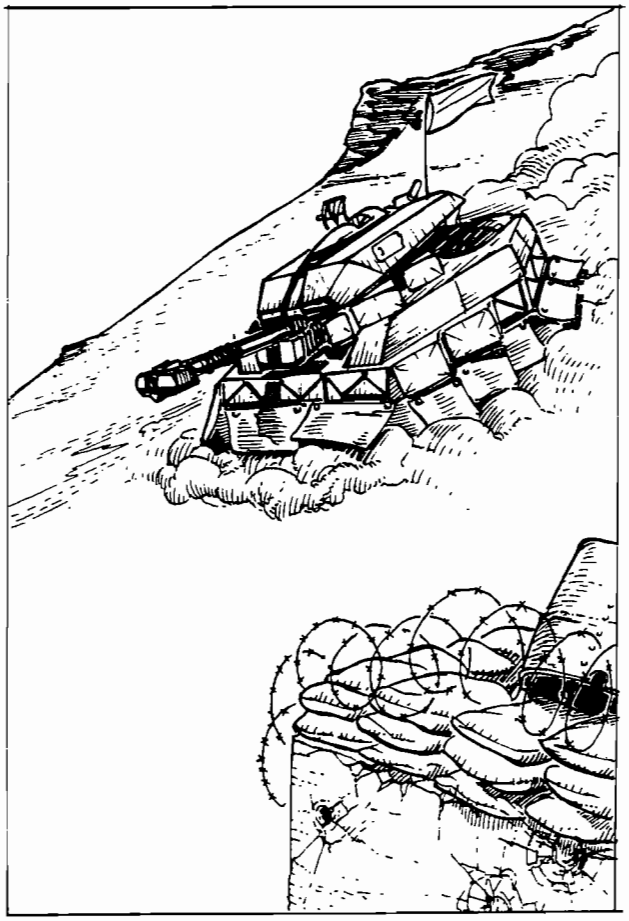


Table 54.6: Secondary Use

DIE ROLL	SECONDARY USE
01-21	1) High performance
22-56	2) Industrial
57-60	3) Military
61-99	4) Recreational
00	Other

1) High Performance Secondary Use: High performance vehicles are generally souped up, chromed out, rubber melters. The vehicles are devoted to speed, acceleration, range, and/or maneuverability. Any vehicle in this class automatically receives +10% on acceleration, +20% on speed, and +2 on maneuverability. These vehicle parameters are going to be determined later in this chapter. High performance vehicles get 1-3 rolls on Table 54.7, *High Performance*.

Table 54.7: High Performance

DIE ROLL	MODIFIED ASPECT
01-20	Acceleration, +50%
21-40	Speed, +50%
41-60	Range, +50%
61-80	Maneuverability, +1-6
81-99	Overhaul, all +10%
00	Other

2) Industrial Secondary Use: Industrial vehicles are designated for commercial use. They are often the simplest vehicles to operate since they are expected to be used by many different workers. The referee can certainly make exceptions to this.

The industrial accessories listed in this section are self explanatory (I hope). Their size and power is determined by the size and wate of the vehicle to which they are attached. E.g., a shovel attached to a semi-trailer, will certainly move more earth (or whatever) than a shovel mounted on a skateboard.

Industrial vehicles roll deci-dice to determine how many rolls they get on Table 54.8, *Industrial Accessory*. On the first roll there is a 100% chance of getting an accessory, the next time there is a 50% of getting a second, then there is a 25% chance of getting a third accessory, this continues until the player fails a roll, or has 8 accessories for her vehicle.

Table 54.8: Industrial Accessory

Die Roll (d100)	Industrial Accessories (d6) 1-3	4-6
01-04	5 hex articulation	Mower
05-08	10 hex articulation	Mulcher
09-12	Agitator	Painter
13-16	Auger	Pile driver
17-20	Back hoe	Plow
21-24	Brushes	Pneum. drill
25-28	Combine	Press. wash
29-32	Conveyer belt	Pump
33-36	Crane	Refrigerator
37-40	Crusher	Rock counter
41-44	Debarker	Roller
45-48	Double cargo size	Saw
49-52	Dredge	Scoop
53-56	Drill	Screw
57-60	Dumper	Shelves
61-64	Feller	Shovel
65-68	Fire hose	Shovel
69-72	Foam sprayer	Shovel
73-76	Forklift	Sluice box
77-80	Forklift	Sprinkler
81-84	Forklift	Sweepers
85-88	Garbage holder	Tank
89-92	Grader	Tiller
93-96	Mixer	Tow
97-99	Seed planter	Vacuum
00	Other	Other

3) Military Secondary Use: Military vehicles are built tougher than other vehicles. Damage rolls to military vehicles have 1/2 effect. E.g., a 60% reduction of speed due to vehicle damage, would only be a 30% reduction on a military vehicle. Military vehicles are also eligible for specialized accessories listed on Table 54.9, *Military Accessory*. Military class vehicles get 1-3 rolls on this table.

Table 54.9: Military Accessory

DIE ROLL	MILITARY ACCESSORY
01-04	Aerosol (chapter 45)
05-16	Armour (chapter 42)
17-20	Artillery (chapter 43)
21-32	Camouflage
33-38	Grenade launcher (chapter 49)
39-40	Rocket launcher (chapter 49)
41-52	Periscope
53-62	General accessory*
63-72	High performance accessory*
73-82	Industrial Accessory*
83-92	Recreational accessory*
93-98	Gun (chapter 46)
99	Miscellaneous weapon (chapter 49)
00	Other

*does not count as a roll.

4) Recreational Secondary Use: This vehicle class usually sports the typical R.V. equipment found in any respectable camper. All recreational vehicles get 1 roll on Table 54.10, *Recreational Accessory* per 20 passengers.

Table 54.10: Rectreational Accessory

DIE ROLL	RECREATIONAL ACCESSORY
1	Bar
2	Bath, hammock
3	Bed
4	Bidet
5	Awning
6	Entertainment centre
7	Fridge
8	Oven
9	Sink
10	Toilet
11	Shower
12	Other, none

3) Speed

Speed refers to the maximum speed that the vehicle can attain, it is no indication of safe driving speed. The maximum speed can be generated under virtually any conditions, except maybe during extreme head winds, or whenever else the ref sees fit. Minimum speed is anywhere between 0 h/u and the maximum speed. All vehicles may move 50% of their speed in reverse, if the ref feels that this value should be altered she may do so. Speed is rolled on 6 d12s, all summed. This is the vehicle's maximum speed in h/u.

Maximum Vehicle Speed
6 x d12 hexes per unit (h/u)
h/u = kmh x 3.6
h/u = m/s x 1
h/u = mph x 2.2

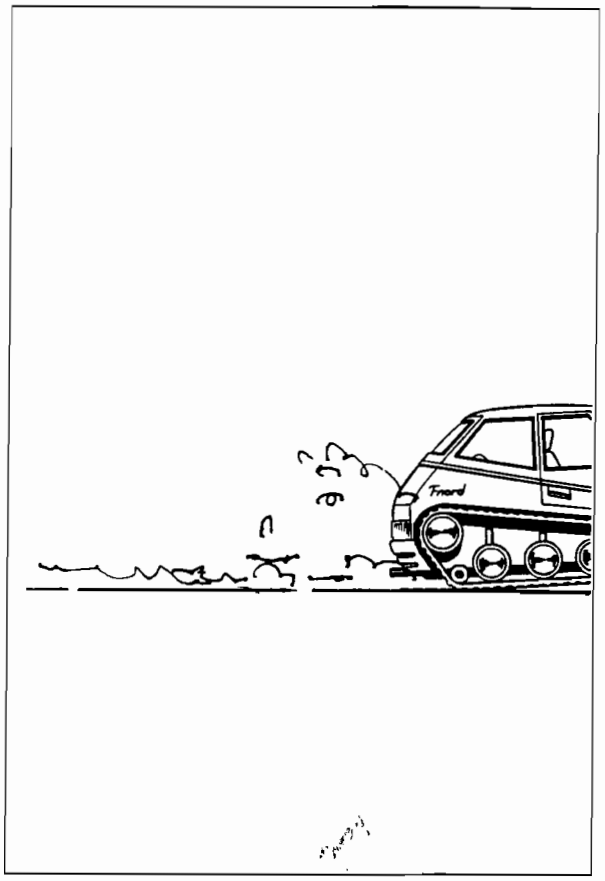
4) Acceleration

Acceleration indicates how much faster the vehicle can travel from one unit to the next. A high acceleration can indicate the power of the engine in relation to the wate of the vehicle, basically the higher the acceleration the more powerful the engine.

The acceleration of a vehicle represents the maximum possible acceleration that the vehicle is capable of. This acceleration can be attained as long as the contact medium can handle it (grade is sturdy enough, atmosphere is dense enough). Vehicles can accelerate at any rate less than the maximum. The acceleration of a vehicle is determined by summing 10d20, and dividing the total by 10. The number generated (between 1 and 20) is the vehicle's acceleration in h per u2.

A vehicle with an acceleration of 5 h/u2 will move 5 h/u in the first unit, 10 h/u in the second unit, and 15 h/u in the third unit. The vehicle can increase its speed until it reaches its maximum speed, at which point it can accelerate no further.

Maximum Acceleration
(10xd20)/10 hexes per unit squared (h/u^2)
$h/u2 = m/s^2 \times 1$



5) Locomotion

The locomotion of a vehicle is the external extension of the drive train, it is what acts on the environment to create movement. Typical locomotion types are wheels, tracks, and propellers. If the ref does not desire vehicles capable of three dimensional movement potentially airborne vehicles can be given a ceiling of 1 meter off of the ground. This could be done for a/g, propellered, or jet propelled locomotion types.

If the ref cannot come up with a pseudo-scientific explanation of how the locomotion works (most referees would have difficulty explaining how a combustion engine works, let alone anti-grav) black boxing it should shut them up...er pacify them.

The speed of the vehicle helps determine the locomotion type. Roll on the relevant column of Table 54.11, *Locomotion Type*. For example, a vehicle that can move 30 h/u would roll on the middle column, while one that moves 200 h/u would roll on the rightmost column. Table 54.12, the *Locomotion Type Subtable* is is used for special types of locomotion. For instance, a set of jets may propel the the vehicle on wheels, or may be the sole source of locomotion. If more information is needed about the particular type of locomotion refer to chapter 5, Robots.

Table 54.11: Locomotion Type

TYPE OF LOCOMOTION	SPEED OF VEHICLE (h/u) <14	14-111	>111
Anti-grav	01-02	01-05	01-10
Chemical slide	03-06	—	—
Electromag legs	07-10	—	—
Jets*	11-15	06-15	11-20
Maglev	16-20	16-20	21-55
Pistons	21-25	21-34	—
Pods	26-30	—	—
Propellers*	31-33	35-48	56-99
Sails	34-35	—	—
Skis	36-37	—	—
Slog bag	38-39	—	—
Tracks	40-63	49-73	—
Wheels	64-99	74-99	—
Other	00	00	00

*indicates roll on *Locomotion Type Subtable*

Table 54.12: Locomotion Type Subtable

TYPE OF LOCOMOTION	SPEED OF VEHICLE (h/u) <14	14-111	>111
Anti grav	01-02	01-05	01-10
Balloons	03-11	06-15	—
Chemical slide	12-15	—	—
Skis	16-24	—	—
Wheels	25-33	16-30	—
Normal	34-99	31-99	11-99
Other	00	00	00

6) Engine Type

Similar to the locomotion, the engine type must be run as a black box. The engine types are run so much like black boxes that the only thing which separates them is the fuel that goes into them. All the engines require refitting of some sort: solar cells burn out; coils get demagnetized; rubber bands wind down; and fuel tanks empty.

Engine parts are compatible provided that the engines use the same fuel, are the same tech level, and have roughly the same power output (an engine block for a semi-trailer would not be compatible with that of a mini). For mechanics that attempt bizarre engine repairs, the ref must remember that the less compatible the parts, the higher the DD. The vehicle's engine type can be determined on Table 54.13, *Engine Type*.

Table 54.13: Engine Type

DIE ROLL	ENGINE TYPE	FULL RANGE (km)	REFILL TYPE
01-20	Gaseous	(4d4)*100	Tank
21-60	Liquid	(4d4)*100	Tank
61-80	Solid	(4d4)*100	Tank
81-85	Plasmoid	(5d4)*100	Tank
86-90	Solar	(8d4)*100	Cells
91-92	Nuclear	(15d4)*100	Load
93-94	Magnetic	(8d4)*100	Recharge
95-96	Dynamo	(3d4)*100	Rewind
97-99	Broadcast	Set range	—
00	Other		

IIII

7) Maneuverability

The maneuverability of a vehicle represents the combination of steering capacity, brake response, tire traction, chassis balance, etc. These elements all tie into one number, called the handling level. The handling level is used on the *Driving Performance* table the same as a persona's skill level is used on the *Skill Performance* table. The higher the handling level the better the chance of success on the *Driving Performance* table, and thus the better control of the vehicle. The base handling level is decided on Table 54.14, *Handling Level*. For more information about driving vehicles refer to chapter 17, Driving.

Table 54.14: Handling Level

DIE ROLL	HANDLING LEVEL
01-05	3
06-20	4
21-50	5
51-80	6
81-95	7
96-99	8
00	Other

8) General Accessories

Table 54.15, *General Accessory* attempts to organize all the accessories imaginable for vehicles onto one simple table. The roll can add cheap junk, but character, to a vehicle, or it could turn the vehicle into a spectacular machine. All vehicles get one roll on the *General Accessory* table. Table 54.16, *Junk Accessory* requires no explanation.

Table 54.17, *Normal Accessory* and Table 54.18, *Special Accessory* have accessories that alter the vehicle in a beneficial manner. Some of the effects are straight forward, as in double cargo space. While other vehicle modifications are left to the interpretation of the referee. The main reason for this lack of definition is that the accessories can be attached to anything, and the required adjustments for vehicle size, type, locomotion, etc. are not economical for this chapter. Vehicles that have been 'tested' for a particular environment can operate in it without penalties.

Table 54.15: General Accessory

DIE ROLL	ACCESSORY TABLE
01-20	Junk*
21-95	Normal
96-99	Special
00	Other

*does not count as a roll



Table 54.15: Junk Accessory

DIE ROLL	RANDOM JUNK
01-05	Air freshener
06-10	Armrests
11-15	Bumper sticker
16-20	Chrome
21-25	Cigarette lighter
26-30	Flashy interior
31-35	Fuzzy dashboard
36-40	Fuzzy dice
41-45	Hood ornament
46-50	Insect deflector
51-55	Lot stickers
56-60	Mug holder
61-65	Retractable lights
66-70	Roof rack
71-75	Seat covers
76-80	Special horns
81-85	Strange paint job
86-90	Sun roof
91-95	Tinted glass
96-99	Wavy hand
00	Other
Does not count as a roll	

Table 54.17: Normal Accessory

DIE ROLL	NORMAL ACCESSORY
01-03	Air conditioning
04-06	Alarm
07-09	Communications
10-12	Convertible
13-15	Double fuel tank
16-18	Emergency exits
19-21	High gravity tested
22-24	Lights
25-27	Low gravity tested
28-30	Multiple engine types
31-33	Multiple fuel source
34-36	Multiple locomotions
37-39	No blind spot
40-42	Off road tested
43-45	One way windows
46-48	Radar detector
49-51	Safety equipment
52-53	Sec. use tables: High perform.
54-56	Sec. use tables: Industrial
57-59	Sec. use tables: Military
60-62	Sec. use tables: Recreational.
63-65	Spare locomotion
66-68	Special doors
69-71	Special instruments
72-74	Special windows
75-77	Steering wheel (special)
78-80	Superstability
81-83	Vehicle repair kit
84-86	Window maintenance
87-92	Refer to *Special Accessory* table
93-99	One additional roll
00	Other

Table 54.18: Special Accessory

DIE ROLL	SPECIAL ACCESSORY
01-06	Amphibious, sub-liquid tested
07-12	Aquatic, surface liquid tested
13-18	Autopilot, built in transportation bot, chapter 5
19-23	Bot fuel system (months use vs. km, see chapter 5)
24-28	Compucammo, (see chapter 42, Amour)
29-34	Computer on board (see Miscellaneous Equip., chapter 48)
35-40	Diagnostic computer, mechs get +40 on its repair PT rolls
41-46	Driving computer, +20 on Driving PT rolls
47-52	Environmentally sealed, exatmo
53-58	Medical equipment on board (see ch. 47)
59-64	Mental mutation accessory, see ch. 58
65-70	Miscellaneous equipment on board (see chapter 48)
71-76	Navigation computer, knows where to go
77-82	Physical mutation accessory, see ch. 59
83-88	Robot peripheral (see chapter 5)
89-92	Stealth coating, evade radar etc.
93-96	Windowless (use a robot vision system, chapter 5)
97-98	Three rolls on *Normal Accessory* table
99	Extra roll.
00	Other

9) Wate

The wate of a vehicle is recorded in kilograms. The wate can be important for crashes; for crossing terrain; for vehicular transport; or for running over things. The base wate given in the vehicle format can be increased by attaching accessories, or filling in cargo holds. For those very large accessories, particularly the industrial ones, assume that they are 25 % of the wate of the vehicle which they were assigned to.

10) Size

The specific proportions of a vehicle will not be considered, but the rough area (or volume if necessary) is recorded in hexes. A vehicle will occupy one hex per 200 kg of vehicle wate. These hexes can be arranged in whatever manner seen fit, depending on the appearance, and primary format of the vehicle.

11) Adaptability

This optional feature of a vehicle represents how readily it accepts new parts. These parts could be replacements, or whole new accessories. A DD penalty is assigned to each vehicle indicating how adaptable it is.

Table 54.19: Adaptability DD Adjustment

SECONDARY USE	DD
High performance	+3
Industrial	-5
Military	0
Recreational	0

12) EXPS/Value

Vehicles have no EXPS value at all. All vehicles have a base value adjusted upwards by their accessories. The base value is 50 per kg of base wate, and the base value is adjusted with the attached accessories and the format and use of the vehicle.

Normal accessories (and secondary use) accessories are 250 each, special accessories are worth 500 each. Artifact accessories are worth 2 times the value of the artifact (some of these accessories will be worth much more than the vehicle itself).

Table 54.20: Value Adjustment

PRIMARY FORMAT	VALUE
Cargo	x1
Leisure	x2
Passenger	x1
Self Powered	x1/2
SECONDARY USE	**VALUE**
High performance	x2
Industrial	x1
Military	x3
Recreational	x1

13) Tech Level

The tech level is rolled the same as any other piece of equipment. Only one word of advice, the base value of the vehicle must be determined before any of the wate changes are made due to tech level.

14) Apperance

A vehicle may take on any appearance that the ref, or players can imagine. The only restriction is that the appearance should not alter the wate, size, or value of the vehicle. Some vehicles are going to be very bizarre contraptions, and an excellent imagination is required to give them an acceptable appearance.

IIII

Chapter 55
Support Equipment

Support equipment's title is self explanatory. The list of support equipment consists of devices, or materials, designated for use in other artifacts. Types of support equipment are: batteries, ammunition, fuel, manuals, and spare parts—not brassieres, or jockstraps.

Support equipment is generally useless on its own. It has no greater purpose than to be employed as a disposable counterpart to more useful equipment. Many toys require support equipment: guns need ammo; detectors need batteries; vehicles need fuel; medical equipment needs instructions; etc.; etc.

Many readers will respond to the idea of support equipment with a resounding gag. The idea conjures up more stuff cluttering the already chaotic TOY system. What these people must realize is that, regardless of their level of involvement in the technologies, they already have some idea of support equipment. Weapons will have battery limits. Vehicles will have maximum ranges. Such limits automatically indicate the need for support equipment.

When a lazer rifle's charge is depleted; it needs new batteries. How many batteries does the weapon require? What type of batteries? Support equipment has the answer to such pragmatic and probing questions.

Generating Support Equipment

The support equipment chapter can be used as required. Table 55.1, *Support Equipment* is included should support equipment ever need to be determined randomly (the lairs of mechanics are a good source of such useless items).

Table 55.1: Support Equipment

DIE ROLL	SUPPORT EQUIPMENT
01-20	1. Ammunition
21-40	2. Batteries
41-60	3. Fuel
61-79	4. Manuals
80-83	5. Software
84-99	6. Spare parts
00	Other

1) Ammunition

Ammunition is so important to most weapons that it can hardly be considered support equipment. Most guns are useless—unless being used as a club (type A weapon)—without ammo. Ammunition specifications must be determined for a weapon which has already been generated, or for random stashes of ammunition.

The amount of ammunition which accompanies a new weapon is determined by rolling on Table 55.2, *Start-up Ammo*. A percentile die roll will indicate the number of ammo sets that the weapon has. If the roll indicates zero the gun is accompanied with less than one full set of ammo. This table is used for any weapon that requires ammunition: bolt action rifles; antimat pistols; or fusion artillery.

Table 55.2: Startup Ammunition

DIE ROLL	AMMO SETS
01-50	0
51-70	1
71-80	2
81-90	3
91-92	4
93-94	5
95-96	6
97-98	7
99	8
00	Other

When determining random ammunition the referee must consider the weapon type, the weapon's power level (caliber), the weapon's tech level, and the amount of ammunition present. To determine the ammunition type roll on the *Gun* table in chapter 46 (there is a 1 in d10 chance that the ammo will be artillery ammo). If the weapon type rolled does not use ammunition, then refer to Batteries in this chapter.

Before ammo can be used in a weapon, both the weapon and its ammunition must be of the same tech level, and power level (caliber). To determine these properties of random ammo follow the four steps listed below.

Table 55.3: Power Level

DIE ROLL	POWER LEVEL
01-05	XLP
06-20	LP
21-80	MP
81-95	HP
96-00	XHP

2) Batteries

Most toys require an energy source. Portable equipment have limited energy sources in the form of batteries. Before any artifact that requires batteries can function, the device must have a full set of batteries that are of the correct type, and of the correct tech level. Every new toy that uses batteries must roll the number of cells, and the battery type required for operation.

The battery requirements of the toy can be determined on Table 55.4, *Cells Required*, and Table 55.6, *Battery Type*. If the referee is feeling particularly generous when introducing a new toy, she may also roll on Table 55.5, *Surplus Batteries* This table indicates the number of additional battery sets that are supplied, found, or stolen, with the artifact. If the device requires 8 solid cells, and the roll indicates 5 surplus sets, there are 40 additional solid batteries present.

Table 55.4: Cells Required

DIE ROLL	CELLS REQUIRED
01-10	1
11-20	2
21-40	3
41-60	4
61-70	5
71-80	6
81-90	7
91-99	8
00	Other
Tech level: add (10-tech level) to roll, TL13 = -3. Wate: <2 kg -20 to roll, >10 kg +20 to roll. Power level: XLP -20, LP -10, HP +10, XHP +20	

Table 55.5: Surplus Batteries

DIE ROLL	SURPLUS BATTERY SETS
01-50	0
51-70	1
71-80	2
81-90	3
91-92	4
93-94	5
95-96	6
97-98	7
99	8
00	Other

Table 55.6: Battery Type

DIE ROLL(d8)	BATTERY TYPE
1	1) Gas
2	2) Liquid
3	3) Solid
4	4) Plasmoid
5	5) Dynamo
6	6) Solar
7	7) Magnetic
8*	8) Broadcast or psionic

*Roll again, and ignore the first roll

1) Gas: This cell contains chemicals reacting in a gaseous state. This cell is rechargeable. This cell will cease to function if it is exposed to a extreme cold (cryo attacks).

2) Liquid: Chemicals in the liquid state are used to produce energy in this cell. A liquid cell will be destroyed if it is exposed to a vacuum. The liquid cell is rechargeable.

3) Solid: A solid cell produces the reaction of crystals to produce energy. Solid cells are rechargeable. They are destroyed when exposed to temperatures over 500°C (fusion attacks, napalm blasts, or spaceship drives).

4) Plasmoid: Unreleasable superheated gases are used to produce energy for the cell. Plasmoid cells are rechargeable. A plasmoid cell will not function if it is in less than 1/2 gravity.

5) Dynamo: Internal dynamos manufacture the useable energies of this cell. The dynamo can be reactivated if is properly respun. The dynamo will be destroyed if exposed to extreme gravity.

6) Solar: A solar cell is self rechargeable. When drained of energy it will recharge itself in a hour's exposure to sunlight. Extreme brightness, flash attacks, nuclear flares, will destroy the cell if it is recharging.

7) Magnetic: Magnetic cells are rechargeable if there is 1000 tonnes of solid matter present. The cell must be removed from the toy to recharge, and will recharge in 1 hour. These cells are destroyed if exposed to magnetic disruptions while recharging (magnetic grenades, fusion attack, black holes).

8) Psionic: Psionic cells are continuously self recharging cells. Whenever a psionic cell is depleted, it will consume 1 point of MSTR from the nearest persona. With this psionic energy the battery will recharge itself to full. The persona gets to save versus mental attack, and if she saves, the next nearest persona will be drained. The intensity of the mental attack is 3 to 18. If no drainable mind is within 25 hexes, the psionic battery must wait until one is.

8) Broadcast: Broadcast cells are actually power receivers that convert transmissions from a power source into energy. The receivers cease to function if they are electronically jammed, or are taken out of the broadcast range. If the broadcast source is destroyed, the cells will cease to function.

Multicells: Multicells are single batteries that have the power output of several batteries. A four power multi-cell could charge an artifact which requires four normal cells. A multi-cell is not a power pack, and cannot yield four sets of charges to an artifact that only requires 1 cell. Multi-cells have the same wate as a regular battery (100 gm), see battery wate for more information. Multicells cost much more (see battery cost). A multi-cell will act as d8 batteries of equivalent power. Remember that multi-cells will only operate on toys of the

same battery type. To determine a multi-cell's battery type roll on the *Battery Type* table.

Powerpacks: Power packs are designed to plug into artifacts, and offer a continuous source of power in excess of one charge. To determine the amount of energy in a power pack, a roll is made on Table 55.7, *Power pack Capacity*. As a matter of politeness, power packs are delivered to personas fully charged. Remember that power packs will only work on artifacts of the same cell type. To determine a power pack's battery type roll on the *Battery Type* table.

The power pack's capacity indicates the number of cells that the power pack is equal to. The device can operate under various power drains, but it runs out faster the greater the artifact's power requirements. E.g., an artifact requiring 5 batteries per charge, is connected to a power pack with a capacity of 15 batteries. The artifact can be run continually for 3 full charges. Power packs have a wate of 1 kg plus .050 kg per battery equivalent.

Table 55.7: Powerpack Capacity

DIE ROLL	POWER PACK CAPACITY
10-10	5
11-20	10
21-40	15
41-60	20
61-70	25
71-80	30
81-90	40
91-99	50
00	Other

Battery Value: The value of a battery depends on its cell power (see MULTI-CELLS), and the battery type (see *Battery Type* table). The cell power indicates the number of batteries the cell is equivalent to (multi-cell). So cell power 1 (100) is the cost of a normal battery.

Table 55.8: Battery Value

CELL POWER	CELL VALUE
1	100
2	225
3	350
4	475
5	600
6	725
7	850
8	975
Solar, magnetic times 10	
Psionic, broadcast times 100	

Not all battery types have the same value. Solar and magnetic battery types are worth 10 times the listed cell value. Psionic, and broadcast batteries are 100 times more costly than the listed value.

Power packs are worth 150 per cell charge stored, and are subject to the same battery modifiers described in the last paragraph. So a solar power pack that could recharge itself to 20 batteries worth of power would have a value of 30000 (20 x 150 x 10).

Battery Wate: All batteries, including multi-cells, have a wate of 0.1 kg (100 gm). Power packs have a total wate of 1 kg plus .050 kg per battery charge. Thus a self recharging 20 battery solar power pack would have a wate of 11.0 kg (1 kg + 20 x 0.50).

Battery Notes: Before any power source will be able to power a device, both the device, and the source, must be of the same battery type and tech level. The experience point award earned for correctly identifying batteries is 1 EXPS per eps of value. This experience point award cannot exceed 500 EXPS.

3) Fuel

Fuel is designated for the engines of vehicles and spaceships. An engine's fuel type is determined when the vehicle or spacecraft is generated. The fuel section of support equipment is used to indicate how much surplus fuel is available for the vehicle. Table 55.9, *Surplus Fuel* is used to indicate the amount of extra fuel—whether liquid, solid, power cells, or magnetic coils—that accompanies the vehicle (spaceship).

When creating random fuel depots, the ref must generate both the fuel type, and the amount of fuel. A major problem with random fuel is compatibility. How many refills for a motorcycle are needed to fuel a spaceship? Probably lots.

While the fuel type is simply decided on Table 55.10, *Fuel Type*, the amount of fuel is more difficult to determine. None of the vehicles in **EXP** are given a fuel capacity in either liters, kilograms, or solar cells.

Because of the various methods of fuelling the amount of fuel in a depot is indicated by a vehicle type, its range, and a number of refills. There is 1 in 10 chance that a fuel depot will refuel spaceships. Deciding a depot's fuel capacity in this manner will also indicate how compatible a vehicle is to the facilities. E.g., how do you fill up a moped at a spaceship refuelling station? Carefully.

Table 55.9: Surplus Fuel

DIE ROLL	# of REFILLS
01-50	0
51-70	1
71-80	2
81-90	3
91-92	4
93-94	5
95-96	6
97-98	7
99	8
00	Other

Table 55.10: Fuel Type

DIE ROLL	FUEL TYPE
01-20	1) Gaseous
21-60	2) Liquid
61-80	3) Solid
81-85	4) Plasmoid
86-90	5) Solar
91-92	6) Nuclear
93-96	7) Magnetic
97-99	8) Broadcast
00	Other

4) Manuals

The discovery of manuals for toys can completely shift the course of an evening of gaming, and possibly the course of an entire campaign.

Manuals have two basic formats: instructional, and repair. The benefits of trying to identify an artifact in collaboration with its manual should be obvious. Mechanics get their greatest bonuses when repairing devices with the aid of a repair manual.

The chance of a manual occurring with a toy depends mostly on the scenario in which the artifact was found. Toys discovered in the rubble of some mutant's lair are not likely to be accompanied by repair manuals. However, the unopened crate stolen from the cargo hold of an air car is likely to have a detailed instruction manual.

Repair manuals are less common than instruction manuals. They are essentially useless to anyone other than a mechanic. A bonus of +50 on the performance table roll is granted to a mechanic when using a repair manual (+10 for an instruction manual).

Some brief notes about instruction manuals:

—they are valuable, and may be worth as much as the artifact itself.

—they can be massive, some reaching several volumes in length.

—they can be small, some built into the artifact itself.

—they can be incorrect.

5) Software

Software is programming for computers, but without the computer. Software can be as valuable as it can be useless. The software is not designated for any specific type of computer, except that there is a difference between AI computer software, class computer software, and spacevehicle software. Roll once on Table 55.11, *Software Type* is random support equipment is being generated.

Table 55.11: Software Type

DIE ROLL	SOFTWARE TYPE
01-45	AI computer
46-89	Class computer
90-98	Spacevehicle computer
99	Biorganic/robotic
00	Other

AI Computer: AI computer software is designated for the MOM series of artificially intelligent computers described under computers in chapter 48, Miscellaneous Equipment. Roll once on Table 55.14, *AI Computer Software*, and then refer to the miscellaneous equipment chapter to determine the wate, EXPS, and value of the software.

Class Computer: This is software designated for use in class computers. Class computers are dedicated to a certain profession, and the software here will assist personas with technical maneuvers. Software will adjust the DD of an appropriate maneuver downwards by 0-5 (d6-1) DDs. See chapter 48, Miscellaneous Equipment, for more info about class computers

Spacevehicle Computer: Spacevehicle software will include the all programming, and interfaces necessary to carry out the task described. Roll once on Table 55.15, *Spacevehicle Computer Software* to determine the program, and refer to computers in chapter 52, Spacevehicles. There the referee will determine the wate, EXPS, and value of the software.

Biorganic/robotic: A biorganic insert will have software from either a class computer or an AI computer, and it is prepared for insert into an organic brain. The software will give the user the skill described by the program regardless of the persona's class, race, or mutations. The persona will be able to recall the data whenever she wishes. The software will either be inserted directly into the skull, programmed via the eyes and ears, or plugged into via a mindlink, or a translinker. These two devices are described in chapter 48, Miscellaneous Equipment. Robotic software is the same as biorganic software except that it is designated for robots only.

Software Format: Usually the program will be delivered by down loading it from another system via modem, or something more exotic. If the software must be delivered in some other fashion refer to Table 55.12, *Software Format*. AI software will have a wate of 1 to 10 kg, and space vehicle software will have a wate equal to 1 to 10 kg per computer level. The software formats should be equally effective, depending on the mood of the referee of course.

Table 55.12: Software Format

DIE ROLL	SOFTWARE FORMAT
01-10	Biosoft, organic
11-20	Cassette
21-30	Chips, hardware
31-40	Computer cards
41-50	Crystalline
51-60	Floppy disks
61-70	Little Golden Book
71-80	Optical disks
81-90	Paper tape
91-00	Other

V

6) Spare Parts

This is more of a complementary section than anything else. Rarely does a role-playing game get so involved in technology that it requires detailed rules about spare parts. Spare parts usually enter into the game when some strategic piece of equipment (the one needed to save the universe) is in desperate need of repair.

If you have some sadistic urge to include spare part requirements for the technology, a simple system is included here. A mechanic has a box of spare parts for artifact X. The box of spare parts' wate is 1 to 20 % (d20) of the artifact's wate. The spare parts' value will be 1 to 10% (d10) of the artifact's value. These spare parts will aid the mechanic by +1 to +50% on her PT roll when repairing artifact X.

Table 55.13: Class Computer Software

DIE ROLL	KIND OF SOFTWARE
01-10	Biologist, 3 rolls on skill table
11	Biologist, cloning
12	Biologist, design genes
13	Biologist, nomad skills
14	Biologist, vet skills
15	Knite, determine fate
16	Knite, light saber construction
17	Knite, turn opposite caste
18-28	Mechanic, 3 rolls on skill table
29	Mechanic, biological implants
30	Mechanic, bot priority commands
31	Mechanic, brainstorming
32	Mechanic, mental patenting
33	Mechanic, miniaturization
34	Mechanic, mnemonic trapping
35	Mechanic, override bot CF
36-37	Mercenary, artillery
38-39	Mercenary, determine weakness
40-41	Mercenary, gunnery
42	Mercenary, naval artillery
43	Mercenary, weapon repair
44-46	Nomad, biologist skills
47-49	Nomad, safe campsite
50-52	Nomad, safe passage
53-55	Nomad, tracking
56-57	Nomad, vet skills
58-60	Nothing, 4 rolls on skill table
61-63	Nothing, astrogation skill
64-66	Nothing, estimate value
67-69	Nothing, etiquette
70-71	Nothing, pilot skill
72-79	Spie, 2 rolls on spie skill table
80-81	Spie, computer casing
82-83	Spie, computer interfacing
84-85	Spie, cryptography
86-93	Veterinarian, 3 rolls on skill table
94-96	Veterinarian, biologist skills
97-99	Veterinarian, nomad skills
00	Other

Table 55.14: AI Computer Software

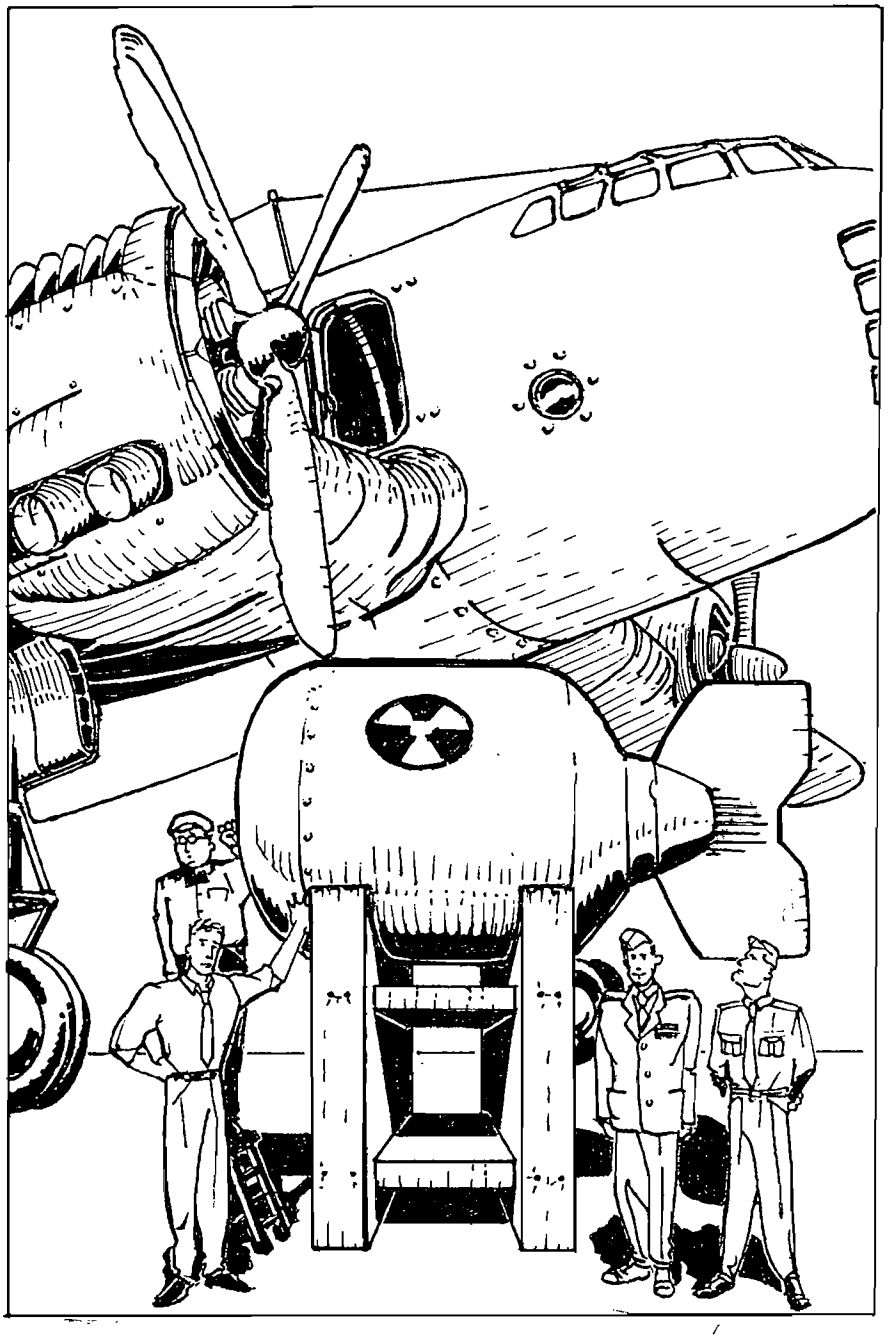
DIE ROLL	COMPUTER SOFTWARE	SOFTWARE EXPLANATION	DIE ROLL	COMPUTER SOFTWARE	SOFTWARE EXPLANATION
01-04	Administration	Maintain records of personnel	53-56	Etiquette	Intersteller etiquette
			57-60	History	Knows much of milieu
05-08	Advisor	Give sagely advice	61-64	Industrial	Operate a plant
09-12	Appraisals	Estimate artifact value	65-68	Law	Applies empire law
13-16	Banking	Monitor bank system	69-72	Mapping	Maps surround. area
17-20	Book reader	Reads golden books	73-76	Mechanical	Talks with machines
21-22	Building control	Surveill., lights, doors	77-80	Medical	Runs medical equipment
23-25	Class computer	+4d10 on PT rolls			
26-28	Combat control	Tactical advice	81-84	Navigation	Finds paths
29-33	Communications	Monitors and communicates	85-88	Printout	Outputs hardcopy
			89-91	Robot	Controls robots
34	Compiler	Add 1-4 peripherals	92-93	STEP	Ignore anthropomroph safety
35-36	Construction	Manage construction			
37-40	Decoder	Break codes	94-96	Translation	Understands lang.
41-44	Detectors	Detects anything	97-99	Weapons	Controls ordinance
45-48	Diplomacy	Makes diplomatic decisions	00	Other	
49-52	Entertainment	Entertains expedition	One roll per computer level		

Table 55.15: Space Vehicle Computer Software

DIE ROLL	SOFTWARE TITLE	CHANCE	EXPLANATION
01-03	Administration	10	Maintain personnel records etc. (nothing)
04-05	Advisor	5	Give good sagely advice
06-07	Anomaly	8	Hide in exatmo
08-09	Anti hijack	20	On ship tactics
10-11	Appraisals	5	Estimate value of anything (nothing)
12-13	Armada	10	Appear as an armada
14-15	Astrogation	20	Replaces an astrogator
16-17	Banking	5	Manage a banking system (nothing)
18-19	Bioassayer	2	Tissue analysis (biologist)
20-21	Book reader	12	Reads little golden books (mech)
22-23	Brig	50	Control doors from bridge
24-25	Cammo	3	Hide on planetary surface
26-27	Chapel	5	Assists prayer (knite)
28-29	Communications	30	Monitors any communications (mech)
30-31	Decoder	2	Breaks codes (spie, mech)

Table 55.15 cont'd

DIE ROLL	SOFTWARE TITLE	CHANCE	EXPLANATION
32-33	Detectors	25	Detects anything (mech)
34-35	Diplomacy	4	Gives diplomatic advice
36-37	Entertainment	10	Entertains guests
38-39	Etiquette	15	Interstellar etiquette(nothing)
40-41	Forensics	2	Crime investigation (biologist, spie)
42-43	Fuel control	10	Add 10% to fuel (mech)
44-45	Gun control	5	Airlock guns
46-47	Gunnery	10	As good as a gunner
48-49	History	1	Knowledgeable computer
50-51	Industrial	5	Manage a plant
52-53	Law	5	Applies empire law (nothing)
54-55	Library	10	Operates as a class computer (all)
56-57	Maneuvers	20	Fancy evasive maneuvers
58-59	Mapping	15	Planetary mapping (nomad)
60-61	Mechanical	5	Mechanical status
62-63	Mechanical	10	Self maintaining (mech)
64-65	Medical	5	Operates medical equip.
66-67	Medical	10	Operates medical equipment (vet, biologist)
68-69	Mimic	3	Appear as another ship type
70-71	Navigation	5	Calculates best starpath (nomad, mech)
72-73	Pilot aid	3	Non-pilot may use ship
74-75	Printout	4	Glorious technicolor holo-prints
76-77	Programming	1	Programming at DD8 base (mech)
78-79	Relations	5	Operates a relations bot
80-81	Robot	1	Controls robots (mech)
82-83	Surveillance	20	Eavesdrop during combat
84-85	Translation	15	'#$%"*&' = 'self explanatory'
86-87	Weapons	4	Can control ordinance etc. (merc, mech)
88-89	Xenobiology	3	Identifies aliens (vet, nomad)



"PEACEMAKER" TL 4

Chapter 56
Tech Levels



Tech level (TL) is an optional roll that is available for all equipment generated (including robots). The higher the tech level of the equipment, the more technologically advanced the device is. A device's tech level can be determined on Table 56.2, *Tech Level Determination*.

Tech levels in **EXP** are different from how most persons would perceive technological advance. The system operates under the basic assumption that any device can appear at any tech level. The tech level refers to the TL of the specific device, and not the level of technological advancement of the society from which the device came. Most societies simultaneously have many different levels of technology at once. For instance on boring old earth, calculators may vary from finger powered abacuses to solar powered, credit card sized computers.

Tech Level 10

All equipment described in the technology section is considered tech level 10. Why ten? Tech level ten is chosen as the baseline on almost arbitrary terms. To be able to include the various artifacts in the technology part of this book, the common tech level had to be somewhere near midground.

Tech level ten (TL10) represents a level of technological development where virtually any sort of device could exist. TL10 is that point where all the facets of science—mathematics, electronics, physics, biology—are cumbersomely grouped together to make any device operate.

As stated previously, the tech level of one device does not represent the tech level of an entire culture. High tech toys can be found in low tech cultures. A high tech artifact merely represents a better combination of the basic sciences for that particular item, and not necessarily a better understanding of these sciences by the whole culture.

What Is Tech Level?

The following table gives a rough indication of technological advance for a very familiar procedure, keeping track of time. The table starts at tech level 0, where there is no concept of time, and temporal actions are carried out instinctively. Tech level 14 is essentially out of our present experience. By this point the clock has ceased being a unit of its own, but is now a trivial component of other devices. Computers depend on clocks. Stoves, cars, pens, and rulers all have clocks built in.

As the tech level of a device increases the skills that require its construction—such as metallurgy, electronics, ceramics, design, and microbiology—become finely focused, and intricately integrated. The benefits of an increased tech level are usually performance oriented, but it would be impossible to document such changes for every device.

There are some basic statistics of all equipment which change when its tech level is greater, or less than, 10. The wate of an artifact decreases as the tech level increases. The EXPS and value generally increase with the tech level of the toy. These changes are listed on Table 56.2, *Tech Level Adjustments*, and explained in the following paragraphs.

Table 56.1: Timepiece Tech Level

TECH LEVEL	TIMEPIECE EXAMPLE	NOTES
0	—	No concept, dependant on instinct
1	Observation	Dependant on natural occurence (snows, darkness)
2	Observing shadows	Observing natural phenomema
3-4	Stick	Standardizing natural phenomena
5-6	Sundial	Quantifying natural phenomena
7	Gravity clock	Using an abstract measure (hourglass)
8	Mechanical	Using repetitive properties (pendulum)
9	Mechanical	Using stored energy (spring driven)
10	Quartz/mechanical	Quartz sweephand
11	Electronic	Quartz LED
12	Electronic	Quartz LCD
13	Electronic	Calculator watches, clock radio.

V

Tech Level and Wate

A low tech level item will use materials which do not aid the device's construction; and components will tend to be arranged in a non-beneficial manner. As a device increases in tech level, its components become more intricate, and the materials chosen for its construction are of a higher quality. Such advances decrease the wate of the item.

The effects of tech level on the wate of a toy can be determined by refering to the "wate" heading of the *Tech Level Adjustments* table. The numbers listed in that column are the wate multipliers. A TL 10 medium-powered flotto lazer pistol (gun #15) has a wate of 1.8 kg. At tech level 3 the pistol would have a wate of 9 kg (wate multiplier of 5). At TL 16 the pistol's wate would be 0.9 kg (wate multiplier of 0.5).

Tech Level and Artifact Identification

The tech level of an object greatly affects a persona's ability to identify it. For example, the TL 3 gun described earlier has a wate of 9 kg. Who would expect a 9 kg gun to be a pistol?

Wate is not the only TL change that can make a toy hard to IDN. The toy may use different materials—e.g., a plastic frying pan; the device may operate under a different process—e.g., a stock is squeezed instead of a trigger pulled; or the artifact may look entirely different—e.g., a key may be a metal ball touched against a door.

Tech level penalties are not applied as mechanically as wate multipliers. These AID adjustments are relative. If a person has grown up in a city where 9 kg, TL 3 lazer pistols are the norm,

the IDN penalty shouldn't apply. So it is the job of the referee to ensure fair application of these penalties. See the *Tech Level Adjustments* table.

Tech Level and EXPS

The experience point bonus adjusts the experience point value of a piece of equipment depending on tech level. This award is not only justified by the fact that high, and low, tech level artifacts are harder to identify (IDN), but by the fact that identifying a better, or worse, made product may actually yield more information than the regular artifact.

The TL 3 lazer pistol is worth 780 EXPS. This is 180 experience points more than the tech level 10 version of the same weapon. This extra experience is awarded in part because the gun is harder to IDN, and in part because it is a prime example of either poorer, or better, engineering (as opposed to more of the same). Refer the chapter 15, Experience, for further questions. See the *Tech Level Adjustments* table for EXPS adjustments.

Tech Level and Value

The last, and most complex, of the tech level adjustments is the value multiplier. There is a value multiplier for each of the 25 tech levels. The value adjustments are the changes in value relative to TL 10. The previous innocuous sounding sentence actually leaves the tech level value adjustment a system with many holes.

The value multipliers are simple enough if they are used as described. The problems with the system arise when any semblance of economics is applied to the game. The first phenomena is the high technology, high inflation correlation. Why should everything at tech level 18 cost 5 times more than at TL 10? Does this mean that there is a 500% increase in the cost of production to rise 8 tech levels. Are the costs of living in a TL 14 world higher than on a TL 8 world? Why would they be? The inherent increases of the value multipliers put economic constraints, that actually may not exist, on cultures

These problems will arise only when playing with the most miserly, or observant, of players. The value multiplier is designed to indicate the comparative value of two artifacts of different tech levels designed for the exact same function. The referee should remember this, and incorporate it into her explanations of the preceding queries.

Deciding on Tech Level

The effects of tech level on equipment have been described already. All that remains is determining the tech level itself. The **EXP** system is based on complete technological chaos. Eons and eons of diverging levels of technology are layered on top of, and beside, each other. This being the atmosphere of most campaigns, the *Tech Level Determination* table can be used to generate the tech level of a toy. The table assumes deviations from tech level 10. The base tech level can be any which the ref chooses. This is commonly TL 10.

When tech levels other than 10 are chosen as the base tech level the ref must create her own *Tech Level Determination* table, or be prepared for TLs less than 1 and greater than 25.

If the ref decides to prepare for obscure tech levels here are some hints. TL 0 (or less) indicates that there is absolutely no concept of such a device existing in the culture. What has essentially been done is the "unrolling" of a particular toy. For those rolls generating TL 26 (or greater) could indicate that this culture has complete understanding, and control, of such a device. They may have actually surpassed the need for any such device at all.

Table 56.2: Tech Level Determination

DIE ROLL	TL RANGE	DEVIATION FROM TL 10
01-24	01-10	Subtract 0-9 (d10-1)
25-80	10	No change (TL 10)
81-95	10-19	Add 0-9 (d10-1)
96-98	10-20	Add 1-10 (d10)
99-00	20-25	Add 10-15 (d6+9)

Table 56.3: Tech Level Adjustments

TECH LEVEL	WATE MULT.	A.I.D ADJUST.	EXPS MULT.	VALUE MULT.
1	10.0	-6	2.0	0.1
2	7.0	-5	1.5	0.2
3	5.0	-4	1.3	0.3
4	3.3	-3	1.2	0.4
5	2.5	-2	1.0	0.5
6	2.0	-1	1.0	0.6
7	1.7	0	1.0	0.7
8	1.3	0	1.0	0.8
9	1.0	0	1.0	0.9
10	1.0	0	1.0	1.0
11	1.0	0	1.0	1.1
12	0.9	0	1.0	1.25
13	0.8	-1	1.0	1.40
14	0.7	-2	1.0	1.70
15	0.6	-3	1.0	2.0
16	0.5	-4	1.0	2.5
17	0.4	-5	1.2	3.3
18	0.3	-6	1.4	5.0
19	0.2	-7	1.6	7.0
20	0.1	-8	1.8	10.0
21	0.08	-9	2.0	12.0
22	0.06	-10	2.2	14.0
23	0.04	-11	2.4	16.0
24	0.02	-12	2.6	18.0
25	0.01	-13	2.8	20.0

MULT. = multiplier; ADJUST. = adjustment

Chapter 57
Multi-Equipment

Multi-equipment is the shortened form of multiple equipment. Multiple equipment is not just several pieces of equipment, but several different toys combined into one device. Combinations such as medi-kit, drug dispensers, or metal detector earth cancellor are very useful examples. In **EXP**, being the testament to technological chaos that it is, the combinations of equipments are determined randomly. The randomness is not without humor though: powered-armour-underwear; chair-guns; hat-bombs; or fusion pistol-medi-kits.

Creating Multi-Equipment

Multi-equipment can be generated simply by the ref deciding that something different is needed, and then continuing to roll several times on the *Toy Type* table.

Multi-equipment may also be needed when the equipment in this book does not exactly meet the requirements of some toy the ref has in mind, but a combination of several toys would.

The "official" system for generating multi-toys employs a deci-die roll against the toy's TL (tech level). If a deci-die roll is less than the tech level of the toy, then another piece of equipment is added to the first one. This additional piece of equipment is rolled randomly. This is done in the same manner as any other toy, accept that the additional toy must be the same tech level as the last one. The ref continues to make percentile dice rolls until she rolls higher than the multi-equipment's tech level, or gets sick of adding new toys. High tech level equipment will very rarely not be multi-equipment. If the ref decides to roll a new tech level for each additional toy, the percentile roll will be compared against the highest of the tech levels.

A piece of multi-equipment is going to be different from its basic components by wate, EXPS, and value.

Wate

The wate of multi-equipment is the total wate of all its component toys. Some refs may even make the multi-equipment's wate less than its total components' because of shared power supplies or processing units.

EXPS

Each piece of equipment maintains its own experience point value. When a persona identifies a component of a combination toy she will get experience for that part, and only when all functions of the toy are identified will she earn experience for the entire toy.

Value

A multi-toy's value is equal to the total of all the component toys' values. There is a percentage bonus added to the total toy value that is equal to the device's TL. So a TL20 combo-toy whose component toys was worth 100 total would be worth 120.

Notes

Multi-equipment shares a common power supply, and therefore all devices will run off of a single battery set. Every device in a multi-toy combination can be used simultaneously without penalty. This factor alone can make multi-guns a menacing factor. Artifact identification (chapter 20), is more difficult for multi-equipment, since the identifier must identify each part separately. Multi-equipment will often sit under used because other factors are not identified.

V

Chapter 58
Mental Mutations

Mental mutations are abilities arising from hypothetical powers of the mind. Mental mutations are also called psionic abilities, and the mutant manipulates unknown forces (possibly never to be discovered) to create the effects of her mutation. The mental mutations require concentration of the mind, like lifting a weight requires contraction of the muscles.

The mutations listed here are intrinsic abilities of the mutant, not skills,. The difference is that a persona can learn a skill and become better at using it, but a mutation changes very little from whence it first appears. The mutations are not easily explained from a biological standpoint, but in the bizarre technological world of **EXP** such mysterious behaviour is not considered magic.

The nature of mutants in a society depends entirely on the campaign that is being run. Mental mutations are considered sinister by most personas because the mutant has no cosmetic indicators of her difference from the others of her race. The referee may find that even in a society which completely accepts all forms of mutations, her referee personas will still be very wary (paranoid) of any mutants that they must deal with. This is primarily because once a persona has revealed a mental mutation, there is no telling what ability may be used next.

Mutation Tables

The number of mutations that a persona has is determined on the *Mutation Frequency* table in chapter 7, Mutations. The number of mutations varies depending on race, desire of the player to have a mutated persona and the referee's input. If the persona is supposed to have 3 mental mutations then the player rolls once on Table 58.1, *Mental Mutation* at least three times.

There are other subtables included here, such as a combat, non-combat, and defect subtables. Players should only use the main *Mental Mutation* table unless otherwise indicated by the referee. These tables are aids to the referee and players when they are in need of specific kinds of mutations. For instance a combat robot may have a device that imitates a combat mutation.

General Queries

The target of a mental mutation is what ever the mutant hopes to affect. The target could be the thinkspace of another sentient being, or it could be some inanimate object across the room. The word target is generic for what ever the mutant wants to affect whether the mutation is a mental attack, a life saving procedure, or and innocuous irritation. Most every use of a mental mutation will require a save by the target. Refer to chapter 16, Special Throws, for more information.

Line of Sight: Line of sight may be required for some mutations, while others merely require the mutant to sense the thinkspace of the target. If there are any problems as to whether a mutation requires line of sight, or not, the referee should decide using these overly simple rules. Mutations that travel in a straight line, and affect the target directly require line of sight, whereas area of effect mutations do not.

Level Improvement: Mental mutations improve as the persona increases in experience level. The experience level of the persona is determined the amount of experience that she has amassed, and by her persona class. Some may argue that class experience level should not affect one's psionic ability. However, the experience level is a general rating of life skills, of which the mutant's psionic ability is included. A more detailed explanation of what experience levels represent can be read in chapter 15, Experience.

Combining Mutations: Expeditions full of mutants will often find themselves combining mutations against powerful opponents (or weak opponents if they are bullies). This can include

stacking kinesises, or combining mutations for other effects. This results of this are entirely up to the referee. For instance combining information eradication, and extra sensory perception may allow a mutant to profoundly effect a target's memory. The mutation called mass mind is the only way that two different mutants could combine such mutations.

The referee should also have special effects prepared for certain weird occurrences. For instance a time stop mutation may attract aliens that manipulate time, and a planal holdaway opened in special drive may create a space vortex. The rule for the referee to remember is that the power of a mental mutation should be delicately balanced with subtle inconveniences.

Mental Mutations Table: This table is the one that should be used by players creating new personas. There is one roll on this table per mental mutation. A deci-die roll of 86 would indicate mental mutation #56 Telekinetic Arm, and the player would refer to that mutation in this chapter.

Table 58.1: Mental Mutations

DIE ROLL	MENTAL MUTATION	DIE ROLL	MENTAL MUTATION
01-02	1. Absorption	38-39	26. Magnetic Control
03	2. Alternate Banishment	40	27. Mass Mind
04-05	3. Animal Attachment	41-42	28. Mechanical Sense
06-07	4. Calculations	43	29. Mental Blast
08-09	5. Communicate	44	30. Mental Control
10	6. Cryokinesis	45	31. Mental Control Over Physical State
11	7. Death Field Generation	46-47	32. Mental Defenselessness defect
12	8. Density Control	48	33. Molecular Disruption
13-14	9. Detections	49-50	34. Molecular Examination
15-16	10. Directional Sense	51	35. Molecular Phase Transformation
17	11. Empathy	52	36. Molecular Phase Transmutation
18-19	12. Energy Attraction defect	53	37. Muscle Manipulation
20	13. Epileptic Projection	54	38. Neuronegation
21	14. Extra Sensory Perception	55	39. Phase
22	15. Force Field Generation	56-57	40. Planal Hideaway
23	16. Gyrokinesis	58-59	41. Planal Holdaway
24-25	17. Heightened Brain Talent	60-61	42. Polar Disruption defect
26-27	18. Hostility Field Generationdefect	62-63	43. Power Drain
28	19. Illusion Generation	64-65	44. Precognition
29-30	20. Information Eradication	66	45. Projected Sense
31-32	21. Intuition	67	46. Protection Shell
33-34	22. Knowledge Transmission	68	47. Psionic Defence
35	23. Levitation	69	48. Purify
36	24. Life Leech	70-71	49. Pyrokinesis
37	25. Light Wave Manipulation	72-73	50. Repulsion Field Generation

Table 58.1 continued

DIE ROLL	MENTAL MUTATION
74-75	51. Restoration
76-77	52. Sensory Deprivation
78	53. Sociability Field Generation
79-80	54. Sonar
81	55. Sonic Attack
82-83	56. Sonic Reproduction
84	57. Suggestion
85	58. Telekinesis
86	59. Telekinetic Arm
87	60. Telekinetic Flight
88	61. Telempathy
89	62. Teleport
90	63. Thought Imitation
91	64. Time Stop
92-93	65. Time Tell
94	66. Total Recuperation
95	67. Ventriloquism
96-97	68. Weapons Discharging defect
98-99	69. Weather Tell
00	70. Ref's Own Table

Combat Mental Mutation Subtable: Table 58.2, *Combat Mental Mutation* is a very specific table that is used by the referee or players who have need of a combat oriented mental mutation, but do not wish to keep re-rolling on the *Mental Mutation* table until they get a combat mutation. A deci-die roll of 86 on this table would indicate the mental mutation #62,. Teleport.

Defective Mental Mutation Subtable: Table 58.3, *Defective Mental Mutation* is also a very specific table. It is used by the referee when a defective mutation effect has been indicated. A deci-die roll of 86 on this table would indicate the mental mutation #70, Ref's own table. In this case the referee would be responsible for devising her own defect.

Table 58.2: Combat Mental Mutations

DIE ROLL	MENTAL MUTATION
01-03	1. Absorption
04-06	2. Alternate banishment
07-09	6. Cryokinesis
10-12	7. Death Field Generation
13-15	8. Density Control
16-18	13. Epileptic Projection
19-21	15. Force Field Generation
22-24	16. Gyrokinesis
25-27	19. Illusion Generation
28-30	20. Information Eradication
31-33	24. Life Leech
34-36	25. Light Wave Manipulation
37-39	26. Magnetic Control
40-42	27. Mass Mind
43-45	29. Mental Blast
46-48	30. Mental Control
49-51	33. Molecular Disruption
52-54	36. Molecular Phase Transmutation
55-57	37. Muscle Manipulation
58-60	38. Neuronegation
61-63	39. Phase
64-66	42. Polar Disruption
67-69	47. Psionic defence
70-72	49. Pyrokinesis
73-75	50. Repulsion Field Generation
76-78	52. Sensory Deprivation
79-81	55. Sonic Attack
82-84	58. Telekinesis
85-87	62. Teleport
88-90	63. Thought Imitation
91-93	64. Time Stop
94-96	66. Total Recuperation
97-00	70. Ref's Own Table

Table 58.3: Defective Mental Mutations

DIE ROLL	MENTAL MUTATION
01-16	12. Energy Attraction
17-32	18. Hostility Field Generation
33-48	32. Mental Defenselessness
49-64	42. Polar Disruption
65-80	68. Weapons Discharging
81-00	70. Ref's Own Table

Non-Combat Mental Mutation Subtable:

Table 58.4, *Non-Combat Mental Mutations* is a very specific table that is used by the referee or players who have need of a non-combat oriented mental mutation, but do not which to keep re-rolling on the *Mental Mutation* table until they get a non-combat mutation. A deci-die roll of 86 on this table would indicate the mental mutation #63, Thought Imitation.

Table 58.4: Non-Combat Mental Mutations

DIE ROLL	MENTAL MUTATION	DIE ROLL	MENTAL MUTATION
01-02	1. Absorption	51-52	41. Planal Holdaway
03-04	3. Animal Attachment	53-54	43. Power Drain
05-06	4. Calculations	55-56	44. Precognition
07-08	5. Communicate	57-58	45. Projected Sense
09-10	8. Density Control	59-60	46. Protection Shell
11-12	9. Detections	61-62	47. Psionic Defence
13-14	10. Directional Sense	63-64	48. Purify
15-16	11. Empathy	65-66	51. Restoration
17-18	14. Extra Sensory Perception	67-68	53. Sociability Field Generation
19-20	17. Heightened Brain Talent	69-70	54. Sonar
21-22	19. Illusion Generation	71-72	56. Sonic Reproduction
23-24	20. Information Eradication	73-74	57. Suggestion
25-26	21. Intuition	75-76	58. Telekinesis
27-28	22. Knowledge Transmission	77-78	59. Telekinetic Arm
29-30	23. Levitation	79-80	60. Telekinetic Flight
31-32	25. Light wave Manipulation	81-82	61. Telempathy
33-34	26. Magnetic Control	83-84	62. Teleport
35-36	27. Mass Mind	85-86	63. Thought Imitation
37-38	28. Mechanical Sense	87-88	64. Time Stop
39-40	30. Mental Control	89-90	65. Time Tell
41-42	31. Mental Control over Physical State	91-92	66. Total Recuperation
43-44	34. Molecular Examination	93-94	67. Ventriloquism
45-46	35. Molecular Phase Transformation	95-96	69. Weather Tell
47-48	39. Phase	97-00	70. Ref's Own Table
49-50	40. Planal Hideaway		

1. Absorbtion

RANGE: None
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: CR plus 4

This mutant can absorb, using the powers of her mind, damage that is directed at her in such a fashion that she does not lose HPS. A lazer bolt will dissipate over her entire body, or radiation will pass through her unaffected. The damage type that the persona can absorb is determined on the Attack Absorption Table. A persona with absorption can absorb an amount of damage equal to half her HPS total plus 3 HPS per experience level. Damage cannot be reduced to less than one point of damage. For example, a 4th level persona with 30 HPS could absorb 27 HPS in damage. If the attack is supposed to inflict less than 27 HPS of damage she cannot gain HPS, and would suffer only 1 HPS of damage.

Table 58.5: Attack Absorbtion

DIE ROLL(d6)	DAMAGE TYPE
1.	Poison; damage from a failed save
2.	Energy; fission, fusion, or lazer
3.	Radiation; damage from a failed save
4.	Psionic attack; any damaging mental attack
5.	Force; arrows, swords, bullets
6.	Choose

2. Alternate Banishment

RANGE: 2 hexes plus 1 hex per 3 levels
DURATION: Permanent
FREQUENCY: 1 @ 12 (MSTR + level)
GENERAL BONUS: CR plus 10

This mutation allows the mutant to zap objects onto an alternate plane of existence. This mutation can only be employed in situations of extreme duress; like combat, surprise, or imminent death, etc. The mutant can only banish complete objects that do not exceed half the mutant's WATE, plus 5 kg per level. A corpulent 4th level persona with a wate of 80 kg could banish an object up to 60 kg in wate. All targets get a save vs psionic attack, if the save is successful the mutation has no effect. Inorganic objects being banished will have either a 0-9 (d10 -1) MSTR , or a MSTR equivalent to that of the persona holding it.

3. Animal Attachment

RANGE: Touch
DURATION: Permanent
FREQUENCY: One animal per 6 levels
GENERAL BONUS: +10 on PT rolls dealing with aliens

This mutation is an example of pet bonding to the highest degree. The persona will become psionically attached a smaller, less powerful, and less intelligent creature that is the same sex as the mutant. The pair have a telepathically bonded relationship, which will allow them to discuss any topic by just thinking to each other. This telepathy cannot be detected with any normal listening device. The animal will receive a save versus psionic attack to avoid attachment, although this not considered an attack.

Once telepathically bonded, the attached animal will have an intelligence equal to the sum of the persona's and its own. This will automatically make the attached animal intellectually superior. Other changes to the attached animal include very sensitive detection abilities, which include locating

clean, unpoisoned: members of the opposite sex; areas of land; food; and water. These detections are effective up to a range of 7 km per point of the animal's new INT.

The attached animal will be absolutely loyal to its bonded master, in return the persona will protect and feed the attached animal. If the persona should die, the attached animal will die shortly after. If the attached animal should die a violent death that the persona could have prevented the persona will suffer a temporary penalty of 1-6 points on her MSTR, and 1-3 points on her INT. If this attribute anguish does not kill the persona she will heal one point back per week of rest.

For example, a female feline mutant, has the mutation animal attachment, and befriends a not so intelligent herbivorous rodent. The animal has a 2 INT, and the persona has an 12 INT. The animal's attached INT is 14. It will certainly choose itself a name, talk telepathically with the mutant persona, and will detect clean food, clean males, clean land, and clean water up to 84 kilometers away.

4. Calculations

RANGE: None
DURATION: Within one unit
FREQUENCY: As needed
GENERAL BONUS: +15 on mechanic PT rolls

This persona has the amazing ability of being able to do virtually any mathematical calculation in her head within 2 seconds. Before the arithmetic savant has a chance of being successful all the necessary data must be present, and the method used to obtain the answer must be reasonably understood. Regardless of the problem's difficulty the response will be generated within one unit. Generally uses for this mutation must be thought up by the player, some examples of how calculations comes in useful is in the calculation of: speed of opponent, probability of success in gambling, HITE of a building, or width of a crevasse. The referee should allow any reasonable use of this mutation to succeed, owing to its almost complete uselessness.

5. Communication

RANGE: Within senses
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: +10 on any communication PT roll

Specially tuned senses in uncharted reaches of the mutant's brain allow her to communicate with any communicating entity; provided that the mutant is physically capable of generating the communication form. The chance of this persona being able to comprehend a language is equal to her INT plus level multiplied by three. If she fails this roll she may make a number of tries equal to one attempt per month per 8 points MSTR.

If the language has been understood, and it is physically possible for the mutant to speak it, she may do so. Forms of communication which cannot be engaged in without technical support are: pheromones, ultrasonic transmissions, and light wave manipulations. If the persona decides to memorize this language permanently she may. The number of languages memorized cannot exceed the persona's INT, plus 1 per level.

If a 4th level persona with a 10 INT were to attempt to communicate with an alien race she would have a 42% chance of success. If she failed this roll she would have to wait a month before trying again. The maximum number of languages that she could have at instant recall would be 14.

6. Cryokinesis

RANGE: 2 hexes @ MSTR, plus 1 hex per level
DURATION: 5 units @ MSTR
FREQUENCY: 1 per 5 MSTR, plus 1 per 3 levels
GENERAL BONUS: CR plus 3

This mutation may be employed in either a nasty way or a benevolent way. The nasty way involves of penetrating a creature's mind with cold. The attack will do one d4 in the first unit, two d4 in the second unit and so on, until a save vs. psionic attack is successful. There is no limit to the number of d4s in freezing damage that the target can take. The psionic attack ends when the mutant turns it off, when the target saves or when the attack has reached its duration. So a persona with a 10 MSTR could inflict up to 50d4 in damage before having to stop cooling her target, it is more likely that the victim would be frozen solid long before that. With the benevolent form of cryokinesis the mutant can turn herself into a psychological air conditioner. This effect has a four hex radius.

7. Death Fields Generation

RANGE: 1 hex radius, plus 1 hex per 4 levels
DURATION: Permanent
FREQUENCY: Special
GENERAL BONUS: CR times 3

This powerful ability is used to instantly drain all hit points from all organic creatures within the area of effect. This will render all creatures dead that do not make a saving throw vs psionic attack. Immediately after this occurs the mutant will collapse and be completely unconscious, for 1 minute per hit point consumed. Once the mutant regains consciousness she may immediately use her death field generation again.

The area of effect nature of this mutation can make it very difficult to use. For every 3 levels of the experience the persona can exclude one target from being affected by the mutation. This allows a 3rd level mutant to spare a certain target from death field generation, or to use it on all targets in the area of effect. At 6th level the mutant could use the death field on all targets in the area of effect, or choose two targets to be excluded.

If a mutant were to employ this mutation on three targets within her area of effect, and none of them made their saving throw, they all would be dead, and the mutant would be unconscious. Assuming the targets had 90 HPS between them the mutant would be unconscious for one and a half hours.

The referee must remember to drain not only the HPS total of the targets, but she must also include the number of HPS that must be absorbed below zero. For instance an anthropomroph with 40 HPS max would have to have 60 hit points drained. Since the mutant cannot be awakened from this sleep she must beware when using this mutation. The referee may randomly lengthen the duration of recovery to keep HPS totals secret.

8. Density Control

RANGE: 10 hexes, plus 1 per level
DURATION: 3 units per MSTR, plus 1 per level
FREQUENCY: 1 per 4 (MSTR + level)
GENERAL BONUSES: CR plus 3

By manipulating magnetic and gravetic fields this mutant can apparently alter the density of objects, including herself, within range. This is done without changing the target's physical structure. The mental mutation can affect inorganic objects as well as organic targets. Increasing density will increase AR by 10%, and decrease speed by 15%. An increased density would make fish sink and birds fall from the sky. Density control could make a weapon denser, and hence more difficult to use (-175 on to hit roll). Lowering density would decrease AR by 10% and increase speed by 25%. There would be similar floating and flying effects with a lessened density. All targets get a save vs psionic attack even if it is for benevolent density changes. Before any attempt at density control can be made, the target must be less than double the mutant's WATE, plus 10 kg per level.

9. Detections

RANGE: 10 hexes per (MSTR plus level)
DURATION: Special
FREQUENCY: As needed
GENERAL BONUS: + 20 for nomadic PT rolls

A mutant.obtains one roll on Table 58.6, *Detection Type* for every four points of awareness. Each detection has a range equal to 10 hexes per point of adjusted MSTR.

The chance of successfully homing in on whatever the mutant detects is equal to a decidie roll less than her tripled AWE plus level. The referee can adjust this chance depending on the situation. Once homed in the persona will still have to search for at least 30 to 360 units (or 1 to 12 minutes) before finding the deposit. Some of the detections must have instantaneous responses, detect lies for instance.

A 2nd level persona with a 12 AWE and a 16 MSTR has 3 rolls on the *Detection Type* table, and it is determined that she can find food, poison, and water. When searching for water it would have to be within 180 hexes, and she would have a 42% chance of detecting the water. Once detected she would have to search for 1 to 12 minutes before she finds the water.

Table 58.6: Detection Type

DIE ROLL	DETECTION TYPE	EXPLANATION OF TYPE
01-08	Chemicals	Not drugs
09-16	Drugs	Pharmaceuticals
17-20	Energy	Harnessed power
21-28	Food	Only for mutant
29-37	Intelligence	Above animal
38-40	Invisible	Anything hidden
41-45	Lies	Deliberate untruths
46-54	Life	Anything organic
55-63	Mechanics	Inorganic functions
64-72	Metals	Can choose kind
73-81	Poison	+1% per intensity
82-90	Radiation	+1% per intensity
91-98	Water	Safe, or unsafe
99-00	Choose/other	

10. Directional Sense

RANGE: Special
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: + 20 on nomadic PT rolls

This mutant may retrace her steps with ease. By psionically relating where she is now to where she has been, this mutant cannot get lost. In addition the mutant can take a true heading on as simple directions as the point of a claw, or finger. The mutation has an unlimited range. The only way she may get lost is if the mutant travels by air (unless avarian), by sea (unless aquarian), or while unconscious. Tremendous bonuses, in the order of plus 20 to 30 on decidice, should apply for when ever this mutant is undertaking anything of a navigational nature. This includes astrogation, aquatic and terrestrial navigation.

11. Empathy

RANGE: 1 hex per MSTR
DURATION: 30 units per MSTR
FREQUENCY: 1 per 6 MSTR
GENERAL BONUS: +20 on vet PT rolls, and spie interrogation PT rolls

This mental ability allows the mutant to automatically live the feelings of creatures around her. This mutant may pick up emotions like fear, joy, sorrow, pain, etc. If the target's INT is 3 points higher than the mutant's, the target will get a saving throw versus this emotional voyeurism. There is no limit to the use of this passive version of empathy. Listening in on another persona's emotions can be very important if one is trying to determine their intent.

A more powerful form of empathy can be used to alter the persona's emotions. This is done by temporarily removing an emotion from a target's emotional repertoire. Feelings such as pain, fear, or depression can be eliminated from the mind of the target if a save vs. mental attack is not successful. Those personas who would benefit

from the removal of such an emotion may receive -4 on their saving throw. The removed feeling will stay away for one minute (30 units) per point of the mutant's MSTR.

When the emotion returns there is a 2% chance that the empath (the mutant that banished the emotion) will be able to regulate the empathed feeling. For example, she could make the victim feel varying levels of pain, or pleasure. The mutant could make the persona feel inappropriately euphoric, or dangerously depressed. A controlled emotion is a dangerous liability for the persona, and each time the mutant tries to manipulate the controlled emotion the target will get another saving throw. If the saving throw is successful the target may permanently throw off the control.

12. Energy Attraction

RANGE: 10 hexes per MSTR
DURATION: N/A
FREQUENCY: Constant
GENERAL BONUS: Roll an additional mutation

This mutational defect calls for a decidie roll each time an energy weapon (lazer, phaser, fission) is used within range of the mutant. If the decidie roll is less than 17% the bolt will change direction and make an attack on the mutant with a bonus proficient totalling -100. Much of the energy that would normally go into inflicting damage is expended when the attack changes direction. If the attack is successful then the hit will only do 25% damage. The energy bolt dissipates completely if it misses the mutant.

This energy attraction defect only works with personal weapons, and will not divert the energy bolts from artillery weapons, or spaceship naval artillery. The energy attraction mutation will turn off when the mutant is unconscious. Energy attacks directed at this mutant inflict normal damage, but suffer a -100 to hit roll penalty. This penalty is incurred due to path alterations that the bolt will take when nears the mutant. This defect does not count as an initial mutation, and the player should roll an additional initial mutation.

13. Epilepsy Projection

RANGE: 1 hex per MSTR, plus 1 hex per level
DURATION: 5 units maximum
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS: CR plus 4

When concentrating on a target, this mutant can cause organic creatures to develop a progressively worse fit of epilepsy. The initial level of seizures are a little above subtle and become progressively worse as the target fails saving throws. Each consecutive unit that the victim fails to save, there are cumulative penalties.

There are many penalties that affect the target when she fails her saving throw. She will lose 25% of her present movement rate, suffer a -150 to hit roll penalty, increase any PT rolls by 4DD, and and -1 on all saves being made. These penalties are compounded every unit until a save a is made (negating all effects), or five units elapse.

If the target fails to gain control of her body after five consecutive units, the victim will have a "grand mal" epileptic seizure. A grand mal seizure will involve 2-16 units of spastic muscular contractions, followed by 1-100 minutes of unconsciousness. Targets suffering a grand mal seizure are at risk of suffocating if they are left medically unattended. The chance of this happening is 1% per unit of grand mal seizure.

If a target, whose movement rate is 4 h/u were to fail her saving throw and were subjected to the effects of epilepsy projection the following would occur. Her movement rate would be reduced to 3 h/u, -150 on her to hit rolls, +4 DD on her PT rolls, and -1 on all saving throws being made. If she failed her save in the next unit her movement rate would be 2 h/u, -300 her to hit rolls, +8 DDs on her PT rolls, and -2 on all saving throws being made. In the 5th unit of epilepsy projection she would have a movement rate of 1 h/u, -750 on her to hit rolls, +20 DDs on her PT rolls, and -5 on her saving throw rolls. Failing her next saving throw, which is likely since she would be suffering a -5 penalty on her roll, she will have a complete seizure

14. Extra Sensory Perception

RANGE: 2 hexes per (MSTR plus level)
DURATION: 2 units per MSTR
FREQUENCY: Special
GENERAL BONUS: CR plus 5
+10 vet PT rolls,
+20 spie interrogation

Extra sensory perception (or mind reading) allows the mutant to probe the thinkspace of any creature to determine facts that the creature would otherwise keep secret. Even the garbled thoughts of a foreign language, and alien thinkspaces, can be understood since the mutant is probing the most basic icons of the sentient mind. For convenience the referee will simply tell the mutant what the target mind is thinking. If the target mind is intent on escaping from a prison cell, the Esper (a mutant with E.S.P.) will learn of this intent by reading its thinkspace. If the target mind is intending to attack, the mutant will learn of this intent through its thinkspace. If the target mind is lying then the mutant will not only learn about the lie, but will also learn the nature of the lie.

Targets automatically and naturally attempt to repulse a mental intrusion like E.S.P. whenever it is initiated. If the mind repulses the E.S.P. intrusion then the mutant may not read that mind again for an hour. If the target fails to ward off the intrusion then the mutant will have close to free reign in the target's thinkspace for 2 units per point of MSTR. After this duration the target may attempt another save.

Thus a mutant with a 10 MSTR could determine what the target thinkspace is up to for 20 units. After 20 units the target mind would get another save. This mutation can be used without any visual target, but it cannot be used to detect the location of creatures within range. Only a mutant who has rolled E.S.P. twice may listen to more than one mind at a time.

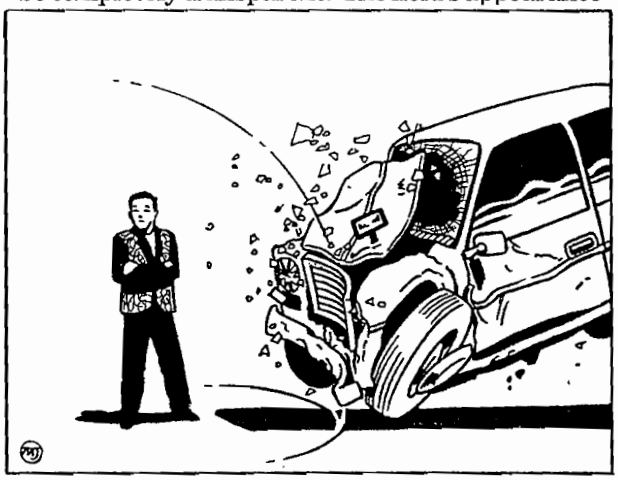
The most complex problem about extra sensory perception is that it is impossible to determine what players are going to do next. Personas can use E.S.P. easily on referee personas since the referee knows more, or less, what her referee personas are going to do next. In light of this the referee will simply tell the player the general intention of the referee persona who's thinkspace is being monitored. Where things become really difficult is in the monitoring of the intentions of personas. This can either be done by referee personas, or other personas in an expedition. No one can be certain what a player's actual intention is, and honesty should not be expected to when the immediate survival of a player's persona is at stake.

The referee can limit her information retrieval to those things that the expedition has done in the past, making it hard for the personas to lie, hide things or deny allegiances. The true power of E.S.P. is in knowing what the target thinkspace intends to do, but for the minds of players the referee personas will have to be limited to access to the persona's past, and not their intended future.

15. Force Field Generation

RANGE: Containment hex
DURATION: Special
FREQUENCY: Wait 1 day
GENERAL BONUS: CR times 2

This mutant may create a protective shell around the hex in which she is contained. The force field may appear as a shimmering translucent shell, or be completely transparent. The field's appearance



will be what ever the referee sees fit. Regardless of how the force field looks it will resist anything that could potentially contact the mutant within it. The shell will keep out rain, dirt, bugs, small animals, and other harmless nuisances. The force field will also absorb anything that can potentially harm the mutant. This includes bullets, lazer bolts, clubs, fires, aerosols, explosions, etc.

The mutant will always be at the center of the force field, and it will move around her as she moves. The mutant cannot leave an activated force field, and it will last until the mutant turns the shell off, or until the shell takes too much damage. The force field can withstand 10 HPS per point of adjusted MSTR (MSTR plus level) of the mutant. Moving damages the force field, and each unit that the persona moves the force field will suffer 2 HPS of damage for every h/u that the mutant moves.

A 4th level persona with a 16 MSTR would generate a natural force field that would withstand 200 HPS of damage before it dissipated. If the mutant is hit by a lazer rifle that should inflict 17 HPS of damage then the force field will take 17 HPS of damage, and the mutant will remain unscathed. Before an attack can damage the force field it must first score a hit on the mutant. If the mutant wants to move then this will damage the force field also. If she runs away at 5 h/u then the force field will take 10 HPS each unit she moves. The force field will dissipate when ever the mutant turns it off, or when it takes more than 200 HPS in damage.

The force field cannot heal itself, and can only be reactivated after the mutant has rested for 8 hours. The mutant will require 1 hour less rest per 3 levels of experience. The mutant cannot create multiple force field shells, or partial force field shells. It is an all or none proposition that will continue until destroyed, or willfully turned off. The force field shell will continue to function if the mutant is somehow knocked unconscious.

The force field can also be used to defend against equipment damage . This is usually the case when equipment is contained within a force field. Vehicle and equipment damage is determined by a roll on the *Extent of Damage* table. Each percentage point on the *Extent of Damage* table counts as a hit point, and the force field can absorb these. A decidice roll of 54 would indicate Minor damage on the *Extent of Damage* table, but the force field would absorb the die roll of 54 as if it were 54 HPS, and the device would be unharmed.

The shell allows anything to exit it, but almost nothing can enter. This allows the mutant to attack targets with ranged, type B, and type C weapons with no effect on her to hit roll. Any unwanted objects within the force field can easily be ejected by the mutant's movement. Since the mutant is very familiar with the structure of her force field shell it should be relatively easy for her to evict unwanted personas. Items that are caught along the area of effect of the shell will be pushed out of the shell 70% of the time. For other personas to be included within the safety of the force field shell they must be holding onto the mutant that is generating the shell.

The force field will not prevent attacks that are borne along the air, such as poison gas. These attacks can still waft into the shell since the mutant still needs air to survive. The intensity of poison gas is reduced by half when it passes through the force field. Radiation attacks can also pass through the shell, but their effect is partially absorbed. The intensity of radiation passing through the mutant's force field is reduced by half. Mental attacks of an entirely cerebral nature are unaffected by a force field.

16. Gyrokinesis

RANGE: 1 hex per MSTR
DURATION: 1.5 units per (MSTR plus level)
FREQUENCY: 1 per 6 (MSTR plus level)
GENERAL BONUS: CR plus 3

This mutation manipulates magnetic poles around creatures or objects; causing them to involuntarily revolve. The target will elevate slightly from the ground and begin to spin. The target's spin could be end over end, or around her longitudinal axis. The revolutions start at a rate of 2 per unit, then 4 revolutions in the second unit, then 6 revolutions in the third unit, and increasing by two revolutions

per unit up to a maximum number of revolutions per unit equal to 1.5 times the mutant's adjusted MSTR. So a 4th level mutant with a 10 MSTR could rotate a target for 21 units, reaching a maximum gyration of 21 rev/unit.

If other personas attempt to keep the mutant from spinning they must make a saving throw versus mental attack, or begin to spin also. If the rescuer's saving throw is successful then they will only be thrown in a random direction for a number of hexes equal to the revolution rate of the target.

If the target fails to save and is fastened down her eyes, tongue, and any other body parts that are not fastened down, will begin to rotate on their own. The uncontrolled body parts gyrating will have the same effects as that of whole body gyrokinesis.

Organic creatures get to save vs psionic attack each unit. A successful saving throw will negate the gyration effects, and the mutant will regain composure after 0 to 3 units. Inorganic objects should only get a save versus gyrokinesis if they are being held by an organic creature.

The effects of gyrokinesis can be quite severe. The severity of the effect depends on the frequency of the rotation that the target is making. When an object, or creature, is spinning at more than 4 rev/unit it is incapable of any semantic or physical activity. For each unit that the target is spinning faster than 6 rev/unit organic creatures must make a successful CON attribute roll, or go unconscious. Beyond 9 rev/unit the target will start to take damage from the torque created by her own body parts. The target will take one d6 for every one rev/unit greater than 9 rev/unit. So a persona being spun at 12 rev/unit would take 3d6 HPS in damage and one being spun at 15 rev/unit would take 6d6 HPS in damage. Gyrokinesis will continue until the mutant shuts it off, or the duration runs out.

The target is rendered physically helpless when spinning at 4 rev/unit, but she could use mental attacks until she is unconscious. Beyond 6 rev/unit the target appears as not much more than a rotating lump, and its effective armour rating should be reduced to its base, usually 500. The gyrating target cannot be translationally moved by the controlling mutant. The only way to make the target crash into things would be to move things into the spinning victim. The damage of hits while spinning should have a bonus equal to one quarter the expected spinning damage for that unit.

17. Heightened Brain Talent

RANGE: None
DURATION: 30 to 120 units
FREQUENCY: 1 per point of INT above 17
GENERAL BONUS: +63 on any INT related PT rolls

This creature can cause her entire brain to become completely engrossed with one specific task. When heightened brain talent is activated the mutant will curl up into a fetal ball, her temperature will rise appreciably, and her eyes will appear to randomly open and close. It isn't at all obvious that she is thinking, and the fit of cerebral activity may be mistaken for a seizure. Normally the problem solving trance will last 1-4 minutes (a minute equals 30 units), regardless of the persona's intelligence.

The fruit of this ungraceful attack is an answer. The mutant will arrive at a conclusion that is correct more than 90 percent of the time. The exact chance of the mutation deriving a correct answer is equal to 90 plus the mutant's INT. This cannot exceed a 99 percent chance of being correct. If the answer is wrong the mutant will know it, and will dispense with the idea immediately. If the task confronted by the persona cannot be solved by logical reasoning (like; why are we here?), or if it relates to aspects of the referee's scenario that the players are supposed to find out for themselves the mutant will withdraw into a completely confused state for 2 to 16 hours.

It is up to the referee to be honest, and ensure that this mutation is as useful and powerful as it is intended to be. There is no reason that the solution has to be an easy one for the expedition. The solution to one problem may lead them into another adventure as interesting as the previous puzzle.

Heightened brain talent is not a psychic ability that can predict the future or determine things unknown to the world. It just allows her to focus her entire mental capacity, with a synergistic effect, on all the data that she knows about. If personas are being particularly difficult in employing this mutation the mutant may suffer 2 to 16 hours of severe mental confusion. The confusion is caused by over taxing the mutation.

18. Hostility Field

RANGE: 1 hex radius
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: -25 on all negotiation rolls

This mutation has a self explanatory title. There is a field of hostility that surrounds this mutant. The mutant has some strange psychic effect on all creatures within a one hex range, causing them to have a hostile emotions towards the mutant.

Generally, all creatures will have a hostile attitude towards this mutant, but in times of disagreement this can become quite acute. Referee personas with an INT less than 8 must save vs psionic attack, or attack the mutant. Usually the referee personas will want to give the obnoxious mutant, regardless of her CHA, a good drubbing. The referee should note that this need not always be lethal combat. See chapter 37, Non-Lethal Combat. Those referee personas with an INT higher than 8 will harass the mutant at the slightest instance, like whenever she talks, or like when she stands up offensively.

Expedition members are immune to this effect, unless the persona crosses them. Expedition members will attack non-lethally unless they choose otherwise . Thus differences in opinion between this mutant and other personas will usually result in violence.

All of these effects wear off as soon as the mutant is out of range of the other personas. Once they are greater than 1 hex away from the mutant they will immediately calm down, and only be left with a bad impression of the mutant, but not the urge to act violently. This mutation has no effect over televids, or other communication devices. This mutation can have a most harrowing effect on veterinarians, and sworn pacifists.

The mutant can override the mutation with her charisma. This only operates on one affected persona per die roll, but that may be sufficient for the mutant to function normally. The hostility field may be over ridden in a benign situation with a successful d100 CHA roll. For other expedition personas this is reduced to a d20 CHA roll in any situation. Although it is virtually impossible for an expedition member to attack the mutant this mutation will still cause endless trouble for the mutant. For instance could a veterinarian function with this mutation? This mutation is a defect, and does not count as a roll for initial mutations.

19. Illusion Generation

RANGE: 5 hexes per (MSTR plus level)
DURATION: Special
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS: CR plus 5

Illusion generation allows the mutant to create non existent sounds, images and sensations in the thinkspace of the target. These sensory illusions can range from a peculiar noise, to a moving three dimensional image. The illusion will only appear for the target if she fails her saving throw. The illusion will not appear to any other persona unless they too are attacked by the mutant. Auditory illusions could make the target break away from the expedition to investigate a strange sound that only the target could hear. A visual illusion of an oncoming vehicle could cause the driver of the expedition's ground car to veer off the road. A complete illusion with sound, smell, sensations, and moving colour could engage a persona in combat with an unstoppable enemy.

Illusions can prove very difficult to run once players have realized what they are. Players will attempt to ignore illusions that are generated by referee personas. The main point is that they would not be seeing the illusion if they didn't fail their saving throw. The effect of failing the saving the versus psionic attack means that they must



face the consequences the illusion. Refusing to 'play' along with an illusion is just the same as refusing to take damage for a poison attack, only it is a lot more frustrating for the players.

If the persona had insisted on walking through an illusionary wall it would be reasonable for the referee to have the persona walk into other 'real' walls. If the persona decides to ignore an attacking illusion, then she may have to risk ignoring a real attacker next time (this could be very dangerous).

It is difficult for an expedition member to convince another expedition member that she is being subject to an illusion. Success depends on the charisma of the persona trying to dissuade illusion victim. Success should be unlikely since she must convince the victim to walk through a wall that she can feel, smell and see, or across a bridge that doesn't appear to be there. It is possible that the unaffected expedition member might just think that the illusion victim is suffering from delusions, conversely the victim may think that the other expedition members are out of it. The illusion is solely within the victim's senses, and nowhere else. Personas that are frequently affected by illusions will definitely suffer prolonged psychological effects.

The duration listed on Table 58.7, *Duration of Illusion* is multiplied by the MSTR of the mutant. The more complex the illusion the shorter its duration. More complex illusions require the mutant to impinge on more sensory systems and this makes it harder for the mutant to maintain the illusion. An adjusting illusion is one that can change for surroundings and situations. An adjusting illusion allows for movement, conversation and this also makes it harder for the target persona to ignore the illusion, and penalties on her player's saving throw are awarded.

The nature of the illusion also affects the player's saving throw. If the illusion is particularly unrealistic then the player may receive a saving throw bonus. All machines, or robots, get +4 to save, and mechanical sensors that aren't equipped with video won't see shapes, and mechanical sensors that don't have audio won't hear sounds. If anything

Table 58.7: Duration of Illusion

ILLUSION COMPLEXITY	BASE DURATION
Auditory only	30 units
Olfactory only	30 units
Tactile only	15 units
Visual	
Stationary	20 units
Adjusting	10 units
Visual and auditory	
Stationary	15 units
Adjusting	5 units
The works	
Stationary	5 units
Adjusting	2 units
Duration equals base duration times MSTR	

manages to touch, or hit, the image another save can be made by the affected personas.

20. Information Eradication

RANGE: 1 hex per level
DURATION: Special
FREQUENCY: 1 per 5 (MSTR plus level)
GENERAL BONUS: +15 on 'convincing' PT rolls

The mutant can force its victim to forget almost anything stored in her memory. If the victim fails to save vs mental attack the memory will be temporarily forgotten. How long, and how easily, the victim forgets the memory depends on the MSTR of the attacker, and the importance of the memory. The victim will eventually remember the forgotten fact. This can occur gradually during the memory lapse, or suddenly when the effect wears off. Things such as instincts and natural abilities are virtually impossible to eliminate from memory. The exact effect of such a specific memory loss is virtually impossible to realistically predict. Luckily **EXP** is a totally unrealistic game.

Table 58.8, *Importance of Memory* shows the save adjustment given to the victim, and the duration of the victim's memory lapse. If a mutant were trying to make a police officer forget that she is writing the mutant a speeding ticket, this would be a critical memory. Since it is in the present, and upholding the law is very important to most peace officers. The cop would get +4 to save, and if she failed she would forget about the ticket for a number of hours equal to the attacker's MSTR.

If the mutant were to meet the same police officer later, and she wanted her to forget that she had met the mutant before, this would only be a memory of minor importance. The memory is only a minor one since the cop has given out several dozen traffic tickets since then.

This example is given so that the referee can get some idea of how flexible the importance of a memory can be. If the referee has no idea of how important the memory is to the persona it is most likely of trivial consequence. If the referee wants to give the persona a fighting chance then she can roll a d6 to determine the memory's importance according to *Importance of Memory* table. The value of the d6 roll corresponds to the memory's importance. Regardless of the importance of the memory, documentation and recordings may still exist. The mutant still won't remember, and the documentation will be irrelevant until she regains the memory.

Another complexity is whether, or not, the attacking mutant knows that a certain memory exists. Information eradication allows a memory to be overlooked by the victim, but it doesn't allow the mutant to search it out. If the mutant has the slightest idea that the target thinkspace might store the memory then she can eradicate it, but the mutation cannot be used to determine what the victim knows. Trying to make a persona forget a critical memory by eradicating its less important components will not work because these components will usually have a critical importance too. Robots, computers, and mechanical recording equipment are affected the same as personas. All inorganic information is given a random d6 importance.

Table 58.8: Importance of Memory

IMPORTANCE OF MEMORY	SAVE ADJUST	DURATION OF MEMORY LAPSE	EXAMPLE MEMORY
1. Trivial	-1	Permanent	Casual street glance.
2. Minor	0	Week	Appointments.
3. Average	+1	day	Work start time.
4. Major	+2	hour	Route to get home.
5. Critical	+4	minute	Trained skills.
6. Intrinsic	+25	Units	Walking, breathing.

21. Intuition

RANGE: 1 hex per MSTR
DURATION: Instant
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: +29 on all thinking PT rolls

When employing intuition the mutant can ask questions of the nature "is it safe to open this door?", and get a simple yes/no answer. The only answers given to proper questions are yes or no. If the mutant fails to ask the correct question a "maybe-so" answer is given, and one of the mutant's daily uses is lost. Incorrect questions are ones that are too large in scope, or ask for information rather than a yes/no response.

The chance of getting a correct answer depends on a save vs psionic attack. The unknown that is being pursued by the persona will get a random MSTR of 0 to 9. The referee rolls a saving throw for the unknown, and answers the question correctly if the unknown fails the save (with a yes or a no). If the unknown saves versus the intrusion no answer can be given.

The ref can adjust the roll depending on the type of unknown. Campaign secrets have incredibly high defences. Questions about living creatures allow the defence to be equal to the MSTR of the creature. For example, asking if a jewel is in a persona's bag would have a defence from 1 to 10, but asking if that persona stole my jewel would have a defence equal to the persona's MSTR. If the referee is creative about the facts in her campaign it should be easy for her to avoid intuition becoming a campaign wrecking mutation.

The expedition will usually get together to ask a series of questions that could give the answer to life the universe and everything. The referee must remember that she is the only one that knows everything about her campaign, and if personas are abusing this mutation the referee can make up some things on the spot which will make the game more complex than simple intuition can handle.

Consider the following question. Will I (my persona) die if I go through that door? The referee could answer either yes, or no, to this question without the slightest hesitation. If the room behind the door is entirely benign she could respond 'yes' to the question, because the persona will die eventually anyway, even if its due to old age. If the room behind the door contains a fully operational heavy offensive combat robot then the referee could still respond 'no' (not entirely without compunction), because going through the door won't kill the persona, but the combat robot might. The referee must keep the mutation balanced so that it is fun for both the players and the referee. Ideally intuition will be used to guide the expedition deeper into the mystery that they are following.

22. Knowledge Transmission

RANGE: Touch
DURATION: Permanent
FREQUENCY: Special
GENERAL BONUS: None

This unique ability allows the mutant to instantly transmit information from one creature to another. The mutant can act like a repository for knowledge that it may not even understand. The first step is acquiring the knowledge from a source. The mutant may wish to transfer knowledge of its own to another persona, or she may wish to transfer knowledge from a third party. Acquiring knowledge from another party requires the mutant touch the persona near its brain, in most personas this will be the head.

The information will be transferred to the mutant if the transferee fails her saving throw. The thinkspace that contains the desired information will not willingly yield to the intrusion of knowledge transmission, and the transferee must fail her save whether she is willing to donate the knowledge, or not. Information isn't given up easily by whatever is storing it. Inorganic storage systems, robots and computers, have a MSTR of 13 to 22 (12 + d10), and organic storage systems, persona brains, uses the MSTR of the persona. The mutant can copy knowledge once a day per 6 points of combined MSTR and level.

Once the mutant has copied the knowledge

from the source it will sit in some deep recess of the mutant's brain until it is needed. If the mutant has some use for the information she can attempt to access it herself. The chance of successfully doing this is equal to 5 times her INT. If a mutant cannot access information for her own purposes it does not mean that she cannot transfer it into another mind.

Knowledge transfer from the mutant to a receiving thinkspace will erase the information from the mind of the mutant that transferred it. Thus knowledge transfer will not result in an ever growing library of knowledge. The receiving persona has a percentage change of successfully comprehending the knowledge transferred equal to five times her INT. The knowledge will only be lost to the mutant if she successfully transfers it.

There is a major restriction is in the number of times a knowledge transmission can be received by a persona. A transmission can be received by a persona once a month, plus once for every point of INT above 16. The mutant may transmit her knowledge once a month for every three points of INT. Mutations cannot be transferred, although all the information about them could be. Abilities such as computer knowledge, or surgery skill can be stored, and then transferred to appropriate personas.

A certain persona in the expedition wants to learn an ancient language that another member of the expedition knows how to speak fluently. The mutant touches the head of the persona that speaks the language and if she fails her saving throw the mutant will have the language stored in her thinkspace. The mutant will be able to use the language herself if she makes a percentile roll less than 5 times her INT. Even if she fails this roll she will still be able to transfer the language to the persona that initially wanted it. If that persona makes a deci dice roll less than 5 times her INT then she will have the language. If she fails, and her INT is less than 16 then she will have to wait a month before she can try to receive the knowledge again. If the mutant's INT were 15 she could try to transmit the knowledge no more than 5 times each month.

23. Levitation

RANGE: Persona only
DURATION: 30 units per (MSTR plus level)
FREQUENCY: 1 per 2 (MSTR plus level)
GENERAL BONUS: +10 on spie sneak PT rolls

This mutation allows the mutant to counter her own body wate against gravity by manipulating mysterious gravity and magnetic waves. This ability is made most obvious by levitating upwards, and defying gravity itself. Levitation also allows the mutant to safely lower herself into a gravity well defying the dangerous accelerations associated with falling.

Levitation does not allow for translational motion, and the mutant cannot use this mutation for flying. The direction may only be up or down, and she must depend on air currents, or other devices, for translational motion. The mutant can travel upwards or downwards at a movement rate equal to twice her regular movement rate.

When employing this mutation the mutant can function normally in gravities from 0g to 5g, by manipulating her wate through levitation. This high gravity functioning improves beyond 5g by 1g per two experience levels. So a 6th level persona with levitation could function in up to 8g.

Levitation will also assist the mutant's wate allowance by allowing the mutant to carry her own wate in equipment while levitation is activated. This can only be done when the mutant is trying to move in normal gravity. Levitating mutants may zoom away when hit with a kinetic attack, avoiding damage. This occurs since their body's have very little wate and hence very little inertia when levitated Playing this realistic and potentially fun aspect of levitation is left to the vices of the referee.

24. Life Leech

RANGE: Touch
DURATION: Special
FREQUENCY: Constant
GENERAL BONUS: CR plus 5

This mutation gives the mutant the infamous ability of being able to painlessly drain life force from a victim and use it herself. In game terms this mutation allows the mutant to leech hit points from other personas by touch. Each touch, or unit, of continued touch will drain 6 HPS from the victim, and add six temporary hit points to the mutant's HPS total. If the mutant cannot touch the target then a successful to hit roll will allow the life leech to work. If necessary the mutant can life leech through a sword or any other conductive material.

Combined life leeched, and normal, hit points may not increase to more than double the mutant's HPS maximum. Therefore a persona with 34 HPS max would have a maximum life leeched total of 68 HPS. These HPS function same as normal HPS, except that the mutant's HPS total is more flexible than other personas. If the mutant sleeps, or falls unconscious, then she will lose any life leeched HPS that are greater than her HPS maximum. If her HPS total is greater than her HPS max when she sleeps, then the mutant will drop to her HPS max. Thus in the morning the mutant with life leech will have to seek out victims to hype up her life force. Mutants with life leech can become very ghoulish characters indeed.

HPS life leeched during combat will not be noticed any more readily than any other combat damage. For instance a non lethal punch would do 6 HPS more than normal. A pat on the back, or a gentle caress would also inflict 6 HPS damage on the target, because life leech cannot be turned off. If a persona were to fall asleep touching the mutant she would be dead in the morning. Life leech makes the mutant a solitary figure indeed. For any living thing that touches her will take 6 HPS in damage. This includes veterinarians, barbers, and lovers. If the life leecher is trying to steal HPS from an unsuspecting persona then the life leeched victim may have to make an AWE roll to notice the 6 HPS lost.

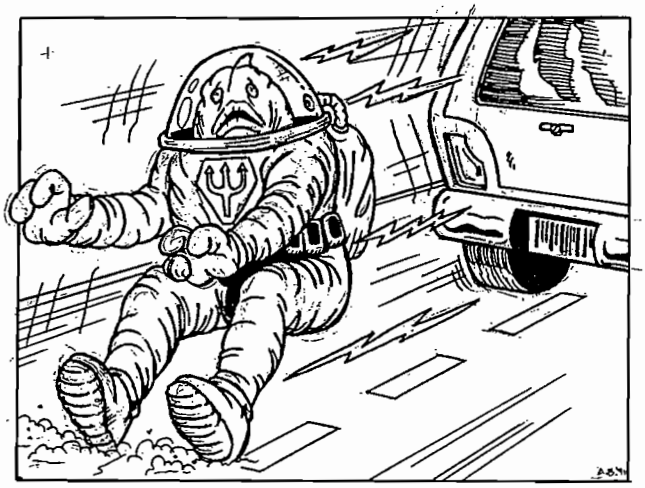
25. Light Wave Manipulation

RANGE: Persona only
DURATION: 30 units per (MSTR plus level)
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS: CR times 3
+50 on spie sneak PT rolls,
+25 on mech PT rolls,

This mutant can manipulate those electro-magnetic waves that fall under the spectrum of visible light. She can warp these naturally occurring waves of light around herself to achieve a variety of effects. By manipulating light the mutant can; become invisible, visible, create darkness, ward off pure lazers, hide its own shadow, change color, glow, makes parts of herself glow, etc. Light wave manipulation does not allow the mutant to create images out of light, but it does allow her to alter the colour, luminosity and shading of any light that strikes her body.

Most often this mutant will use the very powerful mutation to make herself invisible. This mutation has no effect on noises made by the mutant, and it does not alter her wate, or density. An invisible mutant can be detected by radar, sonar, or any other detection device that uses parts of the electromagnetic spectrum other than visible light. The general location of a mutant could also be determined if she were using visible attacks such as lazers, fusion blasts, or grapple guns.

Light wave manipulation is a personal mutation, however the mutant can envelope a certain amount of her equipment also. Light wave manipulation will function normally provided the mutant is not over-encumbered. Light wave manipulation will malfunction if the mutant is over-encumbered. Malfunction of this mutation could have her effects flicker on and off, or leave bits of her undisguised. Light wave manipulation will not function at all if the mutant's wate allowance is in the lift only category.



26. Magnetic Control

RANGE: 1 hex radius per MSTR
DURATION: 1 unit per (MSTR plus level)
FREQUENCY: 1 per 2 (MSTR plus level)
GENERAL BONUS: CR plus 2

Magnetic control allows the mutant to turn itself into a walking electromagnet. The term magnetic is a bit of a misnomer since anything that is metallic will be affected by this mutation. This includes alloys of metal as well as ferrous magnetic metals. A tremendous attraction is built up between the mutant and all metallic objects within range. If the metallic objects are not bolted down they will race towards the persona, and if they are larger than the mutant then she will fly towards them.

Objects less than half the mutant's wate will be pulled towards the mutant at a speed of 7 h/u. Objects greater than twice the mutant's WATE will cause the mutant to be pulled towards the object. She will move towards the object at 3 h/u. The usefulness of this mutation is not immediately obvious, and the player running this mutant must be very creative to ensure that she is not crushed by an array of kitchen utensils, or glued to the side of a moving van.

This mutation is particularly useful for disarming vast numbers of personas. Since all objects within range will be effected weapons in the hands of other personas must make a save versus psionic attack, using the holder's MSTR, or be whisked towards the mutant. Magnetic control can also be used by the mutant to increase her movement rate by 3 h/u when she is running towards some thing that would normally attract her. The mutant has complete control over this mutation, and can turn it off as soon as everyone is disarmed, or if she is getting too close to something big and heavy.

The downsides to this mutation are mostly due to its indiscriminate nature. The mutant will have objects approaching her from all directions within the radius of effect. If something heavy should manage to get to her before she turns off her magnetic control it will get a to hit roll to hit her. If the object attracted to the mutant started more than ten hexes away will do 0-3 HPS of damage for every 2 kg of WATE. A very dangerous situation indeed.

Determining whether something is metallic, or not, is a difficult situation in a game where everything is based on black box technology. If there is a dispute arising over the nature of a device's material structure then refer to the sphincter dice in chapter 16, Special Rolls.

27. Mass Mind

RANGE: Doubles range of mutation
DURATION: Doubles duration of mutation
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS:

Mass mind turns the mutant into a psionic re-broadcast station. Any mental mutation used within range of this mutant can be picked up amplified or redirected. Mass mind will only work on ranged mutations that have a target in mind (no pun intended). Mental mutations that require touch cannot be affected by mass mind. This mutation will amplify almost any mental mutation to double its previous power. Ranges, damages, intensities, durations, etc. are all doubled by mass mind. When the mutant is increasing the psionic power of the mutation she cannot redirect its target.

If another persona in her expedition were to attack an opponent with gyrokinesis, mental mutation #16, the mass minding mutant could double the duration, range, and effect of this mutation. So the target would increase her revolutions per unit by 4 rev/unit instead of 2 rev/unit, and this could be done for twice as long as the persona previously could.

Mass mind also allows the mutant to coordinate multiple psionic attacks on one victim. This means that the mutant can channel the mental attacks of other mutants onto the thinkspace of the one target. The simultaneous channeling can be done voluntarily by the attacking mutants, or the mass mind can over-ride the chosen target.

The mutant with mass mind can also override the target chosen by any mutant provided that the mutation is within range. This does not allow the mass minding mutant to use the mutation herself, but she can redirect another mutant's mutation if that mutant fails a save versus mental attack.

If a mutant from an opposing expedition were to attack a persona with neuronegation, mental mutation #38, the mutant with mass mind could try and redirect the attack onto a persona from the opposing expedition. If the attacking mutant did not make her save versus mental attack then she would inadvertently attack one of her associates. If the mutant is trying to direct mutations such as E.S.P., mental mutation #14, she cannot read the target thinkspace, but she can sure cause confusion for the esper.

VI

28. Mechanical Sense

RANGE: N/A
DURATION: N/A
FREQUENCY: As needed
GENERAL BONUS: +30 on mechanical PT rolls

This mutant has a way with machines. She has an innate ability to understand anything mechanical, and can converse with machines as if they were living entities. The more complex the machine the more developed the level of communication is. The mutant could pick up a weapon and ask it what it had fired at lately. The gun would answer telepathically to the mutant. The chance of this working is equal to the mutant's MSTR. So a mutant with an 11 MSTR would have an 11% chance of talking with mechanical devices.

These machines can be organic or inorganic. There is a 15% chance that the mutant will also have an organic mechanical sense. An organic mechanical sense will allow the mutant to converse with the bones, organs and specific body parts of the living organisms. The chance of this being successful is equal to the mutant's MSTR.

Those mutant's which have inorganic mechanical sense, the more common of the two, will naturally operate as a second level mechanic regardless of what persona class they choose. If the persona chooses to be a mechanic her EXPS earned are doubled until she reaches fourth level. If the mutant has an organic mechanical sense she will have natural abilities equivalent to a second level veterinarian, and will. If the persona chooses to be a veterinarian her EXPS earned are doubled until she reaches fourth level.

The doubling of EXPS until fourth level means that the persona will double any experience award that she receives until she reaches her fourth level of EXPS. Thus a mechanic with inorganic mechanical sense that is supposed to get 732 EXPS for an adventure would get 1464 EXPS instead. This experience point bonus would end once the persona achieves fourth level.

29. Mental Blast

RANGE: 1.5 hexes per (MSTR plus level)
DURATION: N/A
FREQUENCY: Wait 1 unit
GENERAL BONUS: CR plus 4

The mental blast is psionic concussion on the material plane. It usually appears as a fluorescent yellow streak that flashes from the mutant's head. The mutant can make this attack every second unit while in combat. Mental blasts can be used simultaneously with other attacks, or while performing some procedure. The attack will suffer

no penalty, and will not detract from any other performance. As long as the mutant has line of sight targeting is normal. Mental blast can affect any target type regardless of its mental ability. This attack does 2-8 HPs of damage, plus 1 HPs per EXPs level. So a 4th level persona with this mutation would inflict 6 to 12 HPs of damage if the target fails a saving throw vs psionic attack. If the save is successful the damage is negated.

30. Mental Control

RANGE: Touch
DURATION: Special
FREQUENCY: Special
GENERAL BONUS: CR plus 7

This mutation allows the mutant to completely control the body and mind of another persona. To do this the mutant must make skin to skin contact with the organic creature to be taken over. Once skin contact is made the victim gets a save vs psionic attack to repel the mental control. If skin to skin contact is impossible then a successful to hit roll will suffice. If the saving throw is successful, then the mental control is negated. A fail on the saving throw indicates that the victim is subject to complete mental control of the mutant.

Mental control means that the victim's eyes become the mutant's the victim's mouth becomes the mutant's, and the victim's brain is controlled by the mutant (mutations too!). The mind controlling mutant will function normally while controlling another mind. To the player running the mutant it is similar to running two personas at once. The victim becomes nothing more than an extension of the mutant. The mutant can control the creature up to a range of one kilometer per point of adjusted MSTR. If the victim falls outside of this range of effect then she will break the mental control.

The number of creatures that the mutant can control, and the duration for which they can be controlled is dependant on the victim's INT. Table 58.9, *Frequency of Escape Check* indicates how often the creature gets to save versus mental attack. If the save is successful the victim will immediately break free of the mental control.

The mutant can control any number of creatures, provided their combined intelligence is less than the mutant's adjusted INT (intelligence plus experience level). The mutant is capable of only controlling one creature with a greater INT than her own. The player cannot know the INTs of the potential victims, but once she has exceeded the maximum collective INT, the newest target will always save. A fourth level mutant with an INT of 14 could control 18 INT points worth of personas. This could be two 9 INT personas, three 6 INT personas, but only one persona with an INT 18, or greater.

The more intelligent the controlled persona the more likely it is to break the mental control. The most likely way that a persona will break free from mental control is on one of her mental control checks. Mind controlled personas get repeated saving throws at intervals determined by their INT on the *Frequency of Escape Check* table. A successful saving throw at this time will free the victim from the control of the mutant.

Mind control checks will always take the mind controlling mutant by surprise. Creatures can break the controlling by straying out of the mutation's range, being re-controlled by a stronger mutant, by being released by the mutant, by getting access to psionic resistant technology, or by dying. When a mind controlled victim breaks free the mind controlling mutant will instantly know.

Table 58.9: Frequency of Escape Check

INT OF VICTIM	FREQUENCY OF SAVES (EVERY)
up to 3	3 days
4-6	2 days
7-9	1 day
10-12	9-12 hours (8+d4)
13-14	5-8 hours (4+d4)
15-16	1-4 hours
17	41-60 minutes (40+d20)
18	25-40 minutes (5+d20)
19 and up	6-25 minutes (5+d20)

Mind controlled personas are not mindless drones that the mind controlling mutant will send into slaughter. For any damage that the controlled persona takes the mind controlling mutant will take also. Damage taken by the mind controlled persona is divided by four, and then delivered directly to the controlling mutant. This damage is psionic, and cannot be absorbed by armour or force fields. If this amount of damage is a major threat to the mind controlling mutant she may release the mind controlled persona before any more damage is accrued.

If by chance the controlled persona should die, or go unconscious, while she is mentally controlled, the mutant must make a recovery roll, if the recovery roll is not successful, then she will fall unconscious. All mind controlled mutants will remain mind controlled and function normally while the mutant is unconscious. Only if the mutant dies will they be released from the mind control.

Mental attacks on the mentally controlled victim are also directed to the controlling mutant. If the mentally controlled persona fails her saving throw the controlling mutant will get a chance to save before the effect is conducted to her.

If the mutant tires of her mind controlled charge she may dismiss it, but this means that the creature must save versus mental attack to be dismissed. If the controlled creature fails this roll she will remain controlled for another hour, and may attempt another save then. A severe dependance is developed by the controlled thinkspace, and it will not break free until it makes a successful save. Until the dependant persona saves the mutant is still controlling her. It is possible for the controlling mutant to become just as trapped as the controlled victim.

31. Mental Control Over Physical State

RANGE: None
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: CR plus 4

This mutant is capable of conscious control over the normally automatic physical functions of her body. If necessary her breathing can be made very shallow to reduce respiratory damage from gases. Blood flow can be reduced to a cut limb. Venous return from a poisonous bite could be reduced. Hormones can be controlled to reduce hunger sensations, end fertility, or improve muscular strength. Mental control over physical state will mostly be used to reduce malevolent effects on the body by mentally overriding the body's physiological controls. The physical effects of anything are reduced to 25% of what is intended.

If a killing poison was supposed to inflict 80 HPR in damage then it would only inflict 20 HPR. If the mutant is supposed to age a year then she'll only age 3 months. A paralysis effect would have one quarter the duration, and even one quarter the effect. These benefits are attributed to respiration control, blood re-routing, hormonal adjustments and alterations in enzyme production. Benevolent effects can be extended 4 times as long with this mutation. This mutant heals 4 times as fast (4 HPR a day instead of 1), can extend a pharmaceutical's effect 4 times longer, and reduce the side effects by 1/4.

A mutant with mental control over physical state is unaffected by diseases, or cancers. The more dangerous an effect the body is fighting, the more the mutant is required to concentrate. This mutation is a mental one, however it cannot affect a psionic attack unless it is expressed in a physical effect on the body. Subconscious mechanisms will override the mutant from enacting detrimental controls over her body.

32. Mental Defenselessness

RANGE: N/A
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR divided by 2

Just as the title states, this mutant is mentally defenseless. For some reason she cannot properly defend herself against mental attacks. A mutant with this serious defect will usually have a long history of impulsive purchases, personal dependencies, and cult affiliations. These points shouldn't necessarily be reflected in a stupid, or emotionally weak persona, but when subject to a psionic attack her effective MSTR is zero. This does not mean that she does not get a saving throw, but instead of using her MSTR to defend her thinkspace she has no defence. The mutant's mental strength remains the same, but when trying to save against psionic attack the mutant's MSTR is effectively zero. The mutation is a pathetic and potentially lethal defect that does not count as a start up mutation, and allows a another mental mutation to be rolled.

33. Molecular Disruption

RANGE: 1 hex per (MSTR plus level)
DURATION: Permanent
FREQUENCY: Rest period
GENERAL BONUS: CR times 3, if used.

This mutant can instantly convert matter into a low energy gaseous state. Molecular disruption allows the mutant to obliterate solid objects by converting them into a billowing cloud of gas. There is no saving throw against this attack. The persona is capable of disrupting an amount of matter equal to her body wate.

There are two methods with which this attack can be carried out. The first is a silent clandestine version where the matter can be obliterated without anyone noticing. The second version involves a horrendous explosion that attracts all sorts of attention. If the mutant wishes the attack to be silent, she must concentrate for five units before she can attack.

The silent attack mode requires 3 units of rest per kg of wate disrupted, and this rest is completely incapacitating. The explosive version requires no concentration what so ever, and only 1 unit of rest per kg of wate disrupted. The mutant can select the amount of wate that she wishes to disrupt, provided that it does not exceed her own body wate. This mutation does not fully regenerate for six days, less one day per 3 levels of experience. A third level mutant could employ molecular disruption once every 5 days.

Those objects that have a wate less than the amount of disrupted material are irrevocably destroyed. Inorganic structures will take damage according to location of the wate disrupted. Organic personas (of a normal bone/muscle/organ body structure) will usually be vanquished if more than 10% of their body wate is disrupted. If less than 10% of a organic personas body wate is being disrupted then the target will take a d20 per kg lost. robots are less susceptible to disruption than the other personas, they will take a d20 per kg of wate destroyed, but they can withstand losing up to 20% of their body wate. The molecular disruption has no area of effect, and opponents standing shoulder to shoulder with a completely disrupted victim will be unaffected, shocked, but unaffected.

34. Molecular Examination

RANGE: 3 hexes per (MSTR plus level)
DURATION: N/A
FREQUENCY: As needed
GENERAL BONUS: +level on AWE rolls
+10 on all PT rolls

With this mutation the mutant can quickly determine physical weaknesses in any observable structure. The mutant emits no special radiations to do this, and it is carried out by acutely active processing centers in the brain.

The building, animal, or whatever can be analyzed to determine the weakest point in view. The mutant must observe the subject personally and be within range. Thus molecular examination

used against a building in a photograph would determine the weakness in the photograph, and molecular examination used on someone over a televid would find a weakness in the televid. If the subject appears to have no weaknesses, it may only have no structural, or tactical, weakness from that angle, and a change in view might change this opinion. Thus the mutant must use molecular examination on a unit by unit basis.

All objects being examined will get a save vs psionic attack to see if they relinquish their weakness. Buildings and other inorganic objects have a random MSTR between 0 and 9. Military buildings, and such, may have a higher MSTR due to their defensive nature. If the target fails its saving throw then the mutant will gain combat bonuses that represent this extra information.

If the mutant walks up to a solid rock and determines its weakness, she would increase her chances of fracturing it, rolling it, or balancing it. The benefits are + 10 times AWE added to to hit rolls, and + AWE to PT rolls. Such benefits are non-transferable, and the target must fail a save immediately before any benefits can be obtained.

A mutant with molecular examination, and a 14 AWE is in combat with a particularly well armoured alien. Using molecular examination the mutant is trying to find a weakness in the alien's thick, scaly hide. The alien fails her save and the mutant can add 140 to her to hit roll, greatly increasing her chances to hit. However the next unit the alien makes its saving throw, and the mutant gets no bonus other than her regular to hit roll bonus. If the mutant were a biologist and were trying to make an identification on the alien she would automatically add 10 to her PT roll. If the alien failed her saving throw again, the mutant biologist would get to add her AWE to the PT roll also, for a total PT roll bonus of 24.

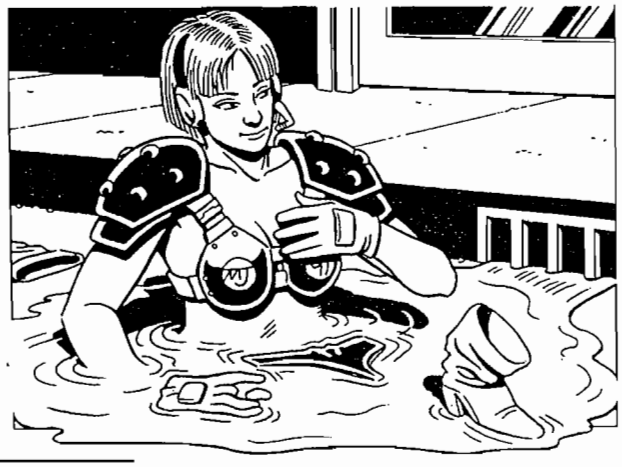
35. Molecular Phase transformation

RANGE: Persona only
DURATION: Special
FREQUENCY: 1 per 4 MSTR
GENERAL BONUS: CR plus 2

This mutation allows the mutant to convert her present body structure into a homogeneous form of any of the three basic phases: solid, liquid or gas. The mutant can convert her entire body, including bones, muscles, blood etc. into a single phase type that contains mutant's functioning life force. While undergoing the effects of molecular phase transformation, the mutant enjoys all sensory faculties, and all capacities of reason. The mutant can only employ those mental mutations that are non-contact. Physical mutations are disorganized and cannot function while transformed.

In the transformed state the mutant cannot carry, or manipulate, equipment of any sort. The mutation only affects her body, and all the equipment, including clothing, she possesses either crashes to the floor, or sits on her statue. There are exceptions. For instance, taking on a solid form with this mutation could freeze the mutant's digit onto a button, or trigger, she is depressing.

Solid: The mutant's body becomes a statue like, motionless body of rock, and can remain in this state for two minutes (60 units) per point of MSTR plus level. The mutant's wate and volume remain the same while solid. Any damage delivered



to the mutant will have no effect, unless the total damage per attack is greater than the mutant's HPS maximum, and then she would only take the amount of damage that exceeds her HPS maximum. If the mutant's HPS maximum were 30 HPS she would take only 2 HPS damage from a 32 HPS attack. Attacks must still make a successful to hit roll before they can inflict damage. The mutant's armour rating cannot fall below 500. Any attacks that have special effects on organic organisms will not work while the mutant is solid. Poison gases, radiations, and exposure to vacuum have no effect on the mutant while she is in this state.

Liquid: The mutant's body will pour out of her present form into a cohesive puddle on the floor. The mutant's wate and volume remain the same while in the liquid phase. Like all liquids, the puddle is affected by gravity, but the puddle can creep its way up walls if it wants too. If the mutant wishes to move she can flow along at 3 h/u. Attack forms like stabbing, clubbing, shooting, or puncturing will have no more effect on the mutant in this phase than they would on any other puddle. Any attack that would heat up water will affect the mutant the same as a normal attack. For instance, electrical, fusion, fission and lazer attacks would damage the mutant if a successful to hit roll is made. The mutant must use her unarmoured AR while in the liquid phase. Exposing the mutant to a vacuum in this phase will have the normal detrimental effects. The liquid state can be used to squeeze through cracks, or other tiny spaces, but the mutant must be sure when the duration of liquidity will end. The mutant can remain in the liquid state for 1 minute (30 units) per point of adjusted MSTR.

When in the liquid phase the mutant can generate a liquid pressure equal to her PSTR. The liquid pressure could be used to push open an unlocked door, however it could not be used to pull the trigger on a gun. This also allows the mutant to attack while in the liquid phase. She can envelope targets with her own wate in liquid and drown them. The target will be able to survive for 1 unit per point of CON, plus 1 unit for every time she makes a successful PSTR roll. Thus a target with an 11 CON could survive with her head enveloped by the mutant for 11 units. It is expected that the target will struggle, and a successful PSTR roll will indicate that she has thrashed another mouthful, beakful or whatever, of air, and her time to death is extended.

The liquid state of the mutant is very cohesive, and the mutant does not have to worry about mixing with other liquids, or being washed away. If an attacker is trying separate the liquid phase mutant into separate parts the attacker must compete with the mutant's liquid pressure (PSTR) in order to separate the cohesive blob. If the attacker over powers the liquid mutant then she may flatten herself out such that the room appears simply wet. If the attacker resorted to a cleaning vacuum then a to hit roll would have to be successful before any of the mutant could be cleaned up. The mutant will only take damage from this sort of attack when she reforms. While liquid there is tremendous opportunity to reconnect into one blob. If reconnection is impossible then the mutant may take a d20 per kg of herself that is missing. The exact mechanics of this are left to decision of the referee.

Gas: The mutant can stay in a gaseous state for one minute (30 units) per 2 points of MSTR plus level. While in the gaseous phase the mutant's wate remains the same, while her volume doubles. This mutant can move at 6 h/u, and travel anywhere that a gas will be able to go. While in the gaseous form the mutant would be able to steam her way through a mail slot of a normal door, but could not penetrate an airlock door. Exposing the mutant to a vacuum while in the gaseous phase will have the normal killing effects. While in this state the mutant can only be affected by lazer and energy weapons (fusion and fission). The mutant can use her unarmoured AR while in the liquid phase. Since the mutant appears as a cloud of smoke, or gas, she can still become a target if noticed.

When in the gaseous phase the mutant can generate a vapor pressure equal to her half her PSTR. The gaseous pressure could be used to pop open an unsealed box, however it could not be used

to push a button on a dashboard. This also allows the mutant to attack while in the gaseous phase. She can envelope targets with her own wate in a gaseous cloud and suffocate the target. The target will be able to survive for 1 unit per point of CON, plus 1 unit for every time she makes a successful DEX roll. Thus a target with an 8 CON could survive with her head enveloped by the mutant for 8 units. It is expected that the target will struggle, and a successful DEX roll will indicate that she has thrashed another mouthful, beakful or whatever, of air, and her time to death is extended. The target can also outrun the cloud if she moves faster than 6 h/u.

The gaseous state of the mutant is very cohesive, and the mutant does not have to worry about mixing with other gases, or being blown away in the wind. If an attacker is trying separate the gaseous phase mutant into separate parts the attacker must compete with the mutant's vapor pressure (1/2 PSTR) in order to separate the cohesive cloud. If the attacker overpowers the gaseous mutant then she may flatten herself out such that the room appears simply wet. If the attacker resorted to a cleaning vacuum then a to hit roll would have to be successful before any of the mutant could be sucked up. The mutant will only take damage from this sort of attack when she reforms. While gaseous there is tremendous opportunity to re-connect back into one cloud. If re-connection is impossible then the mutant may take a d20 per kg of herself that is missing. The exact mechanics of this are left to decision of the referee.

36. Molecular Phase Transmutation

RANGE: 1 hex per MSTR plus level
DURATION: Special
FREQUENCY: 1 per 4 MSTR plus level
GENERAL BONUS: CR times 3
+25 on materials PT rolls

This mutant can transmute objects (other than herself) into any of the three basic phases: gas, liquid or solid. This mutation will most often be used as a very dangerous attack, since partially transmuted targets will suffer tremendous damage. The mutant can transmutate an amount of material that cannot exceed her own wate.

When an entire target is transmutated she will suffer no damage, and will return to normal after 1 to 1000 units. The target cannot function while she is transmutated, and will remain a marvelously sculpted statue, a quivering puddle, or a floating cloud of gas. Although the transmutated target has no functioning mental faculties at all, she will function against attack as would a mutant that has voluntarily undergone Molecular Phase Transformation, mental mutation #35.

Complete trans-mutations can be used to subdue targets, terrify the opposition, or preserve expedition members by converting them into a phase that protect them from harm. For instance an impending depressurization would have no effect on a persona that was wholly converted to a solid. The benefits of being in particular phases are discussed in this chapter under mental mutation #35, Molecular Phase Transformation.

When the persona transmutates an object, or victim, a save vs psionic attack must be made. If the save is successful the attack has been negated, and no part of the target has been transmutated. The mutant can partially transmutate the target, converting part of the target's body into either a solid, liquid, or gas. In most cases this will kill the target. Inorganic targets that do not save are permanently transmutated to the chosen phase, and will almost always be destroyed. Organic creatures can possibly survive a phase attack: damage is determined on Table 58.10, *Effect of Partial Transmutation*. The damage inflicted is per kg of body wate transmutated. So a target that gets 80 kg of her body trans-mutated into a solid would take 20d4 in damage. If she were completely solidified she would take no damage.

Any target that is partially affected by this attack form will have a percent chance of completely transmutating, and not taking any damage at all. The chance of accidental complete transmutation is dependant on the amount of target transmutated in kilograms. See the *Effect of Partial Transmutation* table for the percentage chance of

complete transmutation. The very large target that is supposed to have 80 kg of herself turned into a solid would have an 80 percent chance of completely transmutating and taking no damage. This is incredibly inconvenient for the target, but it is better than being dead.

Multiple attacks on the same target present difficult problems for the referee to resolve. Some guidelines for refereeing this situation include: total amount of target transmutated is included in the chance for complete transmutation; previously transmutated wate can be transmutated, but it will not inflict additional damage; mixing phases on a target doubles the chance of complete transmutation.

If a target dies when transmutated, it will remain partly transmutated, partly dead. If the target survives a partial transmutation, the transmutated flesh will stay attached to the target's unaffected body, and will return to normal after 1 to 10 units. Remember that a complete transmutation will last 1 to 1000 units whether it was intentional or not.

Table 58.10: Effect of Partial Tranmutation

PHASE CHANGE	DAMAGE INFLICTED	COMPLETE TRANSMUTATION
Solid	d4 per 4 kg	1 % chance per kg
Liquid	d4 per 3 kg	2 % chance per kg
Gas	d4 per 2 kg	3 % chance per kg



37. Muscle Manipulation

RANGE: 3 hexes per (MSTR plus level)
DURATION: Until saves
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS: CR plus 6

This mutation allows the mutant to seize complete control of a muscle, and the corresponding motor nerves that manipulate it. This control attack can be made on any creature that uses limbs for leverage. There does not have to be specific muscles and nerves present in the anatomy of the target, and this mutation will work on most alien races. Muscle manipulation will not work on robots.

This attack could carry out any of the following actions, close a target's eyelids, cause one leg to trip another, make a wing stop working, force a fin to flag about limply, push an undesired button, pull a trigger to soon, not throw a grenade, or change targets unexpectedly.

Muscle manipulation is generally divided into limbs. The mutant will always be able to pick a nerve trunk close enough to the spine that she can manipulate the actions required for an entire limb. Another attack would have to be made if the mutant wishes to make two or more limbs act in unison.

As the victim realizes that her muscles are being controlled by an exterior force, and she is not suffering from some peculiar seizure, or cramp, it

will become easier for her to throw off the control. This is reflected by a bonus in her saving throws. In the first unit of control, saving throw adjustments are given according to Table 58.11, *Muscle Manipulation Save Adjustment*. A cumulative bonus of +1 is given for each successive saving throw after the initial unit of muscle manipulation. Thus a victim that has been controlled for 5 consecutive units will receive a bonus of +5 on her saving throw. Muscle manipulation is terminated when the mutant ends the control, the victim makes a successful saving throw, or the victim manages to get out of range.

Muscle manipulation can be made to subtly hinder a target's performance. Covert muscle manipulation will grant a to hit roll penalty of -200, and a performance table penalty of -20. The victim will get a saving throw for this form of attack the same as any other form of muscle manipulation. Muscle manipulation will also work on recently dead targets also.

The mutant can exert muscle manipulations that can kill the target. Such muscle manipulations are considered dangerous controls, and they include stopping cardiac, or respiratory muscles. If the victim fails her saving throw, she will receive a CON roll. If this CON roll is not successful then victim will fall into respiratory, or cardiac, arrest. If the victim is not revived in a number of units equal to the victim's CON then she is dead.

38. Neuronegation

RANGE: 2 hexes per (MSTR plus level)
DURATION: d6 times 30 units
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS: CR plus 4

This mutant is capable of shutting off the minds of creatures. The mutant completely cuts her targets off from any sensory input that they can possibly get. Victims failing their saving throw versus neuronegation become simultaneously blind and deaf, and lose all olfactory and tactile ability. Their brains are completely shut off from the outside world, and the victims collapse into a mindless heap. If an intended victim saves, the attack is negated. Those victims that become a unresponsive pile of flesh will remain so for 1-6 minutes (30 units per minute). While in the neuronegated state the victim is completely and totally immune to any form of mental attack that manipulates the mind. This mutation effects all creatures in a 2 hex radius up to the maximum range.

VI

Table 58.11: Muscle Manipulation Save Adjustment

MANIPULATION TYPE	INITIAL SAVE ADJUSTMENT	MANIPULATION EXAMPLE
Covert control	-2	Non-obvious harassment
Frustrating control	-1	Blinking, button missing
Normal control	0	Sneezing, fist clenching
Obvious control	+3	Punching, kicking
Dangerous control	+6	Shooting self, internal muscles

39. Phase

RANGE: Persona only
DURATION: Up to 1 unit
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: CR plus 5

This mutation allows the mutant to temporarily phase out of the material plane leaving nothing but a ghostly after image. Phasing out can last up to one unit, after which the mutant's ethereal form will rematerialize. Phase can be used to avoid hits, pass through walls, evade mental attacks, and dodge shrapnel. Phase will only work on the mutant, and an amount of equipment that does not surpass her encumbered WA. If the mutant is encumbered and attempts to phase, all her equipment will crash to the floor. Once phased the mutant moves at normal speed, and absolutely no other function can be undertaken.

Movement while phased is rather special since it allows the mutant to pass through walls, or doors at her leisure. In order to pass through floors the mutant must concentrate on a downwards action. A phased mutant will not automatically sink though ceilings, fall through the bottom of rising elevators, or go flying out the back of high speed vehicles. If she wants to though, she can. If a phased mutant is in trouble over what her velocity will be when she rematerializes, it will be no faster than her phased movement rate. Therefore a phased mutant could jump out the wall of a speeding train, and rematerialize moving at her regular movement rate. Even if the train is speeding by at several hundred kilometers an hour.

When phasing is used to avoid attacks the mental mutation will automatically phase out before any attacks can be made. Attacks include any wea-pons, trained abilities, or physical mutations. If an attacker is using a mental mutation then the two combatants should have an initiative roll com-paring their MSTRs. While phasing, there is a 2% chance that the mutant will remain phased for 1 to 3 days. If the mutant should solidify into an object or into a wall there is a 50% chance she will be pushed through in the same direction she was moving, and a 49% chance she will get pushed in the opposite direction. The effect of the remaining one percent is left to the ref's discretion.

40. Planal Hideaway

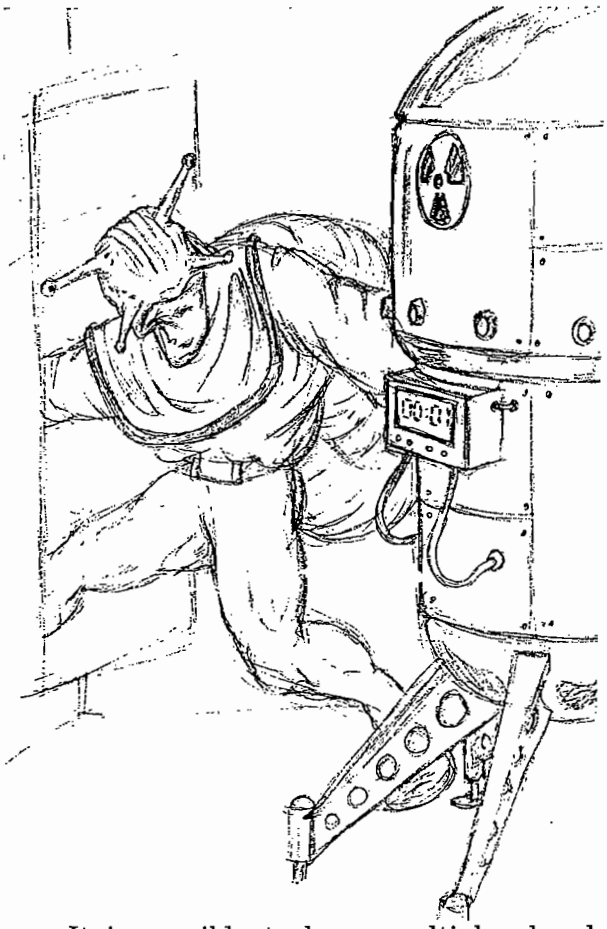
RANGE: N/A
DURATION: Special
FREQUENCY: 1 per 20 (MSTR plus level)
GENERAL BONUS: None

A planal hideaway is a convenient time-space aberration that is generated and manipulated by the mutant. The planal hideaway mutation allows the mutant to create an entrance into a strange 2 hex cube that can store items off of the material plane. The entrance to the planal hideaway appears as a motionless, black, 1 dimensional plane parallel to the strongest local gravitational field (planet, star, or spaceship). Even if the hideaway is opened in total darkness the entrance will always appear darker than the surroundings.

The entrance to the cube stays in the same location, relative to nearest planet or star. Closing the planal hideaway will make the entrance disappear, and no trace what so ever will be left where the opening was made. The mutant can always find its closed planal hideaway entrances.

The planal hideaway can be opened once (when created) and closed once. When the planal hide-away is opened for the second time it will dissipate, and all objects in it will drop a distance of 1 hex onto the nearest solid surface. If some observant personas were to build a concrete block over where they thought the entrance to the planal hideaway to be, then the hideaway open hex above the block.

The planal hideaway will not kill its occupants automatically. When opened it will not release them onto the surface of a sun, nor will it release them under water. An opened planal hideaway does this for reasons of its generation, and it should not be mistaken as benevolence towards its contents. For instance, the hideaway could open just as a nuclear bomb detonates melting its contents (the referee would have to be pathologically cruel to do this).



It is possible to leave multiple planal hideaways open, but the mutant must be present to close each one. Another variation of this is opening a hideaway within a hideaway, however the mutant should be prepared for anything since the results of such actions are left to the ref's imagination. All planal hideaways will dissipate and disgorge their contents when the mutant dies.

The planal hideaway is excised from time and space itself. Anything inside the cube will remain in stasis, and be completely unaffected by time, or any occurrence on the material plane. Organic creatures can subsist inside a planal hideaway without food or water indefinitely. Opening a planal hideaway 10 seconds or 10 years later will make no difference to the items stored inside it. Personas will not heal, nor will they bleed while locked into the planal hideaway. Boredom will be the greatest enemy, and sometimes combat can result from boredom. Combat within the enclosed space of the planal hideaway will only be non-lethal, although any ammunition used will be considered spent. Once the planal hideaway reopens everything restarts again.

The planal hideaway can be a chore for the referee. For instance, what if the expedition jumps inside the planal hideaway and hangs around in the time-space aberration for about 10000 years. Since time is meaningless they may hide inside it for 20 million years. The trick for the referee is that they not only are outside of the channels of time, but they also have no concept of time. This means that a 10000 year wait could feel like a 10 minute wait. This sort of confusion will be accepted by the players provided that it at least allows them to escape what ever they decided to hide from.

41. Planal Holdaway

RANGE: 1 hex
DURATION: Special
FREQUENCY: As needed
GENERAL BONUS: None

This extradimensional bilge follows along in the hex directly behind the mutant. The planal holdaway is a time-space phenomena that functions as a storage compartment capable of carrying ten times the mutant's WA (using her MSTR as PSTR). The holdaway occupies no space on the material plane, and can only be found, or opened by the mutant. The opening is 60 cm square, and appears as a 1 dimensional sheet of blackness. When opened no contents can fall out, but the mutant can reach in and pull out whatever she is looking for. As long as it fits through the opening it can be hidden inside the planal holdaway. This planal footlocker will spill its contents if the mutant dies, or has a negative HPS total (dropping all equipment a distance of 1 hex).

42. Polar Disruption

RANGE: 1 hex per kg WATE less 5 per level
DURATION: d6 units
FREQUENCY: Once per day
GENERAL BONUS: +5 on mechanic PT rolls

Whenever this mutant is subject to extreme duress, there is a chance that she will turn into an electromagnet. The following situations can be classed as extreme stresses: getting hit, being surprised, vehicle crashes, expedition personas dying, killing preferred races, etc. Whenever these stressful situations occur there is a 3% chance that the mutant will suffer polar disruption.

All metallic objects within range are effected by the polar disruption. When an attack occurs, all objects that have less than half the mutant's wate will be repulsed from, or be pulled towards, the mutant. So if a mutant's wate is 58 kg she would affect anything that is 29 kg, or less, in wate. Any object with a wate greater than 29 kg cannot be drawn towards the mutant. Metallic objects with more than twice the mutant's WATE will affect the mutant. If she fails a save versus psionic attack she will be drawn towards the object.

If there is some difficulty determining whether, or not, some artifact has polar disruptable metallic content then consult the sphincter dice described in chapter 16, Special Rolls.

A normal polar disruption will involve 1-6 units of attracting, or being attracted to, metallic objects. There is a 30% chance the mutant will have a repulsive (push metals away) polar disruption. Movement for affected objects will be at a non-damaging 10 h/u. Thus objects will hurtle towards the mutant at 10 h/u, but eventually they just gently pile up against the mutant. A typical attractive polar disruption will snatch all the weapons with range of the mutant, and fly them towards the mutant. Those items held by a persona will get a save versus mental attack using the persona's MSTR.

43. Power Drain

RANGE: Touch
DURATION: Instant
FREQUENCY: 1 per 7 (MSTR plus level)
GENERAL BONUS: CR plus 4

This mutation allows the mutant to drain potential energy from inorganic storage devices (batteries) to gain HPS. The mutant can regenerate 10% to 60% of her HPS maximum for each battery that she drains. Draining a battery has the same benefit for the mutant, regardless of the battery's storage capacity. The healing amount is generated by the roll of a d6, where 1 is 10% and 6 is 60%.

For example, a mutant with 50 HPS maximum touches a battery to heal 20% of her HPS maximum. She will add 10 HPS to her HPS total, and completely deplete the battery. To convert energy to HPS the mutant must touch the storage device, or the artifact that contains the battery. Once hit, the storage supply gets a save vs psionic attack, or it will be completely drained. There is no draining effect when power outlets, or other constant power supplies are contacted.

The mutant must deal with the side effect of this mutation. The side effect causes all batteries on the mutant to wear down twice as fast. So whenever this mutant fires her lazer pistol it counts as two shots because batteries drain twice as fast around her.

There is a 12% chance that the mutant will have the reciprocal mutation, POWER SOURCE. This mutation has all the opposite effects of power drain, and she can recharge batteries by losing 10% to 60% of her HPS total, and batteries around her will drain half as fast.

44. Precognition

RANGE: 1 hex per (MSTR plus level)
DURATION: Constant
FREQUENCY: When needed
GENERAL BONUS: CR plus 3
10 times harder to surprise

This mutant is psionically aware of hostility or impending danger. If the mutant is asleep, the sensation of danger will even awaken her. A mutant can detect danger anywhere from days to seconds before it actually occurs. This will usually give the mutant warning, but it won't always prevent what is about to happen. This hindrance is not designed to render the mutation useless, but challenging. Before a mutant can sense danger the threatening situation must be within range (1 hex per point of adjusted MSTR). Precognition will only work if the hostility, or danger, will personally effect the mutant. If the mutant is about to bite into a poisoned jelly donut then precognition will warn her, if another expedition member is about to shoot her she will be warned that something bad is going to happen, but she may still get shot. This mutant will probably act a little bit more than paranoid than usual.

45. Projected Sense

RANGE: 5 hexes per (AWE plus level)
DURATION: 30 units per MSTR
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: None

The six basic senses of this mutant can be ethereally projected beyond the mutant's body, where they can function normally. The senses that can be projected are awareness, hearing, sight, smell, taste, and touch. So this mutant could project her sight into a locked room, and search it.

None of the senses can manipulate objects while being projected; the projected senses can only observe. While a sense is projected the mutant can still use her organic senses to their full capacity. So this mutant could have two sets of eyes watching something. This could offer the player two AWE rolls when her persona is searching an area.

Sight, hearing and awareness are still subject to damaging effects while in the projected form. A flash, boom or mental attack could respectively injure the mutant's sight, hearing or thinkspace. Projected awareness is analogous to the mutant's sixth sense, and it can deploy mental mutations. The projected sense is where the mental attack will originate from tremendously increasing a mental attack's range. If the mutant wants to project more than one sense at a time she must also project her awareness.

46. Protection Shell

RANGE: 2 hex radius
DURATION: N/A
FREQUENCY: Constant
GENERAL BONUS: CR plus 2

This mutant can create a repulsive field which can ward off various creature types. Creatures of the type repulsed must save vs psionic attack, to be able to get within 2 hexes of this mutant. If the beast is trapped, and still subjected to the protection shell, then it will get an additional save at +4. The mutant gets one roll on Table 58.12, *Creature Type Repulsed* for every 2 levels of experience. If the mutant rolls the same creature type twice, creatures of that type get -2 to save. The mutant can turn off the protection shell to allow members of her preferred races to approach.

Table 58.12: Creature Type Repulsed

DIE ROLL	CREATURE TYPE
01-05	Omnivores
06-56	Carnivores
57-70	Herbivores
71-85	Insects
86-98	Flora
99	Inorganic; robots
00	Other
1 roll per 2 experience levels	

47. Psionic Defence

RANGE: Persona only
DURATION: N/A
FREQUENCY: As needed
GENERAL BONUS: CR plus 4

This mutant has a higher than normal defence versus psionic attack. Psionic defence functions against those mental attacks that manipulate the mutant's body, or mind. Mental attacks are less likely to affect the mutant because her MSTR is doubled when she is making saves against psionic attacks. Regardless of her MSTR a psionically defended mutant will not have a MSTR defence less than 16. This mutation will also automatically defend against benevolent intrusion into the mutant's thinkspace.

A mutant with a 17 MSTR and psionic defence would have a 34 MSTR when saving versus mental attack, and a mutant with a 6 MSTR would have a 16 MSTR when employing psionic defence.

There are other benefits with psionic defence: the mutant cannot be sold anything she doesn't need, and any level of interrogation will be unsuccessful. Mental mutations that employ normal physical reactions to inflict damage are not affected by this mutation. So a mutant with psionic defence would double her MSTR when saving against pyrokinesis, but not when saving against mental blast.

48. Purify

RANGE: Touch
DURATION: Permanent
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: +30 for sanitation PT rolls

This mutation allows the mutant to purify substances by touching them with her bare skin. The purification process will destroy any infectious organisms, or remove contaminants. Picking up a piece of meat would eject and neutralize any bacteria or viruses living in it and it would be safe to eat. The same could be done for contaminated water, plastic, or lumps of gold.

The amount of substance purified cannot exceed 10% of the mutant's body WATE, and the sub-stance must be contacted for 1-4 units. This pro-cedure will result in a 100% pure sample (which is immediately subject to recontamination). It is left to the referee to decide if this mutation will destroy alloys, or separate other composite materials. If it does this mutation could easily become an attack against inorganic targets such as robots, walls or artifacts.

49. Pyrokinesis

RANGE: 2 hexes per MSTR
DURATION: Varies
FREQUENCY: 1 per 2 (MSTR plus level)
GENERAL BONUS: CR plus 5

This attack causes the extreme overheating of organic victims by disrupting their internal body systems. Targets will start to dangerously overheat if they fail against a psionic attack. Pyrokinesis has a cumulative effect, and the target's body can become so volatile that the friction of her cells bustling against each other can cause her to burst into flames.

The victim takes a d10 HPS of damage, due to body overheating, for every unit of pyrokinesis. Each unit of attack there is a cumulative % chance that the victim will burst into flames. The chance of the target spontaneously combusting is equal to the total damage inflicted by pyrokinesis.

If a target immolates the fire will inflict an additional 3d6 HPS of damage before extinguishing itself. If it is important to know what part of the target's body immolated a random body location can be determined by the *Hit Location* tables found in chapter 36. Pyrokinesis ends when the mutant wills it to end or when the target immolates. The target gets no saving throws other than the initial one.

Pyrokinesis is not limited to the spontaneous combustion of organic targets, it can also be used to cause flammable objects to suddenly burst into flames, burning fires to flare up, or explosives to detonate prematurely. The most difficult thing to

determine with the inorganic pyrokinesis is whether, or not, the target is flammable at all. If it cannot be decided whether a stack of papers, a piece of furniture, or a weapon can be affected by this mental attack the referee should consult the sphincter dice described in chapter 16, Special Rolls.

All targets affected by pyrokinesis will get a save versus mental attack using a randomly generated MSTR of 0 to 9. If the target is flammable and fails its saving throw it will burn for 1 to 10 units (plus 1 unit per level of mutant. The effect of the combustion is determined by the referee.

50. Repulsion Field Generation

RANGE: 1 hex radius per MSTR (less level)
DURATION: 1 unit per MSTR (less level)
FREQUENCY: 1 per 6 (MSTR plus level)
GENERAL BONUS: CR plus 10

At least twice a day this mutant can create a undetectable field of nausea and sickening sensations. Every time this mutation is employed, all creatures within the radius must make a successful save vs mental attack, or become completely nauseous. If the save is not successful the creature will become violently ill, and unable to act, while within the field. Creatures that do make a successful saving throw will suffer a combat penalty of -500 on all to hit rolls, half movement (no sprinting or bolting), plus 10 DD on all PT rolls, and halved attributes when attempting attribute rolls. The same effect will be had on all organic creatures, whether they have standard physiological mechanisms, or not.

The repulsion field is a very effective device for immobilizing all those within the area of effect. However the repulsion field is a difficult mutation to control, and it will affect any organic creature within the area of effect including both opponents and expedition members. The mutation will always have the maximum area of effect, and will last for the maximum possible duration. Only as the mutant increases in experience levels will she be able to control this mutation better. For instance she can reduce the duration of the mutation by one unit per level, and she can reduce the range of the mutation by 1 hex per level. A 4th level mutant with a 8 MSTR and repulsion field generation could generate a repulsion field between 4 to 8 hexes in diameter, and 4 to 8 units in duration.

51. Restoration

RANGE: Touch
DURATION: Permanent
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: +20 on practical vet PT rolls

This mutation allows the mutant to heal damaged organic creatures simply by touching them. If the target creature is armoured in a fashion that makes contact difficult (like powered armour, or a space suit) the mutant must make a successful to hit roll before healing her target. Restoration can only return lost hit points, and cannot be reversed to inflict damage. By touching the damaged creature, the mutant can heal a number of HPS in damage equal to her present HPS total. A mutant with 13 HPS can restore 13 HPS to herself, or another persona that she touches.

52. Sensory Deprivation

RANGE: 1 hex per (MSTR plus level)
DURATION: Special
FREQUENCY: 1 per 15 MSTR
GENERAL BONUS: CR plus 8, +10 vet PT rolls

This mutant can sever a target's brain from its various sensory utilities. The attack is only effective against organic creatures, and the results can be quite nasty. If a save vs psionic attack is not successful, the mutant can selectively cut off the target's brain from various senses.

If the mutant decides to sever the target's brain from all her senses (similar to mental mutation #38 Neuronegation) the target will fall unconscious. The creature will remain unconscious for one unit per two points of adjusted MSTR of the attacker. During this time there is a 2% chance the

Table 58.13: Sensory Deprivation Effect

SENSE DEPRIVED	DURATION OF LOSS (MSTR plus level)	EFFECT OF LOSS
All	1 unit per 4	Unconscious, 2% of death check
Hearing	1 minute per 4	half AWE, -100 to hit
Pain	1 unit per 3	Double DSS chance, vet bonus
Sight	1 unit per 4	quarter AWE, -600 to hit, +15 DDs
Sixth	1 unit per 6	-d3 MSTR, disable psionics
Smell/taste	1 minute per 4	-d6 AWE
Touch	1 minute per 6	half DEX, -d6 AWE, -250 to hit, +8DDs on PT rolls

creature will suffer from non-specific internal organ malfunctions. If internal system difficulties arise the unconscious creature must successfully make a recovery roll, or die.

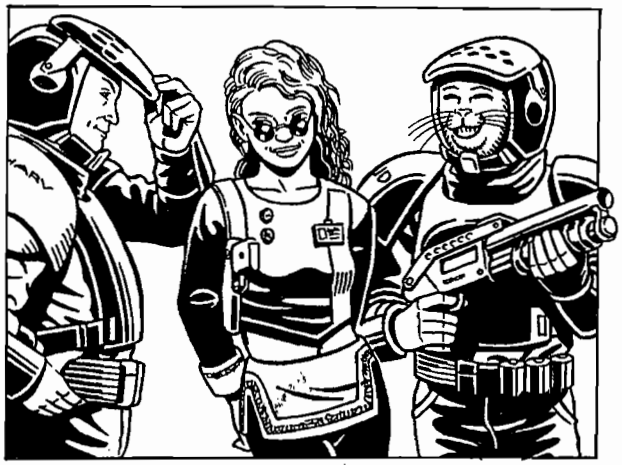
The mutant can also cause deafness, blindness, or a loss of tactile and olfactory senses. The special effects of such sensory depravations are listed on Table 58.13, *Sensory Deprivation Effect*. This attack has an area of effect covering a 2 hex radius, and can be directed at selected targets within it.

53. Sociability Field Generation

RANGE: 1 hex radius
DURATION: N/A
FREQUENCY: Constant
GENERAL BONUS: +20 on personality PT rolls
+70 on negotiation rolls

This mutant has an aura of good humour and friendship radiating around her. The mutation automatically causes creatures to be unusually friendly towards this mutant. Most creatures which enter the one hex radius are affected by this mutation.

Those creatures with intelligences between "low" and "average" (3 to 10) have an 80% chance of becoming friendly and amiable; creatures which have intelligences between "above average" and "genius" (11-17) have a 40% chance of becoming



friendly and amiable, other intelligence ranges(<3 and >17) are unaffected by the sociability field.

The mutation is the opposite to Hostility Field Generation (mental mutation #18), but this mutation does not make creatures automatic friends like the automatic enemies created by that mutation. When creatures become friendly and amiable there is a +70% adjustment on any negotiation rolls made, see chapter 22, Negotiation.

This mutation has no effect over televids, or other communication devices. The sociability field will not overcome the instincts of a hungry, or enraged alien, nor can it be used to pressure personas to place their lives at risk or carry out materially, socially, or personally suicidal acts.

54. Sonar

RANGE: 3 hexes per MSTR, plus 1 hex per level
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: 2 times AWE if searching

This mutation gives the mutant "sonar sight". Sonar sight operates on the acoustic reflection of a variety of undetectable frequencies that are emitted from the mutant's skull. The reflected sound waves are converted into images that allow the mutant to detect solid objects in a 360° radius. Sonar allows the mutant to navigate in the dark, determine if holograms are solid, or not, and see through conductive substances such as smoke or water. Holograms, phased out creatures and projections would be invisible to sonar, but invisible, or visually camouflaged creatures may appear as a blip. Invisible or camouflaged objects can be detected with sonar, although an AWE attribute roll may still be required. Sonar employs a variety of frequencies that allow the mutant to see around smaller obstructions.

Sonar and normal sight are interchangeable, however they are not equivalent in function. Sonar sight does not give fine detail, and the mutant may be unable to tell a parked aircar from a combat robot, or the opposition from her expedition. Sonar may not be able to function through some helmets, but eye gear or breathing masks will not obstruct its function. Sonic attacks on the mutant (while her sonar is on) will do double damage and disable the sonar for 1 to 4 days.

55. Sonic Attack

RANGE: 1 hex radius per 2 MSTR, plus 1 hex per level
DURATION: Instantaneous
FREQUENCY: 1 per 4 (MSTR and level)
GENERAL BONUS: CR plus 3

This mutant can release a deadly burst of sonic energy. The attack is a psionically adjusted version of the mutant's own speech. For instance, a softly spoken word would be converted into a wall of ultra-high and ultra-low frequency sound waves that delivers damage to everything within range. The attack will inflict damage on all objects within the radius of effect, regardless of whether they have ears, or not.. Any organic or inorganic objects that have enhanced audio sensors, such as sonar, will usually take double damage.

The amount of damage inflicted is determined on Table 58.14, *Sonic Damage Range*. The mutant is unaffected by her own sonic attack, unless it is somehow reflected back to her. The sonic attack has a radius (in hexes) equal to the mutant's MSTR. A mutant with a 10 MSTR would have a radius of effect of 10 hexes. Organic and inorganic audio systems can be rendered inoperative if they take more than 15 hit points of damage. If 15 (or more) hit points of damage is delivered a recovery roll must be made, or "deafness" will result. Organic systems will remain deaf for 1-8 hours, but inorganic audio systems must await repair. Sonic attacks can be launched once a day for every four points of adjusted MSTR.

Table 58.14: Sonic Damage Range

DISTANCE TRAVELLED (hexes)	DAMAGE INFLICTED
1 hex	4-32 (4d8)
up to 1/2 range	3-24 (3d8)
1/2 to full range	2-16 (2d8)
beyond full range	1-8 (or nil)

56. Sonic Reproduction

RANGE: Within hearing
DURATION: Special
FREQUENCY: As desired
GENERAL BONUS: +25 on disguise PT rolls
possible CR plus 1

This mutation turns the mutant into a walking digital recorder. Perfect reproduction quality can be obtained on any audible sound. Sounds can be memorized and replayed at a later date. If the player makes a successful intelligence roll the mutant can replay an edited, or remixed version of the recording . The INT roll should be adjusted for the difficulty of the remix being attempted.

Each recording can last up to one unit per point of adjusted MSTR. Thus a 3rd level mutant with a 10 MSTR could make a recording up to 13 units in length. The number of recordings stored cannot exceed the mutant's combined INT and experience level. The major component lacking on these recorded noises is volume, extreme volume cannot be reproduced solely by the mutant. Sonic attacks directed at the mutant can be reproduced, and fired back up to 1/2 range, inflicting half the damage that the mutant took.

57. Suggestion

RANGE: 1 hex 2 per (MSTR and level)
DURATION: Special
FREQUENCY: 1 per (MSTR plus level)
GENERAL BONUS: +40 on convincing PT rolls
+40 on negotiation rolls

A mutant with suggestion can make an intelligent organic persona make decisions that it normally wouldn't make. For instance, the mutant could tell a victim that this isn't the parking space she wants, and if the victim fails her saving throw, she would not park there. Or in the heat of battle the mutant may think to an opponent that they don't want to use a particular weapon because they need to save ammunition. The target would switch weapons if she failed her save.

The mutant can think, or speak, a suggestion to the victim. Spoken suggestions are directed at a target, and the mutant makes her suggestion orally. Spoken suggestions must be done in the target's native tongue. Thought suggestions are directed at the target's thinkspace, and need not be done in the native tongue of the target. The target gets a saving throw bonus of +2 against those suggestions directed at her thinkspace.

The more reasonable the suggestion, the more likely it will succeed. Suggestions like: go kill yourself, kill your friend, and give away all your savings would certainly fail. The referee can make saving throw adjustments (+1 to +6) depending on the gravity of the suggestion. This mutation can be employed once a day per point of adjusted MSTR.

58. Telekinesis

RANGE: 2 hexes per combined MSTR and level
DURATION: 2 units per (MSTR plus level)
FREQUENCY: 1 per 3 MSTR
GENERAL BONUS:

Telekinesis allows the mutant to psionically lift objects without touching them. The mutant needs to concentrate on an object, and it will begin to float through the air under the mutant's control. Objects include anything less than half the mutant's wate, whether organic, or inorganic. Tele-kinetically controlled objects are under the control of the mutant, and will not fall with gravity, or be blown by the wind.

The speed of telekinesed objects depends on the MSTR and experience level of the mutant. Table 58.15, *Telekinesis Movement* gives the speed of telekinesed objects. Using telekinesed objects as weapons is not too efficient since part of the process of telekinesis involves negation of the object's mass, but a telekinesed objects will still inflict 1d6 per 3 h/u movement. This is the damage inflicted on the target, and the damage inflicted on the telekinesed object.

Objects with a wate greater than half the mutant's wate simply cannot be affected by telekinesis. Any object that has a WATE less than

half the mutant's is susceptible to telekinesis. Voluntary organic creatures, and inorganic objects are assigned a random MSTR defence of 0 to 9 (d10), and they must fail their saving throw before they are telekinesed. Involuntary organic targets can use there own MSTR, or the random MSTR assigned to voluntary targets. Targets holding onto large objects get bonuses to save of +1 per 5 points of PSTR. The target is moved through its center of gravity, and can still flail about its limbs. A creature can break free from telekinesis if it happens to grasp onto a stable object and made a successful save.

Table 58.15: Telekinesis Movement

MSTR plus LEVEL	OBJECT MOVEMENT (h/u)
< 2	1
3-5	2
6-8	3
9-11	4
12-14	5
15-16	6
17	7
18	8
19	9
20	10
21	11
22	12
23	13
24	14
>25	15

59. Telekinetic Arm

RANGE: Special
DURATION: 1 unit per (MSTR plus level)
FREQUENCY: 1 per 3 MSTR
GENERAL BONUS: +5 on manual PT rolls

This mutation employs an invisible telekinetic arm which can articulate anything from back-scratching to pick-pocketing. The arm functions like a real arm, hand and all. The arm is flexible and can pick up anything the mutant's PSTR can handle. Although the arm is invisible, it must always be within sight of the mutant. The arm will operate for a duration of one unit per point of MSTR. Only one arm may be created at one time, but one arm per three points MSTR may be created each day. The arm's range is five hexes, and the mutant must watch her telekinetic arm at all times. The arm is subject to damage. If it should take more than half the mutant's hit point total the arm will dissipate.

60. Telekinetic Flight

RANGE: Persona only
DURATION: 30 units (MSTR plus level)
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: CR times 2

Telekinetic flight allows the mutant to fly through the air with out the aid of flying devices. She can defy gravity simply by concentrating with her psionic powers. The mutant can hover, skim along the ground, or soar high into the air. She can travel at a speed up to three times her normal movement rate. Thus a persona who could move 5 h/u could telekinetically fly at up to 15 h/u. The mutant can only fly 3 times her base movement rate, and not 3 times any special movement rates, like bolting or sprinting. While flying the mutant moves as if this were her normal movement rate, and the *Driving Performance* tables need not be consulted for high speed maneuvers.

Telekinetic flight will work in or out of atmosphere, and in or out of gravity. This mutation will

not work if the mutant is more than encumbered by her equipment, or by her body wate in high gravity. There is no decreased effect of telekinetic flight, it simply will not function if the persona is more than encumbered. Encumbrance is discussed in detail in chapter 18, and the effects of high gravity on body wate is discussed in chapter 19, Special Terrain.

If telekinetic flight is combined with other mutations that increase speed supersonic personas can quite unexpectedly arise. If such personas are threatening game balance there are several steps that the referee can take to limit high speed activities, such as: the mutant's body is damaged at high speeds, she gets lost very easily (must make frequent AWE rolls), or she gets severe motion sickness (must make frequent CON rolls).

61. Telempathy

RANGE: Special
DURATION: 30 units per (MSTR plus level)
FREQUENCY: 1 per 6 (MSTR plus level)
GENERAL BONUS: +70 on negotiation rolls
+20 on interactive PT rolls

This mutant can use telempathy to project moods or feelings into the thinkspaces of organic creatures. The mutant can make other personas feel, pain, anger, love, hate, fear, etc. For example, an ursidae could be forced into a frenzy by being made feel anger, a patient could be made to feel pleasure instead of pain, and a nervous Nellie could be immediately calmed. The target must fail her saving throw before any effects can be had.

Telempathy can be projected in a 2 hex radius, with all targets in that area being affected. The strength of the signal is diluted by the number of targets within the area of effect. For every 2 separate thinkspaces within the area of effect each target gets +1 to save. The mutant can accommodate one extra thinkspace for every 2 levels of experience. If telempathy were being used on 4 targets within the 2 hex radius of effect every target would get +1 on their saving throw. A successful saving throw will negate any possible effects.

Telempathy can also be focused on a single target, at a range of up to 1 hex per adjusted MSTR. The thinkspace gets a saving throw vs mental attack in an attempt to negate the effects of telempathy.

The ref must remember that some of the less intelligent creatures are incapable of comprehending higher emotions, and successful mental attacks may have no effect. Players also have no idea what has previously gone on in the target's life, and they have no way of exactly predicting a creature's response to a sudden, unexplained and overwhelming emotion.

62. Teleport

RANGE: 500 km per (MSTR plus level)
DURATION: Instant
FREQUENCY: 1 per 13 MSTR
GENERAL BONUS: CR plus 4

Teleportation allows the mutant to transfer its body and thinkspace from one place to another in an instant. By merely visualizing another location the mutant can will all the molecules of its body to transfer there in an instant. The new destination need only be on the material plane, and the teleporting mutant can travel over, under or through vacuums, oceans, planets, force fields, etc. The teleportation always occurs in an instant, and as soon as the mutant decides to teleport her and her equipment will be at the new location.

Teleportation is particularly safe. The mutant is reassembled in reference to the destination environment, and corrections for differences in velocity, pressure and gravity are instantly made. For example, the mutant could teleport onto, or off of a moving train, and suffer no penalties for the change in velocity. Teleportation has an instinctive survival defence built in, and the mutant is unable to commit suicide, or teleport into certain death, with this mutation. For instance, teleport would not work if the persona was teleporting into a vacuum. This instinct can be overridden if the persona makes a successful MSTR roll.

Each time the mutant teleports she must check Table 58.16, *Teleportation Failure*. It is assumed that the mutation is taking all possible precautions to deliver herself safely, and no adjustments can be made to these values.

The mutation is affected by the amount of equipment that the mutant is teleporting along with herself. If the mutant is more than encumbered then the chance of failure 5 times more likely normal. The chances of teleportation failure are listed on the *Teleportation Failure* table, and they are related to the familiarity of the destination.

A very familiar location would be a favorite room in the mutant's home, or some other specifically memorized location. An outdoors location can never be classified as very familiar. A familiar place would be the office at work, a casually known place would be a restaurant visited once or twice. The other categories are self explanatory.

The chance of failure is compared to a kilodie roll, so familiar destinations are very safe. If the mutant fails her teleport roll she has teleported into an object, the ground or some passerby. This means that her molecular structure has been accidentally integrated with some other solid object. This could be a wall, the ground, a tree, a coat rack, or a passerby.

Teleportation failure will indicate HPS in damage to the mutant. The mutant will take 1-20 d6 of damage determined by a d20 roll. The amount of damage inflicted indicates the seriousness of the teleportation failure. If the damage is low, like 1d6, the mutant may have materialized part of her big toe into the floor. If the damage is high, like 15d6 she has teleported a major portion of her body into another object.

The mutant can zap herself away to any location within 500 kilometers per point of adjusted MSTR. Thus a 5th level persona with a 10 MSTR could teleport 7500 kilometers away. Teleport can be used once a day per 13 points of MSTR, but at least once a day.

Table 58.16: Teleportation Failure

FAMILIARITY OF DESTINATION	CHANCE OF FAILURE (kilodie)
Very familiar	2
Familiar	4
Casually known	10
Described to mutant	50
Unknown	135

63. Thought Imitation

RANGE: 4 hexes per (MSTR plus level)
DURATION: Special
FREQUENCY: As needed
GENERAL BONUS: CR plus 5
+25 on imitative PT rolls

Thought imitation is used by the mutant to turn her brain into a mental process tape recorder. By observing activities of a target the mutant can begin to create pathways in her own thinkspace that imitate the target. This high level of modelling allows her to repeat physical activities, recreate mental attacks, and predict the actions of imitated thinkspaces. To ensure that the mutant's brain does not become a useless hodge podge of neural circuitry, imitated thoughts are quickly forgotten. The mutant's thinkspace resets itself after a brief sleep, or any other loss of consciousness.

The mutant can memorize observed physical acts and repeat them flawlessly if the target fails a mental attack on its thinkspace. The mutant could observe someone opening a complex lock, and then repeat the procedure flawlessly. Obviously the mutant must be able to recreate the action made by the target to within a reasonable degree.

The thought imitation mutation will automatically synthesize and return any mental attack that is used on its thinkspace. This applies only to mental attacks, and a mental mutation like Teleportation (mental mutation #62), or Time Stop (mental mutation #64) could not be imitated. Nor could any physical mutation.

The attack is returned to the attacker at one half the attack strength that the mutant was subjected to. The mutant having its mental attack returned will always get a saving throw regardless of the description of the mutation. If E.S.P. were used on this mutant she would be able to read her attacker's thoughts with half proficiency and at one half the range. If this mutant were subjected to Death Field Generation she would recreate the field at half strength. The thought imitating mutant is still subject to the mental attack, but sends it back instantly. This is often a case of mutual assured destruction.

Using thought imitation to predict a creature's actions is complex and time consuming activity. To predict a creature's actions, the mutant must study the target for at least one melee (5 units) per point of the target's INT. Therefore a target with a 12 intelligence would have to be observed for at least 60 units, or two minutes.

This baseline chance for successful analysis allows the mutant a 7% chance to correctly predict actions of the target. Each additional minute (30 units) of observation increases the chance of success another 7%. The chance of correct prediction is cumulative, so after ten minutes of study the mutant has a 70% chance of predicting a creature's actions. The maximum chance for successfully predicting actions is 90%, and that percentage is reduced by 2% for every point of the target's INT. This means that the maximum chance of determining the actions of a creature with a 15 INT is 60%. Using thought imitation in this mode makes it the ultimate detective tool.

There some is danger in repeatedly imitating another persona's thinkspace, and that is the taking on of certain personality traits of the imitated persona. Usually these personality traits will be the most unsavory ones for the player. A veterinarian may develop unhygienic habits, or a mercenary may develop a very high respect for living things.

64. Time Stop

RANGE: Conscious range
DURATION: 2 units per (MSTR plus level)
FREQUENCY: 1 per 24 MSTR
GENERAL BONUS: CR times 5

Time Stop has a bizarre effect on matter and physical laws. The mutation arrests them in such a way so as to make it appear that time has stopped. Absolutely nothing moves during time stop, except for the mutant. She can function within the time arrested universe at her normal pace.

The scope of the time stop is as far as the mutant can think, yet it leaves no observable edges anywhere in existence. Just this factor makes it a rare and powerful mutation indeed. The only noticeable effect of the mutation is the havoc that the mutant wreaks in her immediate environment.

At the instant of activation of Time Stop the mutant finds herself in a hazy life sized diorama. Falling objects are suspended in the air, bullets stop, flames freeze, and energy blasts hang useless. There is no hot or cold, no up or down, no dense or ethereal All machines, mechanisms, chemical reactions, and physical laws are paralyzed. Except for the mutant.

What the mutant can do in time stop is what makes it such a powerful mutation. Considering the cosmic scope of the mutation's effect the mutant has a very limited area of action. The mutant can race around for the duration of the mutation essentially altering the course of reality. She can lift any object up to ten times her wate allowance (temporal inertia keeps her from lifting anything greater), and by lifting and moving things she can become quite a dangerous opponent.

For example, she could gather up all the lazer bolts suspended in the air during a fire fight, and point them towards the opposition. When Time Stop ended they would attack the targets. She could pull the pins on grenades, and when Time Stop ended they would detonate. She could open the door of a moving vehicle, carry a few personas outside, and leave them suspended there. When

Time Stop ended they would crash to the ground. She could rush into a burning building, pushing the smoke out of the way, bending the flames, and rescuing as many people as she can carry. When Time Stop ended they would find themselves outside on the sidewalk.

Not even those mechanisms on the mutant will function normally in Time Stop. She can fire her weapons and throw her knives, but nothing will start moving until the mutation ends. A surgeon could stop time to make a delicate sewing procedure, but any electronic procedures would have to wait until after Time Stop ended. Mental mutations do not work within the time space aberration created by Time Stop. Although those effects already generated by the mutation will remain. This includes: illusions, mental blasts, force fields, etc.

This mutation can be employed less than once a day. Thus a mutant with a 12 MSTR could only use Time Stop once every second day.

Essay: Chronovores

A proficient player using Time Stop can become a seemingly invincible opponent, and the referee must have some mechanism for limiting the use of the mutation. The best mechanism so far are Chronovores. Chronovores are the 3 dimensional shadows of hyper intelligent pan dimensional beings which get trapped on the material plane when time stop is used. Often they appear as glowing flightless birds which race around aging anything that they touch. There is a slim chance that one will appear each unit that the mutation is used. They can appear during or after the Time Stop mutation is used,. Exposing the rest of the expedition to the risks of Time Stop is a great mechanism for limiting its use. A decidie roll is made by the mutant for every unit that she uses Time Stop. A roll less that 4 indicates a living chronovore appears immediately during stopped time. A roll less than 12 means that one will appear when the mutation's use ends. The chronovores have a movement rate of 14 h/u, and age anything they hit 2-20 years. See chapter 13, Health for effects.

65. Time Tell

RANGE: N/A
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: +15 on timing PT rolls

This mutant's brain contains a series of cyclical neural pathways that allow her to be a walking clock. She always knows the exact time of day, date, amount of time that has elapsed, duration of an event, or chronological order of any observed series of events. Not only can she be pedantic about what happens when, but she can do so to several decimal places. The mutation can be used as an internal watch, for timing cycles of a fusion drive, for knowing exactly when to act, or for detecting time space aberrations. The Time Tell mutation is multi-tasking, and she can carry out any number of these tasks simultaneously. When measuring longer durations of time the mutant must remain conscious, she may sleep, but she must not be unconscious.

66. Total Recuperation

RANGE: Persona only
DURATION: Permanent
FREQUENCY: 1 per 12 (MSTR plus level)
GENERAL BONUS: CR times 2

Total recuperation allows the mutant to instantly restructure her body to that of a previously undamaged form. The mutation psionically repairs all her traumatized tissues by comparing them to an undamaged template stored in her thinkspace. The mutation will not stop the effects of poisons, cure cancers, arrest infections, or regenerate missing tissues.

The most immediate effect of this mutation is that the mutant can instantly restore all her hit points. When this mutation is employed the mutant's hit point total will return to maximum hit points. If the mutant is comatose (at a negative HPS total), and she has not depleted her Total Recuperation for the day, it will automatically activate.

Total Recuperation can also be used to delay aging effects. When any aging is detected by the mutant's thinkspace Total Recuperation will half the effects (2 years is only 1 year). This includes aging attacks and natural aging effects. The mutant must be at maximum HPS if she wishes to use total recuperation versus aging effects. See chapter 13, Health for more information.

67. Ventriloquism

RANGE: 2 hexes per (MSTR plus level)
DURATION: 30 units per MSTR (less level)
FREQUENCY: 1 per 4 (MSTR plus level)
GENERAL BONUS: +13 on trickery PT rolls

The mutant can psionically generate acoustic waveforms some distance from her own body. These sounds are generated within the mutant's thinkspace, and there is no allusion to the fact that she is generating them. Any noise that the mutant could make with her own voice could be created. Ventriloquism allows her to very effectively throw her voice, but it does not allow her to synthesize any unique sounds. Ventriloquism can also be used to obliterate minor sounds by cancelling out the waveforms that make up the noise at the source. The mutation can also be used to subtly alter other sounds.

This mutation can be used to cause a distraction, make a shoe step silent, make a warning bell sound like an okay bell, or change the pitch of some ones voice. The mutant cannot generate brand new sounds, and can only change existing sounds in real time. The effects of the mutation is be negated by a successful save vs mental attack. The saving throw is given to any targets that may hear the real sound, and have an intelligence better than average (9 INT).

The voice, or noises, can be projected up to two hexes per point of adjusted MSTR. Once started, the mutation MUST be employed for one minute per point of MSTR, less one minute per experience level. If the mutant wishes to speak normally she must project her voice near her mouth and her lips will have to fake speaking. If fake speech is attempted, saves vs mental attack are granted to all those listening to the speaker. Making the save will result in disbelief of the speaker.

68. Weapons Discharging

RANGE: 2 hex radius
DURATION: Instant
FREQUENCY: Constant
GENERAL BONUS: -15 on mech PT rolls

This mutant's thinkspace has a strong psionic drive to send mechanical devices into a state of lower entropy. This means that triggered devices are capable of spontaneously activating when near this mutant. Weapons discharge checks can only be made on inorganic loaded weapons like; energy weapons (lazers), projectile weapons (crossbows), artillery, bombs, grenades and aerosols.

This mutation does not require the continual checking of all powered weapons within a two hex radius of the mutant. The referee may make a random check at any time, but not more than once a day. Checks are automatically made for each weapon within range when the mutant is surprised, hit, or subject to any other stressful situation. If the check is positive, only that specific weapon being checked will fire.

There is a 1/2% chance of a weapon discharging for every point of the mutant's MSTR. So a mutant with a 12 MSTR, and this mutation, would have a 6% chance of discharging a weapon. Weapons that must make a roll to hit, (guns, lazers, crossbows) attack as though the mutant has fired them. Table 58.17, *Direction of Random Discharge* is used only if the direction of weapon is not specified.

Table 58.17: Direction of Random Discharge

DIE ROLL (d10)	TYPE C WEAPON'S DIRECTION OF FIRE
1-6	Along ground out of hex; 1 is forward facing facet of hex 2 is facet of hex immed. to right
7-8	Hits holder; or 7 up, 8 down
9	Up, past head of holder
0	Down, past feet of holder

Weapons discharging need not always be setting off bombs, grenades, and guns. It could also activate household appliances, car ignitions, lamps, etc. This mutation is a defect and does not count as a start up mutation. The player should roll again.

69. Weather Tell

RANGE: N/A
DURATION: N/A
FREQUENCY: As needed
GENERAL BONUS: +5 all nomad PT rolls

The thinkspace of this mutant is intimately entwined with the meteorological nuances of its environment. This mutation functions in any environment that the mutant is in. She can predict all the normal weather condition that one would expect, plus altering conditions in foreign environments. Tides under the water, radiation surges in outer space, cave-ins under ground, or any useful bit of **natural** trivia that relates to environment. Unexpected phenomena, like earthquakes, volcanoes, tidal waves etc. can be predicted with half efficiency

The mutant can give same day readings with 100% accuracy. The chance of correctly forecasting the weather decreases by 25%, less MSTR, for every day in the future. A mutant with a 15 MSTR would reduce her chance of correct prediction by 10% for each day in the future. This forecasting penalty cannot be less that 5%.

70. Ref's Own Table

RANGE: Special
DURATION: Special
FREQUENCY: Special
GENERAL BONUS: Varies

The referee's own table is what role playing games are all about. The referee creates mutations that are entirely unique to her campaign, and the players in it. The mutations could be the ideas of the referee, suggestions by players, or great mutations gleaned from other games. A brief description of what the mutation should involve follows. These guidelines will reduce the pains of introducing untried mutations into a campaign.

1) Create a title that is relevant to the mutation, and sounds scientific. This keeps it sounding technology-like, and ensures that it has a biological mythos and not an occult mythos.

2) Write down a pseudo-scientific description of what it does, keeping in mind the biological basis of mutations. Good pseudo-scientific words are ones like: nullify, synthesize, transmute, digitize, generate, amplify, and facilitate

3) Write down a description of what it does in game terms, and what its effects look like.

4) Describe and write down several uses for the mutation. A good mutation will have several uses that are different, and do not overlap with other mutations. The mutation should have combat and non-combat uses, trivial and important uses, etc.

5) Think in game terms how a persona could take over the universe with the mutation. Think in game terms how a persona with this mutation could win all combat situations with out risk. After you have done this create some limits for the mutation and write these limits down. A good mutation will have uses and drawbacks.

Lastly the mutation should be fun to use. Defects should not render persona's useless, and beneficial mutations should not imbalance the campaign.

References

To be sure, the notion of strange powers and super-"human" abilities is about as old as anything. Most of the specific weird powers found in your average comic book have been hashed out one way or another in a gazillion other such books since maybe 1938. You've just finished reading the comprehensive list of **EXP's** mental mutations. It's safe to say that the majority of them are inspired by a variety of sources in science fiction and fantasy. We'd love to be able to tell you who fist came up with the idea of pyrokinesis, but archaeologists probably haven't dug up the manuscript yet.

Never the less, some of the previous mental mutations are best known by a particular portrayal in the movies or literature. So in the interests of giving you the best examples of the aforementioned abberations (and so as to not be accused of swiping anyone else's good ideas), we now present some biblio- and film-o- graphic references for several mental mutations.

Epilepsy Projection:
"Scanners" [film], Claude Heroux (Producer) & David Cronenberg (Director), (1981), Avco Embassy Pictures.

Gyrokinesis:
"The Fury" [film], Yablans, F. (Producer) & DePalma, B. (Director), (1978), Fox.

Heightened Brain Talent:
Angie Mitchell's "speaking-in-tongues" Gibson, W. Count Zero, 1988, Ace Books, New York.

Intuition:
Thomas Magnum's "little voice"
"Magnum P.I." [TV], 1978-1989, CBS

Knowledge Transmission:
Vulcan Mind Meld (portrayed)
"Star Trek III..." [film], Bennet, Harvey (Producer) & Nimoy, Leonard (Director), (1984), Paramount.

Mass Mind:
Psi-Hawk
"Marvel New Universe: Psi-Force" [comic book], 1986-1989, Marvel Entertainment, New York.

Mech Sense:
Forge
"Marvel: X-Men" [comic book], ongoing, Marvel Entertainment, New York.

Mental Control Over Physical State:
Remo Williams
Sapir, R. & Murphy, W., The Destroyer series of novels, Ace Fiction, New York.

Mental Defenselessness:
"Videodrome" [film], Heroux, C. (Produc.) & Cornenberg, D. (Direct.), (1983), Universal.

Molecular Phase Transformation:
"Firestorm, The Nuclear Man" [comic book], DC Comics, New York.

Neuronegation:
Cloak of "Cloak & Dagger"
"Spectacular Spider-Man" [comic book], #64, Marvel Entertainment, New York.

Polar Disruption:
"Ernest Goes To Jail" [film], Williams, Stacy (Produc.) & Cherry, John (Direct.), (1990), Touchstone Pictures.

Power Drain:
Johnny B. from
"Misfits of Science" [TV], 1985, NBC.

Projected Sense:
Dr. Strange's Astral Projection
"Strange Tales" [comic book], #110, Marvel Comics, New York.

Sonar:
NeoDolphins
Brin, David, *Uplift Trilogy*, (1980-1987), Bantam, New York.

Sonic Attack:
Paul Atriedes' Weirding Power in
"Dune" [film only], DeLaurentis, R. (Produc.) &
Lynch, D. (Direct.), 1984, Universal.

Sonic Reproduction:
"Terminator" [film], Hurd, G. (Produc.) & Cameron,
J.(Direct.), (1984), Orion Pictures.

Telekinetic Flight:
Mighty Mouse
"Wreck of Hesperus" [film], 1944, Terrytoons.

Teleport:
Bester, Alfred, The Stars My Destination, 1957,
Signet Books, New York.

Thought Imitation:
"Earth Girls Are Easy" [film], Garnett, T. (Produc.)
& Temple, J. (Direct.), (1989), Vestron Pictures.

Weapons Discharging:
"Starman" [film], Franko, L. (Produc.) & Carpenter,
J. (Direct.), 1985, Columbia.

Chapter 59
Physical Mutations

Mutants with physical mutations are the true mutants. They are the horned humans, the pink ursidae, or the metal skinned aquarians. Physical mutations have some connection with the the outside world. These interfaces between the mutant and the environment can vary from very blatant external organs to very subtle changes in structure. It is these organic interfaces to the outside world that yields the descriptive quality that most physical mutations have. Personas with physical mutations physically look different, and even a cursory medical examination will immediately expose a physically mutated persona.

Physical mutations are complex manifestations of tumours gone bizarre, and mutated versions of genes that are not normally expressed. The physical mutation could arise spontaneously, or could have been congenital (born with it). The mutations can also be highly sensitive versions of normal physiological structures.

The mutations are unique to the personas that harbors them, and they have not been handed down through the generations. Possibly grandma and grandpa carried a recessive version of the gene, but it took mom and dad to expose their gametes to the proper mutagens. The mutant herself may have been party to the mutation creation as she may have played too close to mutagens that altered her growing body.

Mutants may have certain personality traits because of their unique nature. The unique cosmetic challenges they face may make them individualistic, but not psychopathic. Mutants can be kind caring personas with antennae on their heads, and pincers in their mouths.

Generating Mutations

The number of mutations that a persona has is determined on the *Mutation Frequency* table, in chapter 7, Mutations. The number of mutations varies depending on race, desires of the player, and the referee's input. If the persona is supposed to have 3 physical mutations then the player rolls once on Table 59.1, *Physical Mutations* at least three times. For questions about range duration and other such specifications about mutations refer to chapter 7, Mutations.

Table 59.1: Physical Mutations

DIE ROLL	PHYSICAL MUTATION	DIE ROLL	PHYSICAL MUTATION
01-02	1. Acidic Enzymes	52-53	30. No Resistance to Disease
03	2. Adaptation	54-55	31. No Resistance to Poison
04-06	3. Attraction Odor	56	32. Oversized Body Parts
07-08	4. Arms	57	33. Photosynthetic Skin
09	5. Body Structure Change	58-59	34. Phosphorescent Skin
10-11	6. Carapace	60-61	35. Poor respiratory System
12-13	7. Chameleon Power	62-63	36. Pockets
14-15	8. Decoy	64-65	37. Pressurized Body
16-17	9. Density Control	66-67	38. Radiating Eyes
18-19	10. Diminished Sense	68-69	39. Regeneration
20-21	11. Double physical pain	70-71	40. Rubbery Skin
22-23	12. Edible tissue	72-73	41. Rust
24	13. Electric shock	74	42. Self Destruction
25	14. Enthalpy Attack	75	43. Shape change
26-27	15. Fat cell generation	72-74	44. Size manipulation
28	16. Gas generation	75-76	45. Skin structure change
29	17. Haste	77-78	46. Smoke screen
30-31	18. Heat Generation	79	47. Sonic attack
32-35	19. Heightened Attribute	80	48. Spit poison
36-37	20. Heightened vision	81-82	49. Static quills
38-39	21. Increased metabolism	83-84	50. Strange new body parts
40-41	22. Launchable quills	85	51. Symbiotic attachment
42-43	23. Light generation	86	52. Tear Away Body Parts
44	24. Mechanical Insertion	87-88	53. Undersized Body Parts
45-46	25. Mechanical Prosthesis	89-90	54. Vibrations
47	26. Mitosis	91-93	55. Vision defect
48-49	27. Multiple Body Parts	94-96	56. Wate Manipulation
50	28. New Organs	97-98	57. Wings
51	29. Non Breathing	99-00	58. Ref's Own Table

The Physical Mutations Table: The *Physical Mutations* table is used by personas when they are generating new personas. There is one roll made on this table per physical mutation. A deci die roll of 86 would indicate physical mutation #52, Tear Away Body Parts.

Table 59.2: Defective Mutations Subtable

DIE ROLL	PHYSICAL MUTATION
01-10	4. Arms
11-18	10. Diminished Sense
19-26	11. Double physical pain
27-35	21. Increased metabolism
36-43	25. Mechanical prosthesis
44-51	30. No resistance to Disease
52-59	31. No resistance to poison
60-67	34. Phosphorescent skin
68-75	35. Poor Respiratory system
76-80	42. Self destruction
81-88	53. Undersized body parts
89-99	55. Vision defect
00	58. Ref's Own Table

The Defective Mutations Subtable: Table 59.2, *Defective Physical Mutations Subtable* is a very specific subtable used by the referee when she desires to roll a defective mutation, but does not wish to keep rolling the *Physical Mutations* table until she gets one A roll of 86 on this table would indicate physical mutation #53, Undersized Body Parts.

Table 59.3: Combat Physical Mutations

DIE ROLL	PHYSICAL MUTATION
01-05	1. Acidic Enzymes
06-10	6. Carapace
11-20	13. Electric shock
21-25	14. Enthalpy Attack
26-30	16. Gas generation
30-35	17. Haste
36-40	18. Heat Generation
41-50	22. Launchable quills
51-55	23. Light generation
56-60	38. Radiating Eyes
61-63	39. Regeneration
64-65	41. Rust
66-70	45. Skin structure change
71-75	46. Smoke screen
76-80	47. Sonic attack
81-85	48. Spit poison
86-90	49. Static quills
91-95	54. Vibrations
96-99	57. Wings
00	58. Ref's Own Table

The Combat Physical Mutations Subtable: Table 59.3, *Combat Physical Mutations Subtable* is a very specific subtable used by the referee when she desires to roll a combat mutation, but does not wish to keep rolling the *Physical Mutations* table until she gets one. A roll of 86 on this table would indicate physical mutation #49, Static Quills.

Table 59.4: Non-Combat Physical Mutations Subtable

DIE ROLL	PHYSICAL MUTATION
01-03	2. Adaptation
04-06	3. Attraction Odor
07-09	5. Body Structure Change
10-12	7. Chameleon Power
13-15	8. Decoy
16-17	9. Density Control
18-20	12. Edible tissue
21-22	15. Fat cell generation
23-24	17. Haste
25-27	19. Heightened Attribute
28-31	20. Heightened vision
32-33	21. Increased metabolism
34-35	24. Mechanical Insertion
36-38	26. Mitosis
39-41	27. Multiple Body Parts
42-44	28. New Organs
45-47	29. Non Breathing
48-50	32. Oversized Body Parts
51-53	33. Photosynthetic Skin
54-56	34. Phosphorescent Skin
57-59	36. Pockets
60-62	37. Pressurized Body
63-64	39. Regeneration
65-67	40. Rubbery Skin
68-69	41. Rust
70-72	43. Shape change
73-75	44. Size manipulation
76-78	45. Skin structure change
79-82	46. Smoke screen
83-85	50. Strange new body parts
86-88	51. Symbiotic attachment
89-91	52. Tear Away Body Parts
92-94	56. Wate Manipulation
95-97	57. Wings
98-00	58. Ref's own table

The Non-Combat Physical Mutations Subtable: Table 59.4, *Non-Combat Physical Mutations Subtable* is a very specific subtable used by the referee when she desires to roll a non-combat mutation, but does not wish to keep rolling the *Physical Mutations* table until she gets one. A roll of 86 on this table would indicate physical mutation #51, Symbiotic Attachment.

1. Acidic Enzymes

RANGE: 1 hex per (MSTR plus level)
DURATION: N/A
FREQUENCY: Wait 1 unit
GENERAL BONUS: CR plus 2

This mutant has a hyperactive stomach that produces excess amounts of acid and digestive enzymes. Her stomach is surrounded with extra layers of muscle which can contract powerfully and eject a spittle of corrosive acids. The mutant's esophagus, mouth and lips are covered in thick protective skin, and her teeth will be small and gnarled. Although her upper digestive tract is protected from the acid the rest of her body is affected normally.

The acid spittle acts as an offensive weapon. In the duress of combat she can release one spittle every other unit of combat. The spittles can be cast up to 1 hex per point of adjusted PSTR, attacking as a type B weapon. If the mutant should score a hit the spittle will inflict 2 to 16 (2d8) hit points of damage plus one hit point per experience level. Thus a 3rd level mutant with a 12 PSTR could spit acid 15 hexes, and inflict 5 to 19 hit points of corrosive damage.

Damage from this digestive acid attack permanently damages organic tissues, preventing them from spontaneously regenerating. The digestive juices will have no effect on inorganic materials. A food culture will not grow after being bitten into by a creature with this mutation. The mutant will probably have a penchant for more spicy foods anyway. Swallowing acidic compounds will not affect the mutant much. Kissing is out of the question unless her partner also has this mutation.

2. Adaptation

RANGE: N/A
DURATION: Special
FREQUENCY: Constant
GENERAL BONUS: CR times 2.5

The thinkspace and immune system of this mutant is extremely flexible and resilient. It allows her to adapt her body to things such as poisons, mental attacks, and diseases. If the mutant is subject to such an attack there is a chance that her body will adapt to the attack. Once adapted to the attack later attacks will be unable to inflict damage. There is also a chance that the mutant will become permanently adapted to the damage form.

If this mutant were subjected to E.S.P., mental mutation #14, her thinkspace would cloud her thoughts to future invasions. If a needler loaded with paralyzing needles were to hit the mutant's blood stream her immune system would destroy the toxin, and her body would alter to protect those sites where the toxin acts. Adaptation could push a bacterial infection out through her skin, or carry it to her stomach for digestion.

Adaptation radically alters the mutant's body chemistry, or thinkspace structure, and cannot be endured for too long. The temporary adaptation will wear off after the mutant's first sleep. There is a slim chance of permanent adaptation occurring.

A decidie roll less than twice the mutant's adjusted INT will indicate that the mutant has temporarily adapted to the attack. She will remain adapted to the damage form until her next sleep. There is also a 1% chance per experience level that the mutant will become permanently adapted to the attack. Permanent adaptation means that the mutant can never be affected by the attack again. The mutant may be permanently adapted to a number of attack forms to one third her INT. Thus a 3rd level mutant with a 12 INT would have a 30% chance of temporary adaptation, and a 3% chance of permanent adaptation. She could be permanently adapted to no more than 4 attack types at once.

Adaptation also applies to benevolent effects as well as damaging attack. For example, quick fixes, healing pharmaceuticals, or benevolent mutations could be adapted to as well. To unadapt the mutant to an effect is at least a 20DD vet maneuver.

3. Attraction Odor

RANGE: 1 km per PSTR
DURATION: Special
FREQUENCY: Constant
GENERAL BONUS: +1 on CHA
+15 on friendly rolls

The attraction odor is a combination of sexual pheromones, chemotactic agents, food tracking aromas, mental vibrations, and thought patterns. These factors work together to attract less intelligent personas towards the mutant. The mutation may present itself by having the mutant constantly surrounded by a certain kind of flying insect, or she may notice that whole herds of nomadic aliens change course to follow her. Most often a singular poor beast driven to the mutant because the attraction odor simultaneously resembles its favourite food and a mate.

The attraction odor is most effective on creatures of low INT (INT < 8). Typically drawing them towards the mutant uncontrollably. When the attracted creature finds the mutant, and the mutant turns out to be neither food nor mate, it will get a save vs poison in an attempt to leave. The intensity of the poison will be equal to the persona's CHA. Until the creature saves versus the attraction odor, it will follow the mutant about making strange noises. Saves are granted each day until the creature loses interest (when it saves). Most of the attracted aliens will be dangerous since they will certainly find some thing worth eating, or mating with, amongst the expedition members. The type of alien attracted by the odor is determined on Table 50.5, *Attraction Odor Type*.

Table 59.5: Attraction Odor Type

DIE ROLL	TYPE ATTRACTED
01-35	Fauna, carnivorous
36-52	Fauna, herbivorous
53-70	Fauna, omnivorous
71-75	Insecta, carnivorous
76-80	Insecta, herbivorous
81-90	Insecta, omnivorous
91-93	Flora, carnivorous
94-96	Flora, herbivorous
97-99	Flora, omnivorous
00	Other

The area of affect of the mutation gives an idea of its scale. It does not mean that all carnivorous fauna within 10 kilometers will charge towards the mutant. It is expected that many have saved along the way and lost interest. What the mutation does do is double the chance of alien encounters in general, and each encounter has a 25% chance of being the attracted animal type. If a repellant is used, the repellant/attraction odor combination will negate each other's effects for the duration of the repellant.

Attraction odor has a generally attractive aroma, and makes more intelligent creatures slightly more benevolent to the mutant. The mutant's CHA is increased by 1 point, and she receives a bonus +15 when negotiating.

VI

4. Arms

RANGE: N/A
DURATION: Permanent
FREQUENCY: Constant
GENERAL BONUS: None, defect.

The mutant is now the proud owner of an extra 1-4 randomly moving arms. These arms are freewilled and infuriating. They follow semi-spaztic actions of their own volition, scratching the persona's ears, grappling with her nose, shaking each other, making obscene gestures, or reaching out to tentatively grab things. Binding down the arms is not feasible since the mutant will quickly tire as they strain unceasingly.

Each extra arm has a penalty of -1 on the mutant's DEX attribute. This penalty is the same regardless of the location of the extra arm. If the mutant somehow gains mental control over physical state (mental mutation # 31) the arms can be controlled the same as normal arms.. Of slight benefit to this mutant is ambidexterity. She may use both of her hands with equal dexterity since she has no dominant handedness. Surgical removal of the extra arms will not restore the decreased DEX, and will negate the ambidexterity effect. Arms does not count as a start up mutation, and the player receives another roll.

Table 59.6: Location of Arm

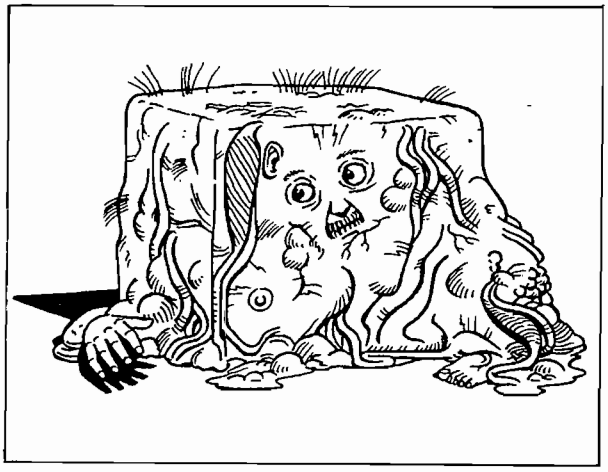
DIE ROLL	LOCATION OF ARM
01-30	Back
31-60	Chest
61-65	Head
66-68	Leg, left
69-71	Leg, right
72-85	Side, right
86-99	Side, left
00	Other

One roll for each extra arm.

5. Body Structure Change

RANGE: Persona only
DURATION: 1 hour per (MSTR plus level)
FREQUENCY: 1 per 6 (MSTR plus level)
GENERAL BONUS: +100 on disguise PT rolls

This mutant has complete control over the pliable nature of her body. She can release enzymes that loosen her connective tissues allowing her muscles to pull her body into any conceivable structure that she wishes. Her arms may be moved to her back or onto her legs. She could adjust her face by changing



the shape of her nose, pulling her hair back into her head, and restructuring her skull. She could retract all her arms and limbs, turning into a ball shaped thing. She could restructure her internal organs to assist a veterinarian in surgery. She has complete control over the shape of her muscles, bones, and internal organs with this powerful mutation.

The mutant cannot alter her wate, remove any amount of flesh voluntarily, alter her thinkspace, or radically change her skin or hair colour. There is also a 1% chance per hour (cumulative) that the mutant will not be able to return to her original form. Thus a mutant that had her arm on her head for 4 hours while trying to reach a banana will have a 4% chance of permanently having her arm sticking out of her head.

There is a 2-8 unit (2d4) transformation period where the mutant's body is particularly malleable. This is usually a disgusting sight where the mutant is transforming and manipulating her body. If any damage is incurred during this time, it will be tripled.

The mutant can retain the shape for one hour per point of adjusted MSTR. At the end of this time her body will return to its previous structure. The restructuring will also have a 2-8 unit period of susceptible malleability.

6. Carapace

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR plus 1 per +40 AR

The carapace is a horrendous buildup of thick semi-pliable skin. The carapace will usually be a reddish brown colour, but the mutation could present in other shades. The carapace is a protective covering that reduces the damage received from kinetic attacks, and makes her more difficult to damage in general. The carapaces vary in the amount of body that they cover. Refer to Table 59.7, *Carapace Covering* to determine the amount of body covered, and the effects of that amount of coverage.

A partial carapace has an armour rating adjustment of +99. So an unarmoured mutant with a partial carapace would have a base AR of 599. If armour is found that can be fitted over the partial carapace its armour rating will be increased by +99. Any kinetic attacks on the mutant would be reduced to 3/4. Thus attacks from type A weapons, falls, bullets would have their damage reduced, but lazers, electron rifles, explosions, fires, and acids would be unaffected.

If the player wishes she can have her persona tend to her partial carapace, helping it grow as she increases in experience levels. If she does this she must remember what her initial die roll was, and then add 10 to it for each new level of experience. If the player had rolled 42 on the decidie she would start with a partial carapace. At 2nd level her roll would be increased by 10 to 52, at 3rd level her partial carapace would have grown into a total carapace (62), and her CHA and DEX would decrease by 1 point each. At 6th level the mutant's carapace would have grown to mondo sized (92), and all the AR and attribute changes that go with it

Table 59.7: Carapace Covering

DIE ROLL	CARAPACE TYPE	ARMOUR ADJUST	DAMAGE ADJUST	COVERING NOTES
01-20	Slight	+49	None	CHA -1
21-60	Partial	+99	Times 3/4	CHA -2
61-90	Total	+199	Times 1/2	CHA -3, DEX -1
91-00	Mondo	+249	Times 1/4	CHA -4, DEX -2

7. Chameleon Power

RANGE: N/A
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: +25 on sneaky PT rolls

The mutant's skin is composed of microscopic light detectors, each of which is intimately linked with a specialized cell called a chromocyte. These two specialized skin cells cause the mutant to automatically blend into her surrounding environment. Any time during day or night this mutated being's skin will attempt to conceal itself. This can be useful while hiding, or while being a nuisance. The mutant's skin will unconsciously carry out this reflex, and the only way it can be prevented is by wearing clothing. Even then the skin will adapt to the colours of the inside of the clothes.

When naked this mutant can be very difficult to see. Unless a persona is actively searching for this mutant she will have to make a difficult (d20) AWE roll to notice her. If the mutant is actively hiding this increases to an improbable (d100) AWE roll. If the mutant is involved in combat she will be revealed with an easy (d10) AWE roll. This ability is useless once she is detected, and under the direct eye of a persona. The persona is still subject to detection by lights, sonar, infravision, etc.

8. Decoy

RANGE: Special
DURATION: N/A
FREQUENCY: Special
GENERAL BONUS: None

The decoy is a detachable tail like appendage which can be dropped from the body at will. It appears as a lump of flesh sticking out of the mutant's hindquarters. The decoy proves most useful when evading pursuit. The tail can be dropped at any time, and without any time loss (unless armour must be removed). The decoy releases an attracting aroma that is 80% effective with creatures less than low intelligence (INT < 3) It is only effective on more intelligent creatures if they fail a save versus poison. The intensity of the poison is equal to the CHA of the mutant.

The aroma has a radius of effect of 1 hex per level of experience. Those that are affected by the aroma will become insatiably hungry and will devour the decoy madly. If several personas are vying for the palatable decoy it is not unlikely that fights will ensue over the morsel.

Inside the decoy there is an ingestive killing poison. The poison has an intensity level equal to half the mutant's CON. For more information about the effects of poisons, consult chapter 16, Special Throws. Once the decoy is devoured the attracting effect will wear off, and the decoy diners will have to recover from the effects of poison.

The decoy is regenerable, and will grow back after 8 hours sleep. Any damage inflicted to the decoy while it is attached is applicable to the

mutant,. The decoy can withstand 10% of the mutant's hit points in damage before dropping off involuntarily. If this occurs regeneration will take as twice as long. The decoy has a wate equal to 3% of the mutant's body wate.

9. Density Control

RANGE: Persona only
DURATION: 30 units per (MSTR plus level)
FREQUENCY: 1 per 3 (CON plus level)
GENERAL BONUS: +12 on appropriate PT rolls

The mutant can equilibrate the density of her body to those of surfaces that she is in contact with. This is done by internal bladders that fill with gases, liquids, or bodily solids. These natural materials are instantly mixed to the density that will attain equivalence with the surface that she is standing on. There is no change in shape or size of the mutant.

The mutant can make the density of her body equal to that of liquids, pressure pads, or gases allowing her to cross them without sinking down. She could also increase her density to that of a solid surface, making her very difficult to displace or damage. Once this equilibrium is reached the mutant may move about freely upon the surface unless heat, cold or acidic properties can damage her. The mutant cannot decrease her density if she is more than encumbered.

If the mutant were to make herself more dense she could reduce damage taken by 1/4. Thus any damage taken while she is denser is multiplied .75. A denser mutant can double PSTR when resisting movement. The mutant cannot inflict higher amounts of damage, or increase her chances to hit with increased density.

When the mutant is less dense she can reduce the damage from type A and concussion attacks. This is done by having herself fly out of the way, as her less dense body converts damage into kinetic energy. She will land 1 to 6 hexes away, reducing her damage by 10% to 60%. So being knocked back 3 hexes would reduce her damage by 30%.

This mutation may be employed (a new density can be achieved) once a day per three points of adjusted CON. Each new density can be maintained for 1 minute (30 units) per point of adjusted MSTR.

10. Diminished Sense

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: This is a defect

Table 59.8, *Diminished Sense* will determine which sense is decreased in effectiveness. Diminished senses are serious disabilities that the player will be frequently challenged with. Effective gaming with a diminished sense defect should be rewarded with large amounts of experience points. The defects are difficult to role-play around, and the referee must be constantly aware of them. Cures, or replacement parts for the persona should be one of a priority of one of the referee's earlier scenarios. This mutation is a defect and does not count as a start up mutation. The player receives another roll on the *Physical Mutation* table.

Table 59.8: Diminished Sense

DIE ROLL	SENSE DIMINISHED
01-50	Sixth sense
51-89	Smell/taste
90-95	Hearing
96-98	Touch
99-00	Sight

Sixth Sense: The most common of the lost senses involves the mutant's thinkspace. Diminished sixth sense represents a clouding of the mutant's thinkspace making it unable to properly interface with the persona's consciousness. If this sense is lost the mutant is stripped of all her mental mutations. Since her interface between conscious-ness and the psionic realm is damaged many mental mutations cannot affect the mutant. Those mental attacks that attack via the thinkspace will have no effect. E.S.P.(#14), Mental Control,

Hostility Field(#18), and Sociability field (#53) are just some examples. Mutations that manipulate the environment around the mutant will have normal effect. This includes mutations like Time Stop, (#64) and Molecular Disruption (#33). Attribute penalties are -1 to AWE and -2 to MSTR.

Smell/taste: The loss of this sense forfeits the use of any aromatic detection devices. The mutant is unable to detect noxious poisons, or other smelly surprises. This mutant is unaffected by nausea gases, or attraction odors of any sort. There are also penalties of -1 on AWE, -2 on saves vs gaseous poisons, and half AWE to detect ambushes. This mutation does not conflict with the canine ability to detect radiation.

Hearing: The persona is plain deaf. There is a 90% chance of understanding sign language. Sign language can be taught to a new expedition member every month of game time. There is a penalty of -2 on AWE as long as the persona is deaf. Sonic attacks will inflict 1/2 damage.

Touch: This unique defect has left the persona with a severely diminished reception of touch. This is purely tactile, and the mutant's ability to walk is unaffected. Other than the DEX penalty of -2, sense of touch is probably the most beneficial sense to lose. The mutant has no sense of touch, and therefore a diminished sense of pain. Damage that involves physical pain, which is most damage, is reduced by one half.

Sight: If sight is lost a natural sonar ability will develop. The sonar will allow the mutant to move around, but she is still unable to see. AWE attribute rolls must be made to be able to differentiate between expedition sonar blips, and opponent sonar blips. As long as the mutant is blind, she will suffer penalties of -2 on DEX, and -4 on AWE. Activities that require other senses will be enhanced by a bonus of +25. If blindness should be cured, the attribute penalties will be dropped, but the rudimentary sonar will remain.

11 Double Physical Pain

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

The mutant has little or no threshold for pain, and her pain receptors are hypersensitive. Any pain based damage is increased by 2-8 (2d8) hit points. Those pharmaceuticals that relieve pain last half as long for this mutant, and she will constantly be on the prowl for painkillers that will alleviate some new ache. Note that this mutant greatly resembles a hypochondriac. Damage is also healed twice as fast by this mutant, since she is hyper-attentive to her healing process. For more information on healing see chapter 13, Health. This mutation is a defect and does not count as initial mutation. The player receives another roll on the *Physical Mutation* table.

12. Edible Tissue

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Special
GENERAL BONUS: None

On this mutant's chest is a 4 cm thick buildup of nutritious and tasty regenerating flesh. The flesh is muscle like, slightly denatured, and stocked with vitamins, fats, glycogen and other essential nutrients. The mutant simply tears off strips from her chest and eats them throughout the day. This can supply one day's food for the mutant (it cannot be eaten by anyone other than the mutant). The edible tissue requires exposure to sunlight and air. This helps it absorb water, and generate essential vitamins. If the tissue is hampered by some covering production will drop to 1/2 a day's rations. If the fleshy substance is not debrided daily, it will die, smell bad, fall off, and not grow back for a week. Note that water still must be consumed by the mutant.

13. Electric Shock

RANGE: Touch, or 1 hex per 2 (PSTR plus level)
DURATION: N/A
FREQUENCY: Rest one unit
GENERAL BONUS: +13 on resuscitation PT roll

There are a series of organs found in this mutant's torso which generate and store a powerful electric current. This stored electric charge can be conducted down the mutant's limbs and delivered to an opponent. The mutant can either touch her target, or arc the current through air like a lightning bolt. A shocking ability indeed.

Making direct physical contact results in dangerous high amperage current traveling though the target. If the mutant chooses to touch her victim the shock will deliver 7-16 (d10+6) hit points of damage plus 1 hit point per experience level. The to hit roll is made as a type C attack. Conductive armour will yield a bonus to hit of +100.

When using the ranged attack a crackling arc of blue light jumps toward the target. If a successful to hit roll is made the bolt will inflict 3-12 (3d4) hit points of damage plus 1 hit point per experience level. A to hit roll is made as a type C weapon. A bolt may be tossed up to 1 hex per 2 points of adjusted PSTR. Thus a 4th level mutant with a 10 PSTR could launch a lightning bolt 7 hexes, and inflict 7 to 16 hit points of damage.

Both the ranged and the contact electric shock attacks are type C attacks because they require no physical effort to inflict damage. The current generating organs need time to recharge themselves, limiting this attack to every second unit. The current generating organs can also partially absorb electric shock attacks directed at the mutant. Any electric shock attacks are reduced to 1/3 damage on this mutant.

14. Enthalpy Attack

RANGE: Special
DURATION: N/A
FREQUENCY: Special
GENERAL BONUS:

Enthalpy attack is possible because the mutant has a modified form of blood that resembles brine. The mutant's heart constantly pumps the blood at a ferocious pace to vessels near the surface of the mutant's skin. This keeps the anti-freeze like blood absorbing heat from the air. Consequently every persona within 2 hexes of the mutant will be kept comfortably cool in temperatures up to 50oC.

The mutant can also unleash a blast of freezing cold air combined with flying icicles and breath whipped snow. This freezing attack will inflict 2 to 16 (2d8) hit points of damage, plus one hit point per level of experience. The range of this attack is 1 hex per point of adjusted PSTR. It takes a while for the mutant's bellows like lungs to fill, and the attack can only be used once every 3 units.

The mutant takes double damage from cold based attacks, but heat based attacks will inflict an 1/2 damage.

15. Fat Cell Accumulation

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None, CR times .9

This mutation represents an increase in the number and size of fat cells in a specific location on the body. The blob of fat will always be harmless, noticeable, and embarrassing. If surgically removed it will aggressively grow back in one to four (1-4) days. The growth will have a CHA penalty of minus 0 to 3 (d4-1) points, but no other penalties can apply. To determine the location of fat cell accumulation use Table 59.9, *Fat Cell Accumulation*. Most polite referees will allow the persona another mutation roll if this is a start up mutation.

Table 59.9: Fat Cell Location

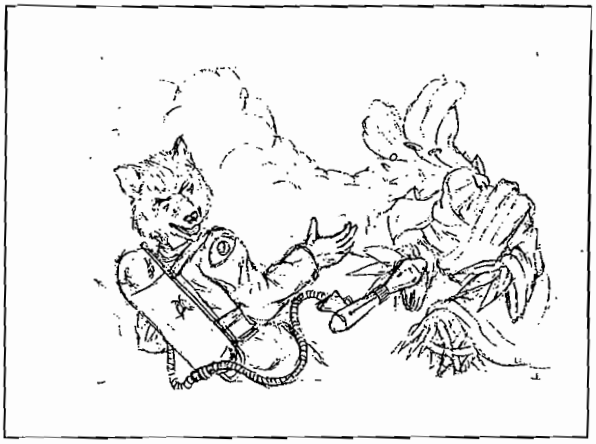
DIE ROLL (kilodie)	FAT CELL ACCUMULATION
001-030	Foot / Heel
031-040	Ankle
041-090	Shin / Calf
091-100	Knee
101-150	Thigh / Hamstrings
151-200	Hip
201-250	Groin / buttock
251-450	Abdomen / Lower back
451-650	Pectorals / Upper back
651-725	Hand
726-800	Forearm
801-875	Biceps
876-950	Shoulder
951-965	Neck
966-979	Mouth / Head
980-988	Eye / Head
989-000	Forehead

16. Gas Generation

RANGE: Special
DURATION: Special
FREQUENCY: 1 per 5 (CON plus level)
GENERAL BONUS: CR plus 3

This mutant can release a noxious spume of gas from her mouth, or some other orifice. The type of gas released is determined on Table 59.10, *Gas Generation*. The mutant is impervious to attacks from her generated gas type, and receives +2 on all saving throws versus gas. The intensity of the poison (gas) is equal to half the persona's CON, plus one intensity point per level. Thus a 3rd level mutant with a 14 CON would exhale intensity 10 poison gas.

The mutant may release varying amounts of gas, but wind conditions must be considered when exactness is desired. The rest of the expedition is not immune to the mutant's poison gas. Under



certain conditions, maybe extreme duress or after the consumption of certain foods, gases may be released without control. For more information about the effects of poison gases consult chapter 16, Special Throws.

Table 59.10: Gas Generation

DIE ROLL	TYPE OF GAS
01-02	Death
03-42	Nausea
43-58	Paralysis
59-60	Pharmaceutical effect
61-99	Unconsciousness
00	Other

Death: A highly toxic green cloud of death is released by this mutant. The maximum area of effect is a 5 hex by 5 hex patch. All organic personas within the area of effect must save versus a poison attack. Those who do not save will take damage from the attack, which is a d4 hit points in damage per point of poison intensity. Those personas which do save will reduce damage by half. The lethal cloud will dissipate into uselessness in 0-3 units.

Nausea: This gas effects all organic creatures that inhale the nausea gas. Each persona must make a save versus poison each unit that they

remain within the cloud. Those that save will be unaffected by the gas. Those that fail the saving throw will be incapacitated with nausea. They will be unable to act for 1 to 8 minutes (30 units). The maximum area of effect of this attack is a 3 hex radius around the mutant. The duration of the gas cloud's cohesion is 2-8 units.

Paralysis: The paralysis gas leaves its affected targets unable to move any of their voluntary muscles for 3 to 30 (3d10) units. A save must be made by anyone that enters the 3 hex by 3 hex fog. This patch of foggy gas will break up in 1 to 8 units.

Pharmaceutical effect: The pharmaceutical type that the mutant can belch up is generated in chapter 50, Pharmaceuticals. The pharmaceutical type can be generated once when the persona is generated, or every time the mutation is employed.

Since pharmaceuticals are so variable in their effect the referee must be prepared to alter the mutation according to each pharmaceutical. For instance, a narcotic drug should have an area of effect, and the mutant should be immune to it. However, a powerful healing drug would have only one dose, and the mutant would be able to use it herself. The frequency of the mutation's use may be altered depending on the pharmaceutical's value. The time it takes to synthesize a new dose of the pharmaceutical could be one day for every 1000 eps of value.

Unconsciousness: This hazy orange gas causes instantaneous unconsciousness for those organic creatures who do not save vs poison within the 3 hex radius. Targets will remain unconscious until awakened. In a normal combat setting this would be 0 to 3 units. Otherwise they will lay dormant for days. A save versus poison must be made for every unit of exposure to the gas. The gas's intensity is higher than normal, being equal to the persona's CON, plus one intensity point per experience level. The gas is lighter than water but heavier than air, and dissipates swiftly (1-2 units).

17. Haste

RANGE: Persona only
DURATION: 1 per 2 (CON plus level)
FREQUENCY: 1 per 4 (CON plus level)
GENERAL BONUS:

The mutant's nervous system is specially wired with large diameter, low resistance neurons, and a hormonal system that can be flooded with adrenaline. Haste depends on the sudden surge of adrenaline which allows the mutant to do everything at double speed. Problems can be thought out in 1/2 the time required (if solvable). Movement is doubled. Swings per round and missile fire are doubled. This mutation can be activated for a length of time in units equal to 1/2 the creature's adjusted CON. Once begun, haste cannot be halted, and all activity will be engaged in at double time, or not at all. The effects of pharmaceuticals, will wear off twice as fast (i.e., 1/2 their duration), when haste is being employed. After haste has been used, complete rest for 1 hour is required.

18. Heat Generation

RANGE: Special
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: Special

The mutant is a heat generating machine. Anything that produces body heat will be operating at a higher than normal pace in this mutant. Uncoupled chemical reactions will be producing heat, the friction of the cells in her body, as well as whole body thermal conduction will assist in the heating of this mutant. The referee can check, when ever she sees fit, to see if the mutant has accidentally ignited some nearby flammable artifact. Check the sphincter dice in chapter 16, Special Rolls to determine if something is flammable or not.

Heat generation keeps the mutant nice and toasty warm at all times, unless the temperature drops below -20oC. This creature's body

temperature runs at about 42°C, and is highly susceptible to infravision and fire attacks. Fire/heat attacks inflict double damage. In turn this mutation acts as a defense against cold attacks, which do 1/2 damage.

During the heat of battle this mutant may launch jets of searing flame from her person, up to the phenomenal distance of 2 hexes per point of adjusted PSTR. The flame attacks as a type C weapon. If a hit is scored the target will be subject to 3-18 (3d6) hit points of damage, plus 1 hit point per experience level.

19. Heightened Attribute

RANGE: Persona only
DURATION: Special
FREQUENCY: Special
GENERAL BONUS: Special

With this mutation an attribute of the mutant will be adjusted to bizarre extremes. Which of the attributes is effected is determined on Table 11, *Heightened Attribute*, and is described in the following paragraphs.

Table 59.11: Heightened Attribute

DIE ROLL	HEIGHTENED ATTRIBUTE
01-05	Awareness
06-10	Charisma
11-30	Constitution
31-50	Dexterity
51-60	Intelligence
61-80	Physical strength
81-99	Hit points
00	Other/choose

Awareness: The awareness attribute determines how well the mutant's consciousness is interfaced with the environment in which she lives. Heightened AWE will indicate larger than normal ears, big bulging eyes, a long nose, an extremely sensitive palate, and a very fine sense of touch. The mutant's AWE attribute is permanently increased by 2-8 (2d4) points, and her AWE cannot be less than 15. She will in addition earn a bonus of +30 on any awareness related PT rolls, and tripled AWE when trying to detect an ambush.

Charisma: This mutant can truly turn on the charm in whatever form it is required. Heightened charisma is not just beauty, but also includes persuasiveness and sociability. The mutant will automatically adjust her facial structure, hair length and posture to suit what ever goal she wishes to attain. If she wishes to be alluring, her pupils will dilate, her hair will lengthen, and her voice will change. If she needs to work up a crowd into a frenzy, her posture will be erect, her face will harden, her hair will shorten, and her voice will deepen. This mutation offers a permanent CHA bonus of 2 to 8 (2d8) points, and her CHA cannot be less than 15. She also has a bonus of +30 on any charisma related PT rolls, and tripled CHA during negotiation rolls.

Constitution: The mutant has superior versions of all those organs that make up the constitution of the persona. Her heart is healthy and strong, her blood is resilient, her immune system is ready to go, and she has a liver that could detoxify anything. This mutation offers a permanent CON bonus of 2 to 8 (2d8) points, and her CON cannot be less than 15. There are obvious benefits to this mutant when generating her hit points. The mutant can re-roll her hit points, using her new CON, but the HPS score cannot decrease. The increased CON value will assist the persona in making saving throws, and any save that the mutant makes against an attack will indicate absolutely no effect.. In addition to this the mutant has her recovery duration decreased by half.

Dexterity: The mutant has additional cerebellar processors located throughout her body which are connected to an extraordinarily high number of proprioceptors. This allows the mutant to carry out amazing feats of balance, agility and speed. In the normal course of movement this mutant cannot fall, slip or stagger, and if she should be propelled from a high surface only a d4 per hex is taken for falling damage. This mutation

offers a permanent DEX bonus of 2 to 8 (2d8) points, and her DEX cannot be less than 15. She will in addition earn a bonus of +30 on any dexterity related PT rolls, and tripled DEX during attribute rolls.

Intelligence: This mutant's brain is physically different from that of other personas. Her skull is specially adapted to accommodate the oversized and densely packed grey blob of neurons. The mutant's head is larger than normal, and has special gills that help cool her overactive brain. When she concentrates on some cerebral topic her brain may actually begin to hum. This mutation offers a permanent INT bonus of 2 to 8 (2d8) points, and her INT cannot be less than 15. She will in addition earn a bonus of +30 on any intelligence related PT rolls, and tripled INT during attribute rolls.

Physical strength: This mutant not only has more muscles than normal, but those muscles are better ones. The muscle fibers are larger, and more densely packed with the chemicals that make contraction possible. This mutation offers a permanent PSTR bonus of 2 to 8 (2d8) points, and her PSTR cannot be less than 15. In addition she will have a tripled PSTR during attribute rolls.

Hit points: This mutant's body is ready for damage. Her blood congeals faster, and can plug a a greater hemorrhage than other personas. Whole arteries can seal off, and she can create alternate blood pathways. Her bones are stronger, and her muscles can absorb shock better than normal. In general this mutant will look solid and tough. The mutant's maximum hit points will be increased by 20% to 80% (2d4 times 10%), and her HPS max cannot be less than 60 hit points. This mutant will heal twice as fast as other mutants, and can double her HPS when making recovery and damage system shock rolls. These rolls are discussed in detail in chapter 3, Attributes.

20. Heightened Vision

RANGE: Special
DURATION: Until dead
FREQUENCY: As needed
GENERAL BONUS: Varies

This mutation gives the mutant a special optical ability. The heightened vision is in addition to whatever is considered normal vision for the persona. She may switch from one form to the other as needed. Heightened vision may just be an extension of the normal vision. The eyes of this mutant should be visibly different from those of her race. Each heightened vision is discussed in the paragraphs following Table 59.12, *Heightened Vision*.

Table 59.12: Heightened Vision

DIE ROLL	VISION TYPE
01-20	Infravision
21-30	Microscopic
31-40	Mist cutting
41-50	Semicircular
51-80	Telescopic
81-90	Ultravision
91-99	X-ray
00	Other

Infravision: This allows the mutant to discern thermal irregularities in objects and the environment. Infravision essentially acts as night vision. The range of this vision is equal to the mutant's summed MSTR and AWE. If the mutant already has infravision, her infravision range will be extended by that amount.

Microscopic: This vision system allows the mutant to adjust the distance between, and the shape of, special lenses within her eyes. She can magnify things up to 1000 times increasing her PT roll by 15 where ever such an ability would help.

Mist cutting: This mutant's optical center can filter out the effects of any obscuring particulate matter suspended in the air. This includes, smoke, fog, dust, hail, or severe rain. This means that the mutant will be able to see through smoke screens, and will not be affected by meteorological conditions.

Semicircular: This mutant's eyes are very fish like, overly large, and bulge out of her head. These eyes allow her a semicircular view of her surroundings. This gives the mutant a +2 on her AWE, and makes it impossible to flank her in combat. The mutant's AWE is doubled when making an attempt to detect an ambush.

Telescopic: The mutant can clearly read any material up to 10 hexes per point of adjusted AWE. Her eyes stick out of her head like tubes, and retract with sucking noises as they scan for the correct focus. The mutant receives an AWE bonus of +1

Ultravision: The mutant's eyes glow red, and are receptive to the ultra-high frequencies of the electromagnetic spectrum. This mutation gives the mutant equal night/day vision, the ability to sense radiation, and the ability to visualize electronic circuitry as a live and flowing pattern. Ultravision allows the mutant a bonus of +15 on electronic related PT rolls.

X-ray: This is classic see through the walls vision. The only problem is that the mutant's eyes register radioactively, and expose everything looked at to intensity 1 radiation. X-ray vision allows the mutant to see through 1 hex worth of sold material. The mutant is familiar with this view of the world, and can recognize her fellow expedition members as collections of radio-opaque bone formations.

VI

21. Increased Metabolism

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: Defective mutation

The metabolism of this mutant operates at a rate 3 times greater than the normal for her race. All of her bodily functions are running at 3 times the normal rate. This mutation requires an intake of 3 times more food than normal, just to keep from starving to death. The mutant will always appear emaciated, no matter how much she eats. For example 3 food cultures would have to be consumed by the mutant each day instead of the regular 1. This mutation is a defect, and does not count as a start up mutation. The player should get another roll on the *Physical Mutations* table.

22. Launchable Quills

RANGE: 1 hex per (PSTR plus level)
DURATION: N/A
FREQUENCY: Special
GENERAL BONUS: CR plus 3
CR times 2 if poisoned

On this mutant's chest there are 2-12 tightly packed quills. These can be elevated into a horizontal position, and launched by pressurized methane gas. Initially all quills must be launched at once, but for each level of experience an additional quill may be held back. These missile weapons have a range of 1 hex per point of adjusted PSTR, and do 1-8 points of damage. Treat each quill as a type B weapon attack. One quill will grow back after each 8 hours of sleep. The mutant's armour must be appropriately tailored to use this mutation properly .

There is a 33% chance that 1 to 4 (d4) of the launchable quills will be poisoned. Launchable poisoned quills are similar launchable quills except that each quill delivers a killing. The intensity of the poison is equal to the mutant's CON. If the target fails her saving throw versus poison then she will take poison damage in addition to the d8 of puncture damage.

23 Light Generation

RANGE: 1 per (MSTR plus level)
DURATION: Special
FREQUENCY: 1 per 4 (CON plus level)
GENERAL BONUS: CR plus 4

This mutant is in a symbiotic relationship with a subdermal light emitting organism. The mutant's nervous system can release chemicals which excite and depress the colonies of unicellular organisms. They in turn produce vitamins and hormones essential to the mutant's survival. This mutant can radiate light in a radius equal to 1/4 her MSTR. If desired, the mutant can project a beam emitting from her forehead, extending straight ahead for 1 hex per point of adjusted MSTR. All of this is done by exciting certain subdermal colonies, and depressing others. Such ambient manipulations of light can be produced as needed

During periods of intense stress, like combat or similar situations, the mutant can make the light producing colonies strobe violently. This is the offensive version of light generation. The mutant attacks by strobing a flash of light into the sensors of an opponent. The bolt stems from the orbits of the mutant's own eyes, and is focused by her lenses. The flash attack has a range of 1 hex per point of adjusted MSTR. The flash attack exhausts the organisms, limiting the attacks use. The flash mutation can be used no more than once a day per 4 points of adjusted CON.

The flash attack inflicts no damage, but a save vs mental attack must be made or temporary blindness will result. Blind targets cannot fight properly, and suffer extreme combat penalties (see chapter 17, combat adjustments). Blindness will last 1 to 6 minutes (30 units). If the save is successful the opposing creature's vision will still be impaired. The blurry vision will last for 2 to 20 (2d10) units . Visually impaired targets suffer from tearing eyes, and light sensitivity, but they can still functions. Their penalties are -200 on to hit rolls, -200 on armour rating, +2DD on vision requiring PT rolls, half attribute on DEX rolls, and other stumbling sorts of problems. This attack will have the same effect on the mutant if it is projected onto a reflective surface.

24 Mechanical Insertion

RANGE: Special
DURATION: As needed
FREQUENCY: As needed
GENERAL BONUS: +5 on mech PT rolls

Somewhere along the course of this mutant's life she had a piece of inorganic equipment installed into and integrated with her body. It may have been done surgically, she may have fallen on it, her mother might have swallowed it, or it may defy all logical explanation. This mutation is hard to prepare since the referee must also generate a random toy to be inserted. Whatever the device



turns out to be, it will be completely integrated with the mutant's nervous system. If she has a video cassette built into her chest she will be able to control its recording time, rewind, fast forward, scanning, and eject as easily as she could carry out any other bodily function.

The only limit recommended here is that the wate of the artifact not exceed 10% of the mutant's wate. All other restrictions are determined by the referee. For instance she may feel that a fusion bomb would be an inappropriate inserted device.

25. Mechanical Prosthesis

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant, unless broken
GENERAL BONUS: CR times half

This mutant is now part machine. Somewhere along the line one or more of her limbs have been replaced by blatantly defective mechanical devices. Scraping metal levers and gears are poorly wound into the nerves of the mutant. A prosthesis is subject to rust, and malfunctions (3% chance of a breakdown when under stress), or complete breakdowns (1% per limb/per month). Damage taken by a mechanical prosthesis is not subtracted from the mutant's hit point total, but there is a 1/10 of a percent chance per hit point of malfunction. The extent of damage to the prosthesis can be determined in chapter 21, Equipment Damage. A prosthesis does not change the WATE of a mutant, nor does it affect her attributes, but the mutant should be constantly challenged by the inadequacies of the limb.



Table 59.13: Mechanical Prosthesis

DIE ROLL	LIMB REPLACED
01-50	Left, or right leg
51-60	Right arm
61-70	Left arm
71-80	Roll twice, and ignore this result
81-90	All limbs
91-00	None, eliminate all prostheses

26. Mitosis

RANGE:Persona only
DURATION:Special
FREQUENCY:As needed
GENERAL BONUS: CR plus 3

This mutation allows the mutant to replace her undifferentiated regenerative cells at any injury site. This allows her to replace lost tissues, organs, or limbs. This mutation is not mitosis in the sense of whole organism reproduction, but in the sense of tissue regeneration. This mutation does not heal lost hit points, although it can prevent some prolonged damage attacks.

This mutation will automatically replace any lost body part that is below the neck provided that the mutant is not dead. A detached limb will start to bud back within 1 to 8 minutes, and extra damage that may be expected from a lost limb will not occur. Remember that this mutation will not heal hit points, just arrest their loss. The limb reproduction will be complete in 2-16 hours. During the healing period, no movement is allowed. If movement occurs, the regeneration will take 1-6 hours longer. If a wound is cauterized mitosis will be unable to regenerate the lost body part. Once grown back the new limb will not function for 20 hours.

The beneficial abilities of this mutation do not stop at limb, and organ replacement. Any form of secondary damage, like protracted poisoning, acid burning, or post dose radiation damage will be countered by mitosis.

27. Multiple Body Parts

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: Depends

This genetic phenomenon will be either beneficial, or bad, for the mutant. Some of the extra body parts are under neural control of the mutant, while others are nothing but malformed cosmetic reproductions of the part. The player rolls once on Table 59.14, *Multiple Body Parts* and refers to the following paragraphs for the effects. If the mutant receives no bonuses from this mutation, it will not count as a start up mutation, and the player can roll on the *Physical Mutations* table again.

Table 59.14: Multiple Body Parts

DIE ROLL	DUPLICATED BODY PART
01-10	Arms
11-24	Ears
25-29	Eyes
30-44	Feet/toes
45-58	Hands/fingers
59-73	Head
74-82	Legs
83-94	Mouth
95-99	Nose
00	Other

Arms: The mutant will have 1-4 extra arms protruding from her chest. The arms will always be symmetrically aligned. The extra arms are fully functional arms that the mutant can use. This will allow her to use her two right arms to attack twice a unit , but she would only be able to attack with two pairs of right and left arms if she were ambidextrous. Multiple arms does not indicate ambidexterity. For those mutants with an odd number of arms (meaning one centered limb) handedness must be determined between left, center and right arms. +5 is granted on any PT roll that may require extra arms (repairs, surgery, first aid, lock picking). The extra arm will increase the mutant's CR by one per extra limb. A PSTR attribute roll may be given when it involves holding onto things, or multiple DEX rolls may be given when trying to grab things.

Ears: 1-6 extra ears sprout from this mutant's head. Half of them will be useless decorations if more than three are rolled. For every functioning extra ear that the mutant has she will get an attribute bonus of +1 on her AWE. There is also a penalty of -2 on CHA if the mutant has an odd

number of ears.

Eyes: 1-6 tiny eyes, in addition to her normal eyes, are found on the mutant's forehead half of these eyes will be blind. The mutant will earn +42 on her to hit rolls, and +1 on AWE for every seeing eye imbedded on her forehead. The mutant will suffer a CHA penalty of -3 if the total number of eyes is an odd number. CR increases by +1 per extra seeing eye.

Feet/toes: There is a 50% chance that this mutant will have an additional defunct foot on either of her feet, or have 1-3 extra toes on both feet. If the mutant has more than two feet subtract -10% from any negotiation rolls made. This does not count as a start up mutation, and the player should roll again on the *Physical Mutations* table, or the *Multiple Body Parts* table.

Hands/Fingers: There is a 50% chance that this mutant will have an extra non-functioning hand, otherwise there will be 1-4 extra fingers on each hand. This mutant has a negotiation adjustment penalty of -10%. This does not count as a start up mutation, and the player should roll again on the *Physical Mutations* table, or the *Multiple Body Parts* table.

Head: This diminutive, lifeless, wrinkled head has many of the same neural connections as the mutant's normal head. So the extra head's facial expressions will mimic those of the mutant. There is also a chance that the head will betray the real emotions of the mutant. The extra head cannot be covered up, because it will immediately make gasping and coughing noises with its mouth. The additional head gives the mutant penalties of -5 on charisma and -30% on negotiation rolls. This does not count as a start up mutation, and the player should roll again on the *Physical Mutations* table, or the *Multiple Body Parts* table.

Legs: This creature has two to seven extra legs (d6 plus 1). This will increase the mutant's speed by 20% per extra leg. Thus a mutant with 5 extra legs would double her movement rate. CR increases by increased movement percentage. E.g., a movement rate increase of +50% would increase the CR by 1/2.

Mouths: The mutant has 1 to 3 extra mouths. These mouths are smaller than the mutant's regular mouth, and they join to it by short oral passages. The extra mouths can salivate, chew, spit and eject vomit, but they cannot talk. There is a CHA penalty of -1 per extra mouth. This does not count as a start up mutation, and the player should roll again on the *Physical Mutations* table, or the *Multiple Body Parts* table.

Noses: The mutant's face is covered with growths of flesh and cartilage that resemble noses. These specialized outcroppings constantly have a mucous like ejection dribbling out of them. If the mutant should happen to sneeze she is better off covering her whole face with a handkerchief. This mutation will make the mutant sneeze often. There will normally be 1 to 8 extra noses with a CHA penalty of -1 per 2 extra noses, and a general penalty -15% on the negotiation rolls.

28. New Organ

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: Varies

This mutant has a specialized new kind of organ that carries out peculiar processes that are not essential to the mutant's life, but can be helpful in prolonging it. Unless specified otherwise, the mutations can be used as often as needed. One roll on Table 59.15, *New Organ* is made, and each new organ type is discussed in the following passages.

Air: This enormous gland is located in the abdomen of the mutant and it breaks down bodily energy stores to produce air. The air is secreted into the esophagus, and brought up into the mouth from there it is inhaled by the mutant. She can breathe underwater with ease, hold her breath indefinitely, and kiss for hours. In the case of inhaled poisonous substances +4 on her saving throw is granted, and 1/2 or no damage is taken. CR is increased by 2.

Blood: Normally this mutation will be a blood producing organ that supplements the mutant's

Table 59.15: New Organ

DIE ROLL	NEW ORGAN
01-10	Air producing
11-20	Blood draining/producing
21-35	Electricity storing
36-49	Gas absorbing
50-62	Ink producing
63-65	Iron Stomach
66-75	Light absorbing/draining
76	Mental attack absorbing
77-85	Plastics destruction/production
86-90	Poison producing
91-00	Pus producing

blood supply in case of injury. The mutant will not not suffer damage from prolonged bleeding effects, nor will she have any problem with donating many times her total blood volume every day. The organ is very sensitive, and will not aggravate internal injuries by pumping liters of blood into the persona's abdomen or skull. The extra supply of blood keeps the persona from going into shock, making her easier to perform vet PT rolls on , and harder to knock unconscious during combat. The player doubles her persona's hit points when making a DSS roll, loses half as many hit points per turn when comatose, and gives vets a +15 PT roll bonus when working on her. For more information about damage and healing refer to chapter 13, Health.

There is a 15% chance that the mutant will have a blood draining organ. This consists of an external blood sucking tentacle, and an internal blood filtering organ. The large tentacle burrows to a major artery, injects anticoagulants, and aggressively pumps blood from the target. The organ will drain 1 to 6 (d6) hit points worth of blood per experience level each unit that the blood draining tentacle is attached. A 4th level mutant would drain 4d6 worth of vital juices from her target each unit that the blood draining organ remains attached. This attack increases the mutant's CR by 3.

The target will definitely be aware that the tentacle is attached, and she will make every effort to detach it. A successful PSTR challenge will pull the tube out. The tube can withstand 20% of the mutant's hit points maximum, before being knocked off the target. If the tube goes to a negative total greater than 20% of the mutant's hit point maximum the tube has been severed. For instance, if the mutant had 40 hit points, her tube could withstand 8 HPS before being knocked off the target. If it were reduced to -8 HPS in one attack, the tube would be severed. A severed blood tube will grow back in 1 to 6 months. The blood draining tube cannot reach out of the mutant's hex.

Electricity: This mutant has an organic rechargeable battery as her new organ. The mutant can charge up this organ by draining small power cells. The mutant can then recharge another power cell with the electricity stored in her organ. The mutant can store a number of cells equal to her CON.

If the mutant has stored her maximum number of cells she can release all the energy at once in an electrical attack. The attack will inflict a d8 per experience level of the mutant, and has a range of 1 hex. A fully charge mutant will increase her CR by 1.

Gas: The gas absorbing organ sits in the mouth and nose of the persona. It will grow to cover the lower half of the mutant's face when activated. The mutation is sometimes called an air liver because it filters anything airborne before it gets inside the mutant. This makes her immune to most diseases, and very hardy against poisoned gases The mutant receives +5 on her saving throw against any gas attack, and is unaffected by those gases that must be inhaled. If there is a dispute over whether a gas needs be inhaled or not the referee should consult the sphincter as described in chapter 16 Special Rolls. The organ also helps draw air out of the environment, and low oxygen atmospheres affect this mutant very little. This mutation increases the mutant's CR by 2.

Ink: This organ produces an enormous supply of fine black ink. The gland opens on to the mutant's skin via a 'sphinkter' in which she can

dip a quill pen, and write until she dies of old age.

The ink can also be violently ejected in a liquid environment as a distracting screen (6 hexes by 9 hexes). The screen will dissipate in 3 to 30 units. The mutant can also spray her ink jet on land as a blinding attack against a single target. The land attack has a range of 6 hexes, and a poison intensity (blinding), equal to half the attacker's CON. The mutant will always have enough ink to write with, but can only eject it once a day per 4 points of adjusted CON. This mutation increases the mutant's CR by 2.

Iron Stomach: This mutation is two in one. The mutant has a stomach that can digest anything that it encounters. This includes metals, alloys, glass, toxins, plastics, and organic compounds. The mutant will have an appropriately fortified mouth and esophagus to go with it. The only complication is that this mutant also has increased metabolism, physical mutation #21. The mutant will be constantly hungry, and may have difficulties to keep from eating computer parts and other essential artifacts. Ingested poisons will have no effect on the mutant.

Light: A light emitting organ will continually carry out chemical reactions that produce light. The organ can produce a radius of effect equal to 1 hex per experience level.

There is a 20% chance that the mutant has a light absorbing organ instead. This amazing mutation absorbs ambient light, but has no effect on lazers, and other organized light sources. This creates a blob of darkness around the mutant that grows by one hex per experience level. The amount of darkness can be controlled by the mutant, and gives her a bonus of +15 on sneaky PT rolls in the dark.

Mental Attack Absorbing: This protective organ absorbs those waveforms which travel from thinkspace to thinkspace. This has the effect of absorbing mental attacks against the mutant's thinkspace. The organ is reflected in a doubled MSTR when saving against a mental attack. This organ is not intelligent, and will also interfere with beneficial mental mutations. The mutation has no effect on those attacks which manipulate the environment around the target. This mutation increases the mutant's CR by 4.

Plastics: A plastic producing organ will allow the mutant to ooze plastic from some embarrassingly located orifice. The plastic is malleable, warm and quick drying. The plastic can come in any desired color, although once chosen, the colour cannot be changed. The mutant can produce 1/10 of her body wate in plastic each day.

There is a 30% chance that this mutant will have glands that produce enzymes capable of destroying any plastic that it eats or licks. It allows the mutant to damage plastic equipment, and eat plastic as a food source.

Poison: Coursing throughout this mutant's body, and secreted by pores on her skin is a naturally produced killing poison. This poison has a random intensity of 3 to 12 (3d4), plus one point per level of experience. Any close physical contact like a hug, punch, or kiss will subject the victim to a killing poison attack. Veterinarians must take extra precautions when working on these mutants to avoid a poison attack. This mutation increases the mutant's CR by 3.

Pus: This lucky mutant has a gland that keeps to its constant task of spilling out pus, scum, cur, dregs or any other frothy grossness that the referee can imagine. The randomly located opening cannot be plugged, or sewn shut. This mutation does not count as a start up mutation, and the player should receive another roll on the *Physical Mutation* table.

29. Non Breathing

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

This mutant does not have to exchange gases in order to respire. The mutant does not require light nor any particular ambient environmental factor in order to carry out her life processes. The mutant does have to consume food, and larger than normal amounts of water. At least 5 liters of water a day

is needed to supply the mutant's biochemical reactions. The mutant carries out all other biochemical processes that her race would, except that she does not breath. Digestion is normal, blood is needed to carry nutrients and waste products around. The mutant earns a +4 bonus to save on gas attacks that involve inhaled poisons.

30. No Resistance To Disease

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR times 1/2

Sadly this mutant is subject to who knows what diseases, and even has the pleasure of starting the campaign with one chronic non-terminal disease. This mutant is three times as susceptible to diseases as other personas. This disability cannot be rolled again, and it does not count as a start up mutation.

31. No Resistance To Poison

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR times 1/3

This mutant now has an effective resistance to poison of 0 to 3 (d4-1). This means that when saving against poison she cannot use her CON for defence, but must use this random die roll. Any bonuses that would normally be added to her saving throw still apply. Pharmaceuticals that are imbibed have double effect, but the chance of side effects are tripled. This disability cannot be rolled again, and it does not count as a start up mutation.

32. Oversized Body Parts

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: Varies

This mutation involves grossly oversized body parts that benefit the mutant in some manner. The player makes a roll on Table 59.16, *Oversized Body Parts*. The referee should keep in mind that the oversized body body parts will cause trouble for the mutant in the areas of clothing, armour, and public comments.

Table 59.16: Oversized Body Parts

DIE ROLL	BODY PART	OVERSIZED EFFECT
01-20	Arms	+3 PSTR
21-30	—	+1 CON, double CON on amorous attribute rolls
31-40	Brain	+2 INT, +2 MSTR
41-50	Ears	+3 AWE, double AWE on ambush detection
51-60	Eyes	+1 AWE, night/day vision
61-70	Heart	+2 CON
71-80	Legs	+2 PSTR, +50% on mvmt. rate
81-90	Lungs	+1 CON, hold breath 1 turn CON
91-99	Nose	Double AWE for ambush detect.
00	Other	

33. Photosynthetic Skin

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

This mutant has light green, hairless, almost translucent skin. The chloroplasts in her skin can act as a supplementary source of energy. When her skin is exposed to the sun, she need not eat or breath, but she must continue to consume water at her normal rate. While using photosynthesis the

mutant can wear no covering what so ever, and she cannot do so in darkness, or artificial light. If the conditions are right for photosynthesis the mutant will suffer no damage from bleeding, and she will heal five times faster than normal. Damage from cold or heat based attacks add 1/2 damage when the mutant is using her photosynthesis.

34. Phosphorescent Skin

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

Through the production of light retaining materials in the skin, this mutant continually glows some strange colour. The light produced is barely enough to read by, but it is sufficient enough to be easily seen at night. The mutant also registers as a radiation anomaly.

35. Poor Respiratory System

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

All the essential components of this mutant's respiratory system are substandard. Her lungs are undersized, her blood is lacking in transport molecules, and gas exchange is bad at the tissues. In general she will tire sooner in any endurance activities. She immediately suffers a penalty of -1 on her CON, and -2 to on all saving throws versus poison. This mutation is a defect and does not count as a start up mutation. The player should make another roll on the *Physical Mutations* table.

36. Pockets

RANGE: Persona only
DURATION: Until dead
FREQUENCY: As needed
GENERAL BONUS: +30 on tricky PT rolls

This odd mutation consists of pockets or openings that can be covered by exterior flesh.. The mutant can manipulate the location, size and shape of the pockets on her body. If she wants a big pocket on her tummy like a marsupial pouch, she can do so. If she wants a dozen pockets all over her body she can dissipate the large one, and move the openings all over her body. Each fleshy covering will create an airtight seal which can hold up to 2% of the mutant's body wate. The total amount of stuff concealed in the mutant's body cannot exceed 5% of her body wate.

37. Pressurized Body

RANGE: Persona only
DURATION: 1 unit per (CON plus level)
FREQUENCY: 1 per 2 (MSTR plus level)
GENERAL BONUS: CR plus 2

Throughout the mutant's body are organs that contain pressurized gases. The mutant can release these gases into specialized cavities in her body, and puff out like a puffer fish. Between this and her thick resilient skin the mutant can increase the pressure of her body to many time that of normal.

When in the pressurized state the mutant can fall a distance of 1 hex per adjusted PSTR without taking any damage. If she falls from a height greater than her PSTR in hexes she will only take a d4 in damage per 2 hexes of distance. All damage taken from force attacks (explosions, swords, rocks, car accidents) will be halved. The mutant is unaffected by the pressure changes of decreased atmosphere, although she still must find some way to get air.

While pressurized there is a 1% chance per 10 hit points of damage taken that the mutant will

explode. Exploding while pressurized will inflict 7 to 84 (7d12) hit points of damage to the mutant. Bystanders are unaffected by explosive decompression of the mutation. The mutant can also explode right out of her armour inflicting 3 to 18 (3d6) hit points of damage to herself in the process.

38. Radiating Eyes

RANGE: 1 hex per 2 (MSTR plus level)
DURATION: Not applicable
FREQUENCY: Every second unit
GENERAL BONUS: CR plus 3

This mutant can launch a beam of radiation from her eyes. The beam is about 30 cm wide and is two dimensional. It appears to onlookers that the mutant has flashed yellow lazers at her targets. The radiation beam and the mutant herself will register on radiation equipment. The beam is composed of killing radiation with an intensity of 2-12 (2d6) plus one intensity per experience level. The attack can be made every second unit of combat. If the target's save is successful she will only take half damage from the attack. Full damage is 1d4 per intensity of radiation. For more information about saving throws and radiation poisoning see chapter 16, Special Throws.

39. Regeneration

RANGE: Persona only
DURATION: Permanent
FREQUENCY: Special
GENERAL BONUS: CR times 2

Every cell in this mutant's body is capable of recreating its nearest neighbour, and can do so with tremendous speed. The mutation cannot regenerate lost limbs, but it can quickly repair the damage inflicted by wounds equally as severe.

The mutant's body is constantly healing itself. As long as she is not comatose (her hit point total is greater than 0) she will heal 1 hit point a unit for every 5 points of adjusted CON. This means that a 4th level mutant with a 16 CON would heal 4 HPS every unit. The healing is complete and accurate. There is no scarring, and the mutant is as good as new when she is returned to maximum hit points. This form of background regeneration does not work if the persona has less than 0 HPS, at this point she is dying like any other persona.

Massive reconstructive regeneration can be carried out automatically by the body, or whenever the mutant wishes. Massive reconstruction involves the re-routing of blood, the slapping together of flesh, and the manipulation of other systems. When this is done the mutant can instantly heal two HPS per point of adjusted CON. This can be carried out once a day per 7 points of adjusted CON. The body will instinctively carry out massive reconstruction if the mutant's HPS total drops below zero. A 4th level mutant with a 10 CON could massively reconstruct 28 HPS worth of damage no more than twice a day. If massive reconstructions are not sufficient to get the mutant up to a positive HPS total she will die like any other mutant.

Regeneration will reject any foreign tissue attachments, grafts, or cybernetic connections vigorously. The mutation is extremely self protective and will only accept its own reconstructions of its own tissues.

40. Rubbery Skin

RANGE: Persona only
DURATION: Until dead, possibly longer
FREQUENCY: Constant
GENERAL BONUS: None

The mutant's skin is replaced by rubber. This fabulous slippery skin comes in an assortment of wild and wonderful colours. These colours, or even meticulous patterns can be chosen by the player, or rolled randomly be the referee. Rubbery skin can even be elaborately painted without any harm coming to the mutant. The mutant is also immune to infections, parasites, skin conditions, or common colds. The mutant need not wear any protective clothing in all but the harshest meteorological conditions. Rubber dissolving aerosols will inflict 3 to 30 HPS of damage to this mutant.

41. Rust

RANGE: Touch
DURATION: Permanent
FREQUENCY: Constant
GENERAL BONUS: CR plus 3

Any metal touched by the mutant will instantly rust away. This means any metal like substance touched by any part of the mutant will be spontaneously oxidized. The mutant oxidizes the metal via an electromagnetic imbalance that is essential for maintaining her existence.

The body requires the change in electron status of the of metals in order to maintain equilibrium. Each time the mutant touches something half her body wate in metal will oxidize into dust. Not all metals are effected equally by the mutant, and the damaging effect can vary drastically. Many artifacts are combinations of alloys, of metals and plastics, or wholly ceramic. The sphincter dice described in chapter 16, Special Rolls will be used to determine the metal content of such items. The bottom line is that the mutant is unable to use anything mechanical.

In combat the rust mutation can be quite complicated. Swords used against the mutant will only hit once before they are destroyed. Bullets will disintegrate on impact, but they will still inflict their damage. Robots will take 10 to 100 (10d10) hit points of damage, plus two rolls on the malfunction. If a robot decay table is being used simply move the bot down two levels on the decay table. The mutant need only touch the robot to inflict this damage, and she will receive a +500 bonus on her to hit roll. Regardless of the wate of the robot, it will take only the damage indicated. Robots are composed of many materials, and the rust mutation will severely damage them, not completely disintegrate them.

42. Self Destruction

RANGE: 2 hex radius per level
DURATION: Until dead
FREQUENCY: Once
GENERAL BONUS: None

Within the cells of this mutant's body is a biochemical byproduct of cellular respiration that is quite explosive. If the neural signals coming from the mutant's stress center become too great there is a 1 in 1000 chance of the mutant self destructing in glorious technicolor. The explosion is a dangerous one, inflicting a d10 in damage per experience level of the mutant. The more experience the more of the chemical that has been deposited. If by some means this biochemical byproduct is removed from the mutant's cells it will begin to deposit again, reaching explosive levels within hours.

Situations where a self destruction check is warranted are going into battle, losing a fellow expedition member, ending a ursidae frenzy, losing a game of checkers, or if the player throws something at the referee. A roll of 042 on kilodice will indicate self destruction. This mutation may be kept secret from the player, does not count as a start up mutation. The player should get another roll on the *Physical Mutations* table. The only warning that the player may have is that her persona keeps setting off explosives detectors.

43. Shape Change

RANGE: Persona only
DURATION: 30 units per (MSTR plus level)
FREQUENCY: 1 per 5 (CON plus level)
GENERAL BONUS: +150 on disguise PT rolls

The mutant can completely rearrange the shape of her body. She can change the pigmentation of her skin, and alter its texture to match anything that she has seen. She can alter her internal structure to mimic the shape of any shape that she desires. Ultimately the mutant can imitate the external structure of anything that she has seen. The

mutant's thinkspace is not strong enough to shape change into an imagined object, it must be something that she had visualized. The mutant could shape change into anything, a large box, another persona, a robot, or an alien.

The mutant will not be able to recreate any of the special attacks that creature had, nor will she be able to record information like the previous machine could, nor will she be able to carry out any of the class skills that the persona had. The mutant can alter her wate by more than 50% less, or 50% greater. If the mimicked creature is much larger than the mutant she may turn herself into an exact scale replica of it.

The transformation takes 6 to 60 (6d10) units and is messy and noisy. Bones have to be broken, major organs soften and are temporarily pushed out of the body, bodily fluids are released and then recovered, etc. During this state the mutant is helpless, and any damage taken will be tripled. The shape change being made cannot be adjusted while the transformation is taking place.

There is a 3% chance that the mutant will get stuck at the transformation phase, and lay unconscious for 0 to 5 (d6-1) days. During this period she will slowly return to her normal shape. The shape change will last for 1 minute (30 units) per point of adjusted CON. At the end of this time the mutant will spontaneously shape change back into her normal form.

44. Size Manipulation

RANGE: Persona only
DURATION: 20 units per (CON plus level)
FREQUENCY: 1 per 3 (MSTR plus level)
GENERAL BONUS: None

The mutant can cause the molecules of her body to fall in on each other just enough to decrease her size proportionally. She can also cause them to expend slightly and therefore increase her size in a proportional fashion. The changes are both immediate and complete. The mutant's equipment is unaffected by the change, and this can result in oversized clothing, or tearing ones clothes asunder.

Making oneself smaller involves decreasing the space between every molecule in her body. The result is proportional decrease is size that can make her up to 50% smaller. There is no change in the mutant's body wate. The decrease in size does not make her weaker, but it does make her a little bit more dense and harder to hit. There is a bonus of +75 on her armour rating when the persona is shorter.

The mutant can increase her size by up to 50% when she slightly increases the space between her molecules. There is no change on any of her attributes, a slight change in her density, but she can make herself considerably taller. The mutant will receive a bonus of plus whatever percent she increased her size by onto her damage adjustment. Note that her physical strength has not increased, but her leverage has.

45. Skin Structure Change

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

This skin of this mutant has been radically altered to the consistency of some previous ancestors. The majority of the skin structure changes are defensive in nature. They all function as normal skin except for their described appearance, and change in base armour rating. Refer to Table 59.17, *Skin Structure Change* to determine how the mutant's skin is different. None of the skin alterations affect the mutant's CHA. These are the mutant's natural skin, and the condition of the skin is determined by the mutant's CHA, and not the other way around.

When not wearing armour a mutant's armour rating is normally 500. The *Skin Structure Change* table lists the changes to the mutant's AR. This value is added to the mutant's AR regardless of how she is armoured. If the mutant can wear armour with this mutation then her AR will be adjusted by the value. Thus an unarmoured mutant with thatched skin would have an AR of 580, and any armour she were wearing would have a bonus

of +80. Note that wearing armour may be an insulting idea to a mutant with naturally armoured skin.

Table 59.17: Skin Structure Change

DIE ROLL	SKIN TYPE	EFFECTS EXPLANATION
01-10	Weaker[a]	-30 AR, whitish and flaky
11-50	Stronger	+30 AR, tanned and thick
51-70	Thatched	+80 AR, overlapping strips
71-80	Scaled	+130 AR, overlapping scales
81-90	Plated	+150 AR, interlocking plates
91-95	Metallic	+180 AR, flexible metal skin
96-99	Plastix	+230 AR, plastix armour
00	Other	

[a]this is a defect and does not count as a start mutation

46. Smoke Screen

RANGE: Special
DURATION: 1 to 12 minutes (30 units)
FREQUENCY: 1 per 2 (CON plus level)
GENERAL BONUS: CR plus 2
CR plus 4 if explosive

This mutant's back can heat up, ignite secretions located on her skin. The combusting material will generate thick vision obscuring smoke. The mutant can instantly heat up her back to generate the thick smoke. The cloud does not inhibit one's ability to breath, but it is completely disorienting and cannot be seen through.

If the mutant stands still the smoke will create a cloud 2 hexes high with a 5 hex radius. If the mutant is moving she will create a wall of smoke 2 hexes high and 1 hex thick. The wall of smoke will follow the as she moves for 2 units. The cloud will last for 1 to 12 minutes before settling or being dissipated by the wind.

There is a chance that when the mutant is stressed she will instinctively release the cloud, say while talking to a banker, getting a speeding ticket, or in an argument with another persona.

There is also a 15% chance that the mutant will have an explosive smoke screen This will ignite violently when provoked by an open flame (match, gunfire, energy weapons). Anything within the smoke screen at that moment will take a d10 in damage per experience level of the mutant.

47. Sonic Attack

RANGE: 1 hex per PSTR
DURATION: Special
FREQUENCY: 1 per 2 (PSTR plus level)
GENERAL BONUS: None

There is a billows in this mutant's neck which allows her blast air through her specialized vocal cords. The scream created is composed of high and low frequency wavelengths of damaging sound. Immediately before the mutant attacks her neck billows out to beyond her nose.

The amount of damage inflicted is determined on Table 59.18, *Sonic Damage Range*. The mutant is unaffected by her own sonic attack, unless it is somehow reflected back to her. The sonic attack has a radius (in hexes) equal to the mutant's PSTR. A mutant with a 10 PSTR would have a radius of effect of 10 hexes. Organic and inorganic audio systems can be rendered inoperative if they take more than 15 hit points of damage. If 15 (or more) hit points of damage is delivered a recovery roll must be made, or "deafness" will result. Organic systems will remain deaf for 1-8 hours, but inorganic audio systems must await repair. Sonic attacks can be launched once a day for every two points of combined PSTR and level.

Table 59.18: Sonic Damage Range

DISTANCE TRAVELLED(hexes)	DAMAGE INFLICTED
1 hex	4-32 (4d8)
up to 1/2 range	3-24 (3d8)
1/2 to full range	2-16 (2d8)
beyond full range	1-8 (or nil)

48. Spit Poison

RANGE: 1 hex per (PSTR plus level)
DURATION: Not applicable
FREQUENCY: Wait 3 units
GENERAL BONUS: CR plus 3

The mutant has poison producing glands that can eject a spittle of poison tremendous distances. The gland requires a 3 unit wait period while it recharges itself. Thus the mutant can spit poison every 4 units. The type of poison generated by the mutant is determined on Table 59.19, *Poison Generation*. The effects of each poison are discussed in the following paragraphs.

Table 59.19: Poison Generation

DIE ROLL	TYPE OF POISON
01-60	Death
61-80	Nausea
81-90	Paralysis
91-99	Unconsciousness
00	Other

Death: A highly toxic spittle of death is released by this mutant. Any organic personas hit by this attack must save versus a poison. Those who do not save will take damage from the attack. This poison inflicts a d4 hit points in damage per point of poison intensity. Those personas which do save will only take half damage. The poison intensity is 1 to 8 plus experience level

Nausea: Those that fail their saving throw will be incapacitated with nausea. They will be unable to act for 1 to 8 minutes (30 units). Those that make their saving throw will be unaffected by the poison. The poison intensity is 1 to 8 plus experience level.

Paralysis: The paralysis poison leaves its affected targets unable to move any of their voluntary muscles for 3 to 30 (3d10) units. The save must be made by anyone that is hit by the spittle. Those that make their saving throw will be unaffected by the poison. The poison intensity is 1 to 8 plus experience level.

Unconsciousness: This nasty spittle causes instantaneous unconsciousness for those organic creatures that do not save vs poison. Targets will remain unconscious until awakened. In a normal combat setting this would be 0 to 3 units. Otherwise they will lay dormant for days. Those that make their saving throw will be unaffected by the poison. The poison intensity is 1 to 8 plus experience level.

49. Static Quills

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR plus 1

This mutant's body is completely covered with quills, spines, thorns and other nasty pointy things. The layer of quills is thick and offers an armour rating bonus of +101, but the mutant is unable to wear armour of any sort. She even has a slight chance of puncturing a vac suit. Any type A attack that involves a creature's punch, bite, or claw will inflict a d6 plus 1 hit point per level of damage to the attacker. Thus a 5th level mutant with static quills would have an unarmoured armour rating of 601, and would inflict 6 to 11 hit points of damage to any creature that punched her.

50. Strange New Body Parts

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: Varies

Just like the title of the mutation states the mutant has some strange new body part that is uncommon to her species. If the body part rolled on Table 59.20, *Strange New Body Parts* is not unique to her persona's species, then the player can roll again. The strange new body parts are discussed in the following paragraphs.

Table 59.20: Strange New Body Parts

DIE ROLL	NEW PART
01-07	Antennae
08-16	Ears
17-25	Eyes
26-34	Eyestalks
35-45	Fins
46-50	Gills
51-60	Horns
61-66	Mouth
67-85	Nose
86	Oral grapple
87-90	Pincers
91-92	Spike
93-95	Tail
96-98	Tentacles
99	Turtle shell
00	Other/choose

Antennae: The mutant has a pair of insectoid like antennae sticking out of the top of her head. There is a 90% chance that the antennae will give the mutant radar as similar in effect to mental mutation #54, Sonar.

Ears: The mutant has a pair of unique ears, large elephant ears, or floppy rabbit ears. The ears are purely decorative, and this mutation does not count as a start up mutation. The player can roll again on the Physical mutation table.

Eyestalks: The mutant's eyes are now located atop retractable and articulated eyestalks. The mutant can extend her eyes from her head by about 30 cm. She could use these to increase her cover when firing around a corner.

Fins: The mutant will have a dorsal stabilizing fin, and webbed hands and feet. This mutation will allow any persona to swim in water at a speed equal to her movement rate on land.

Gills: These gills are located on the side of the mutant's neck, and offer her an additional breathing apparatus. The gills function both in and out of water, and allow her to breath in liquid.



Horns: The mutant has a set of horns sticking out of the sides of her head. There will be 1 to 4 pairs of horns located on her head. The horns are purely decorative, and do not count as a start up mutation

Mouth: The mutant's mouth is replaced with some other sort of obscure oral access device. Like a beak, trunk, proboscis, or an osmotic absorptive sheet. The strange new mouth is purely decorative, and does not count as a start up mutation.

Nose: This mutant has a strange new nose. It can be missing, inverted, elephant like, clown like, merely a hole, or some other peculiar variation. The strange new nose is purely decorative, and does not count as a start up mutation

Oral grapple: This is a metal covered bone shaped like a grappling hook. The mutant can

shoot the oral grapple from her mouth. It has a range of 2 hexes and attacks as a type B weapon. Anything that the grapple hits will take a d8 in damage, and have grapple firmly lodged into it. The mutant can retract, and release the grapple at will. The mutant can reel the oral grapple in using her PSTR. The oral grapple will be severed if it takes more than 15% of the mutant's hit point maximum in one attack. A severed grapple will grow back in 1 to 6 months.

Pincers: Protruding from the mutant's mouth are a pair of large serrated pincers. The mutant can dexterously manipulate her food with these pincers, or she can use them to violently attack as a type A weapon. If a hit is scored they will inflict 1 to 8 (d8) hit points in damage.

Spike: The spike resembles a unicorn's spike sticking from the persona's forehead, and it can be used in the same fashion. The spike can be used as a type A weapon that inflicts 1 to 12 HPS in damage.

Tail: The mutant has a nice long articulated tail protruding from her hindquarters. This tail can be used to manipulate objects, or to lift the mutant from the ground. It essentially functions as an extra articulation.

Tentacles: The mutant will have 1 to 6 tentacles replacing 1 to 4 limbs. Each tentacle rolled will replace one limb. If there are 5 or 6 tentacles replacing 4 limbs then the mutant will have 1 or 2 extra limbs. She will be able to use the extra limbs as arms or legs depending on what is needed at the time. For example, she could have extra attacks, or increase her movement by 10% per extra limb.

Turtle shell: This mutant has a fully functional turtle shell into which she can retract her arms, legs, head and what ever other appendages she has. The shell is very strong, and when completely retracted into it the mutant's AR is 700, and she is immune to poisons, gases, and has a doubled CON versus radiation. The shell can withstand twice the mutant's HPS before it will break open. The turtle shell will heal 1/4 the normal healing rate. This mutation increases the mutant's CR by 3.

51. Symbiotic Attachment

RANGE: 1 hex
DURATION: Permanent
FREQUENCY: One at a time
GENERAL BONUS: +30 mech or vet PT rolls

Externally this mutation appears as a long umbilical cord with a gnarly suction cup attached to the end. The cord is an extension of the mutant's nervous system, and the cup at the end has all the agents, enzymes and neurotransmitters necessary to take over another creatures nervous system. There is a 17% chance that the mutant will have a symbiotic attachment that can interface with inorganic machines.

The mutant must first score a to hit roll near the mutant's central nervous system. This to hit roll must be successful even if the target wishes to be attached. The next unit the mutant gets a saving throw versus poison (the attacker's neurotransmitters), and if she fails the mutant completely controls the target. The intensity of the attack is equal to the mutant's adjusted CON. The target must make a save, or be controlled, every unit that the symbiotic attachment is connected to her. Each unit that the target is struggling she will take 1 to 3 hit points in damage. An unconscious target can be automatically controlled without the benefit of a saving throw.

During the struggle the target can pull the attachment from her body if she successfully makes a PSTR challenge. This will inflict 2d4 HPS of damage to herself, but it will remove the attachment. The umbilical cord can be severed if it takes more than 20% of the mutant's HPS max in one attack. A severed symbiotic attachment will be treated as any other severed limb. Any damage done to the cord will be delivered to the mutant also.

If control is successful the mutant completely controls the body that she is attached to, and has access to all memories skills and abilities that the target had. The player has essentially extended her mutant to two personas. 10% of any damage taken by the attached creature will be delivered to

the controlling mutant. The attached creature will be freed if the mutant allows her to go, or if the mutant is knocked unconscious. If the mutant is knocked unconscious by something that doesn't affect her target, the target is freed and that is too bad for the mutant.

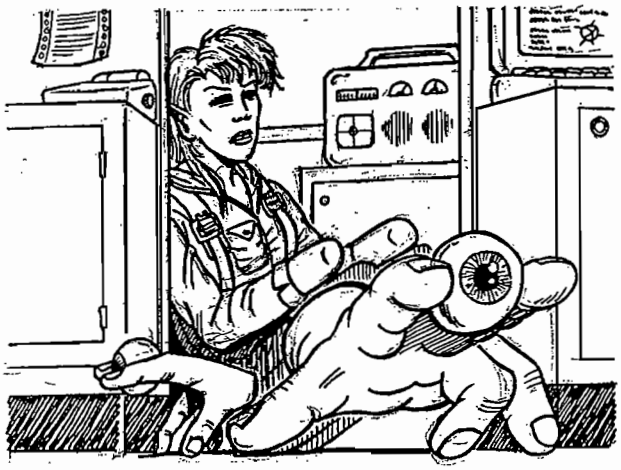
52. Tearaway Body Parts

RANGE: 1 hex per (MSTR plus level)
DURATION: 1 hour per (CON plus level)
FREQUENCY: Constant
GENERAL BONUS: None

Under the correct circumstances the mutant can remove parts of her body while keeping them under mental control. The mutation is as disgusting as imaginable. The mutant could tear off an arm and have it to open a door while she stands far away from the area. She could remove an eye and leave it in a room to carry out some spying, or tack an ear to the wall to listen in on a conversation. If the mutant were to leave an eye and an arm somewhere she would be able to attack from far away. When the job was done she could get the arm to gather the eye and crawl back to the mutant.

The mutant can keep track of 1 loose body part per two levels of experience. The mutant must be within 1 hex per adjusted MSTR of her body part. If she leaves the range of effect the body part will immediately begin to decompose. As it is the mutant can only leave a part detached from her body for up to 1 hour per point of adjusted CON, without it beginning to decompose.

Body parts have a HPS total equal to 10% of the mutant's HPS maximum. This amount of hit points is set regardless of the size or importance of the detached body part. If the body part should start to decompose it will take a d8 in hit points each hour it is left unattended. If the body part is reduced to zero hit points for any reason it is dead, and the mutant cannot reattach it. The mutant does not have any ability what so ever to regenerate her dead body parts.



53. Undersized Body Parts

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR times 1/2

This mutation is a defect that should be obvious to all concerned personas. The mutant has some body part that is obviously undersized, altering the persona's attributes, and shape. This mutation is a defect and does not count as a start up mutation. The player should roll again on the *Physical Mutation* table.

Table 59.21: Undersized Body Parts

DIE ROLL	BODY PART	UNDERSIZED EFFECT
01-20	Arms	-2 PSTR
21-30	—	-1 CON, decrease amorous abilities appropriately
31-40	Brain	-2 INT, may even have an obviously small head
41-50	Ears	-1 AWE, half AWE on ambush detection
51-60	Eyes	-1 AWE
61-70	Heart	-1 CON
71-80	Legs	-2 PSTR, -25% on movement rate
81-90	Lungs	-1 CON, hold breath half normal length
91-99	Nose	Half AWE for ambush detection
00	Other	

54. Vibrations

RANGE: Touch
DURATION: 1 unit per (PSTR plus level)
FREQUENCY: 1 per 3 (DEX plus level)
GENERAL BONUS: +5 on relaxing PT rolls

The neurons in this mutant's body can set up harmonic patterns which cause her hand to vibrate at predetermined frequencies. This mutant can call on her hands to produce a relaxing comforting pulse at any time. This skill can be used to soothe other personas with an incredible massage.

During combat or other periods of stress the mutant can vibrate her hands at super high frequencies which will allow her to damage anything that she touches. When attacking with type A punching attacks she will inflict an extra 3d4 hit points of damage if she hits, and she will receive a bonus +97 to hit with punching attacks. Combat vibrations can be employed for 1 unit per point of adjusted PSTR. Damaging vibrations can only be initiated once a day per 3 points of adjusted DEX.

If she punches or holds something specifically intending to break it the mutant can quadruple her PSTR when making such an attribute roll. This can only be done on stationary inorganic objects and cannot be achieved during combat. A successful PSTR roll will shatter what ever she is concentrating on. This will count as one of the daily uses of the mutation.

55. Vision Defect

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: None

The optical sensors of this mutant are somehow defective in a peculiar sort of way. The mutation is challenging to run for the referee since these eye defects will only come into effect every once in a while. The player makes one roll on Table 59.22, *Vision Defect*, and the table describes what effect the defect has on the mutant. This mutation is a defect and does not count as roll the player should roll again on the *Physical Mutation* table.

Table 59.22: Vision Defect

DIE ROLL	VISION DEFECT
01-25	Near sighted, extreme, no ambush detection, -1 AWE
26-50	Far sighted, extreme, no ambush detection, -1 AWE
51-75	Tunnel vision, extreme, no ambush detection, -2 AWE
76-95	Colour blind, shades of a single colour only, -2 on AWE
96-99	Eye disease, chronic pus discharging infection, -2 CHA
00	Other/choose

56. Wate Manipulation

RANGE: Persona only
DURATION: 3 units per (CON plus level)
FREQUENCY: 1 per (CON plus level)
GENERAL BONUS: Varies

This mutant can adjust her body wate at will. She can instantly increase her wate by absorbing water and airborne particles and plumping herself up. The mutant will not appreciably increase in size, but she will appear to bloat. When manipulating her wate upwards she is capable of tripling her body wate. Conversely the mutant can spew out frothy jets of unnecessary bodily fluids and jellies to decrease her body wate to a third what it regularly is. There is no noticeable decrease in the mutant's size, but she will appear much thinner.

The benefits of altering ones wate are the obvious ones. They are easier to carry, or harder to move. They can fall with more force, or they can climb more easily. In movement the mutant will move 50% slower when heavier, and 25% faster when lighter. There is also a +25% bonus on non-powered weapons damage adjustments when attacking in the wate increased form. The mutant will return to her normal wate if she is knocked unconscious.

57. Wings

RANGE: Persona only
DURATION: Until dead
FREQUENCY: Constant
GENERAL BONUS: CR plus 1

Regardless of this mutant's race she will have a large set of wings which arise from her back. These wings allow the mutant to fly through the air with the greatest of ease. All encumbrance effects as described in chapter 18, Encumbrance, apply to the flying mutant. The mutant will be able to fly at a base rate that is twice her land movement rate. If the mutant's speed is particularly fast she may be required to make maneuver rolls for certain actions. Maneuver rolls are discussed in chapter 17, Driving. The mutant would have to be flying faster than 18 h/u to before being required to make driving PT rolls. The wingspan of the mutant is such that she is unable to fly indoors, requiring at least a 2 hex wide corridor for maneuvering, and at least a 3 hex ceiling.

58. Ref's Own Table

RANGE: Special
DURATION: Special
FREQUENCY: Special
GENERAL BONUS: Special

The referee's own table is what role playing games are all about. The referee creates mutations that are entirely unique to her campaign, and the players in it. The mutations could be the ideas of the referee, suggestions by players, or great mutations gleaned from other games. A brief description of what the mutation should involve follows. These guidelines will reduce the pain of introducing untried rules into a campaign.

1) Create a title that is relevant to the mutation, and sounds scientific. This keeps it sounding technology like, and ensures that it has a biological mythos and not an occult mythos.

2) Write down a pseudo-scientific description of what it does, keeping in mind the biological basis of mutations. Good pseudo-scientific words are ones like: enzymatically, glandular, specialized organ, bladders, immune system, pheromones, pliable, eject, filtrate, biochemical

3) Write down a description of what it does in game terms, and what its effects look like. Remember that physical mutations are physical, and if the mutation doesn't have any physical outlet it probably shouldn't be a physical mutation.

4) Describe and write down several uses for the mutation. A good mutation will have several uses that are different, and do not overlap with other mutations. The mutation should have combat and non-combat uses, trivial and important uses, etc.

5) Think in game terms how a persona could take over the universe with the mutation. Think

in game terms how a persona with this mutation could win all combat situations with out risk. After you have done this create some limits for the mutation and write these limits down. A good mutation will have uses and drawbacks.

Lastly the mutation should be fun to use. Defects should not render persona's useless, and beneficial mutations should not imbalance the campaign.

References

Acidic Enzymes:
Dr. Brundle's Regurgitative Juices
"The Fly" [film], Cornfield, S. (produc.) & Cronenberg, D. (direct.), (1986), Fox.

Adaptation:
The Borg
"Star Trek: The Next Generation" [TV], (1987-), Paramount.

Attraction Odor:
Tweety Bird (v. Sylvester Cat)
"Looney Toons" [film], Warner Bros.

Arms:
Card, O.S., Treason, 1990, St. Martin's Press, New York.

Body Structure Change:
"The Thing" [film], Foster, D. & Tusman, L. (produc.) & Carpenter, J. (direct.), (1982), Universal.

Carapace:
The Rhino from
"The Amazing Spider-man" [comic book], 1962-, Marvel Entertainment, New York.

Enthalpy Attack:
Superman's Cold Breath
"Superman" [comic book], DC Comics, New York.

Fat Cell Accummulation:
Baron Vladmir Harkonnen
Herbert, F. Dune, 1965, Chilton, New York.

Gas Generation:
Pepe Le Pew
"Looney Toons", [film], Warner Bros.

Haste:
The Flash
"The Flash" [comic book], DC Comics, New York.

Hightened Attribute:
Consititution - The Newcomers,
"AlieNation" [film], Hurd, G. & Kobritz, R. (produc.) & Baker, G. (direct.), (1988), Fox.

Increased Metabolism:
Marathon
"Strikeforce Morituri" [comic book], Marvel Entertainment, New York.

Launchable Quills:
Porcupine Pete
"Legion of Super Heroes" [comic book], DC Comics, New York.

Mechanical Prosthesis:
Tetsuo Shima's Arm
"Akira" [film, comic book], Katsuhiro Otomo, Japan, (distributed in North America through Epic Comics).

Mitosis:
"Swamp Thing" [comic book], DC Comics, New York.

Multiple Body Parts:
Quattro's Arms
"Nexus" [comic book], Mike Baron & Steve Rude, 1980, First Comics.

New Organ:
Blood Draining -
"From Beyond" [film], Yuzna, B. (produc.) & Gordon, S. (direct.), (1986), Empire Pictures.

Poison Producing -
"Rapid" [film], Dunning, J. (produc.) & Cronenberg, D. (direct.), (1977), New World.

Non-Breathing:
Conner MacLeod
"Highlander" [film], Davis, P. & Panzer, W. (produc.) & Mulcahy, R. (direct.), (1986), Fox.

Phosphorescent Skin:
"Cocoon" [film], Zanuck, R. (produc.) & Howard, R. (direct.), (1985), Fox.

Pockets:
Kanga
Milne, A.A., Winnie-The-Pooh, Dutton, London.

Shape Change:
T-1000's Morphing
"Terminator 2: Judgement Day" [film], Hurd, G.A. (produc.) & Cameron, J. (direct.), (1991), TriStar.

Strange New Body Parts:
Gills -
"The Man From Atlantis" [TV], (1977), NBC.

Symbiotic Attachment:
Heinlein, R. The Puppet Masters, 1956, New York, Del Ray.

Tear Away Body Parts:
"Brother From Another Planet" [film], Rajski, P. & Renzi, M. (produc.) & Sayles, J. (direct.), (1984), CineCon International Films.

VI

Appendix A
Glossary of Abbreviations

A	Antipathy
ADP	Adaptability
AID	Artifact identification
AR	Armour rating
ATM	Normal atmosphere
ATT	Attacks
AWE	Awareness
BNP	Bonus non-proficient
BP	Bonus proficient
CF	Control factor
CHA	Charisma
cm	centimeter
CON	Constitution
cps	Copper piece
CR	Combat ratio
CT	Combat table
d4	Four sided die
d6	Six sided die
d8	Eight sided die
d10	Ten sided die
d12	Twelve sided die
d20	Twenty sided die
d30	Thirty sided die
d100	One hundred sided die
d1000	One thousand sided die
DA	Damage adjustment
DD	Degree of difficulty
DEF	Defences
DEX	Dexterity
DPT	Driving performance table
DSS	Damage system shock
ECM	Electronic countermeasures
eps	Electrum piece
EXATMO	Out of atmosphere
EXPS	Experience points
gps	Gold piece
H	Hatred
h/u	Hexes per unit
HD	Hit die
HIG	High gravity
HITE	Height in cms
HPS	Hit points
INATMO	In atmosphere
INT	Intelligence
kg	kilogram
km	kilometer
LOG	Low gravity
m	meter
MOVE	Movement
MR	Maximum roll
MSTR	Mental strength
N	Neutral
P	Preferred
pps	Platinum piece
PSH	Pure strain human
PSTR	Physical strength
PT	Performance table
REC	Recovery roll
Ref	Role-play excitment facilitator
res	Restrictiveness
RND	Random peripheral
RP	Referee persona
RPC	Referee player character (see RP)
sps	Silver piece
SS	System shock
T	Tolerated
TOY	Technological object yield
VALUE	Value in eps
WA	Wate allowance
WATE	Weight, or mass in kg
ZOG	Zero gravity

Ap

Appendix B
Glossary of Terms

Alien
A non-anthropomorph persona created on the random alien creation system

Adjusted
Adjusted MSTR, adjusted PSTR, or any other adjusted attributes means that the persona's level is added to attribute.

Anthropomorph
The generic term for any of the human-shaped races, regardless of what specific organism that race resembles.

Aquarian
A non-existent race of humanoid fish.

Area of effect
The number of hexes in which targets are subjected to damage or special effects. The value usually gives a radius for a spherical area of effect

Armour rating
The armour rating of the persona indicates how well she is protected from damage in combat. The higher the armour rating value the less likely she is to be damaged

Attribute roll
A die roll made by the player to check against an attribute when her persona is challenged by a specific task

Attributes
These are the imaginary divisions of a persona's physical abilities. They are also called statistics

Avarian
An imaginary race of flightless humanoid birds

Awareness
An attribute representing the persona's ability to notice her surroundings.

Biologist
Any persona with an innate ability to deal with the natural biological world. Biologist is a character class, or profession, for personas

Biome
The biological equivalent of a geological zone. A biome contains distinctive flora and fauna. A biome is of importance to aliens, biologists and nomads.

Bonus non-proficient
This is the to hit roll bonus used when the persona is attacking with an unfamiliar weapon. This value is less than the regular to hit roll bonus used. Each weapon type has its own bonus non-proficient.

Bonus proficient
This value is added to the player's to hit roll if her persona is using a weapon she is skilled in. Each weapon type has its own bonus proficient.

Bot
This is a shortening of the word robot. A bot a robot that is out of control, and capable of thinking on its own. Only a crazed bot can be run by a player.

Canine
An imaginary race of humanoid dogs

Charisma
An attribute representing the ability of the persona to interact socially.

Class
A class represents the innate abilities of the persona turned into an almost professional pursuit.

Comatose
The persona has a negative hit point total, and is losing hit points steadily. This is an unconscious state where the persona is dying.

Control factor
The control factor is a secondary attribute for bots that indicates how crazy they are. The lower the control factor the less of a robot the bot is, and the more of a player character. See chapter 5.

Constitution
An attribute representing the persona's physiological hardiness.

Critical roll
Critical rolls are extreme rolls of the dice. Whenever the highest possible, or the lowest possible, value on a die is rolled, it is a critical roll.

Damage
Whenever a hit is scored in combat the persona loses hit points. The amount of hit points lost is the damage. The more lethal an attack, the more damage it inflicts.

Damage adjustor
This value is added to the damage roll for certain weapon types. The stronger the persona is the more damage she will inflict.

Decaturn
The decaturn is a measurement of time, it is 10 minutes, or 300 units, in length. This is scale time, and a decaturn may take an hour, or a minute, of playing time.

Decidie
Decidie, decimal dice, or decidice indicates that a value between 1 and 100 must be generated on two ten sided dice. One ten sided is the tens place, and another is the units place, where zero-zero equals one hundred.

Dexterity
An attribute representing a persona's agility, and co-ordination.

Die roll
A die roll indicates that a random number must be generated. Because the numbers are generated by dice, it is called a die roll.

Encumbrance
Encumbrance is the total load of equipment that the persona is carrying. The greater the encumbrance, more the load hampers the persona's ability to perform.

Equine
This is an imaginary race of humanoid horses.

Exatmo
Anything that takes place in the vacuum of outer space. Short for exterior to atmosphere.

Experience
Experience is a quantifiable value of the persona's increase in knowledge from one scenario to the next. The persona earns experience points for being played, and the point total represents the persona's overall experience.

Feline
Felines are an imaginary race of humanoid cats.

Florian
Florians are a race of imaginary humanoid flora.

Hex
A hex, short for hexagon, is a six sided perfect polygon. The hex is also the game scale for measurement. A hex equals 2 meters. Movement of figures is usually carried out on hex paper, a page of interconnected hexes.

Hit points
The persona's hit points indicate how much damage she can take. A persona with many hit points can sustain more damage than a persona with few hit points. A persona loses hit points when she is hurt. If a persona loses too many hit points she dies.

Hit
A hit is a combat term that indicates a target has been damaged. When a hit is scored the target usually loses hit points.

Humanoid
Humanoids are a category of anthropomrophs that differ from Pure Strain Humans in some obvious way not described by the other races.

Inatmo
Anything that takes place in normal atmosphere. Short for in atmosphere.

Initiative
Initiative is a way of determining the order of play between the players. Initiative can include the speed of the personas involved.

Insectoid
Insectoids are an imaginary race of humanoid insects.

Intensity
Intensity represents how dangerous a poison or psionic attack is. The higher the intensity the more dangerous the attack.

Kilodie
A kilodie indicates that a random number between 1 and 1000 must be generated. The kilodie is composed of three ten sided dice, where one die is the hundreds place, another is the tens place, and another is the units place. A roll of 0, 0, 0 would indicate 1000.

Knite
A knite is a persona whose psionic capacity is trained for the military purposes of good or evil.

Level
The level of a persona represents how skilled they are in their respective class. Experience point totals will indicate a persona's level which will allow her to succeed at more difficult class skills.

Maximum roll
This is highest possible to hit roll that the player can roll. This only applies to her to hit roll. If she rolls higher than this value, she may only announce her maximum roll. Each weapon type has a different maximum roll.

Mechanic
The mechanic is a character class for personas who have an innate ability to understand, and manipulate, the mechanical world.

Melee
A melee is 10 seconds, or 5 units, of game time. A melee may take 10 minutes, or 3 seconds of playing time.

Mental strength
An attribute measuring the persona's psionic ability, will power and luck.

Merc
Merc is short for mercenary. The merc is a character class for those personas whose pursuits tend towards armed conflict.

Miss
The miss is a combat term to indicate that a to hit roll did not score any damage. A miss may contact a target, but it cannot cause loss of hit points.

Movement
Movement is the changing of position of personas during combat. Each persona has a movement rate which indicates how many hexes the persona can move each unit. This is the speed of the persona.

Mutation
Mutations are changes in the genetic make-up of a persona which yield imaginary abilities built into the body (physical mutation) or controlled by the mind (mental mutations).

Negative
Usually refers to a hit point total that is less than zero. This is a severely damaged state for a person to be in. People are unconscious, aliens are dead, and robots are damage when negative.

Nomad
The nomad is a character class followed by those personas who have an uncanny ability to survive in inhospitable terrain.

Nothing
The nothing is a civilian character class. The nothing persona has no interests, or abilities, of measurable worth.

Persona
The persona is the embodiment of all playing features: attributes, race, and class. The players (you) manipulate personas like playing pieces to engage in scenarios. Anything that acts in the game is a persona, personas are also run by referees, however the player persona is the most detailed and important. Personas can also be called player characters.

Player
You the reader. The real world persona that controls the fantasy world character called a persona.

Proficiency
Proficiency is a combat term that indicates the persona can use a certain weapon in combat. If a persona uses a weapon she is not proficient in she will be penalized in combat.

Race
The race is the biological representation of the persona. The race is usually a humanoid one, however bots and aliens can be personas and are categorized as special races.

Ref, referee
The player that is responsible for preparing the game for a group of players. The referee is responsible for running all those personas that are not run by players.

Referee persona
A persona that is generated and run by the referee.

Reptilian
A reptilian is a member of an imaginary race of humanoid reptiles.

Restrictiveness
Restrictiveness is a combat term which indicates how cumbersome armour is to wear.

Rodentia
Rodentia are an imaginary race of humanoid rodents.

Save vs
"Save vs." indicates that a save must be made versus either poison or psionic attacks.

Saves
When the persona's mind or body must defend against an attack she will get a chance to save from the attack. A save is made by having the player roll a twenty sided die. The higher the roll the more likely the persona is going to save. If the persona doesn't save she will be damaged, or effected, by the attack.

Saving throw
A dice roll made to avoid psionic or poison effects. See Saves.

Spie
Spies are player characters who have a conniving ruthless state of mind, and have combined this mentality with lethal skills.

Stat roll
See attribute roll.

Thief
A reference to those personas who are sneaky kleptomaniacs.

To hit roll
A to hit roll is a combat term indicating that an attacker is trying to damage her opponent. The higher the to hit roll the better, because the attacker must generate a number greater than her opponent's armour rating in order to hit.

Toys
Toys are special high tech equipment created on the Technological Object Yield System in the technology book. Hence the abbreviation TOYS.

Turn
A turn is a component of combat time equalling 1 minute, or 30 units, in length. A turn may take an hour or 15 seconds of playing time to complete.

Type A
This is a classification of weapons. Type A weapons are non-powered thrusting and striking weapons. Examples are swords, clubs, daggers and axes.

Type B
This is a classification of weapons. Type B weapons are non-powered missile weapons. These weapons have a ranged attack, but the attacking forces are generated by the persona. Some examples are bows, rocks, darts, and bolos.

Type C
This is a classification of weapons. These weapons are powered weapons of any sort. Powered weapons required no extensive physical effort by the persona to cause damage. Examples are lazers, rifles, crossbows or aerosols. Weapons listed as type D, E, and so on are type C weapons which attack more than once a unit.

Type D (See Type C).

Type E (See Type C).

Type F (See Type C).

Unit
The unit is the smallest component of combat time. All actions made by the persona during combat are broken down into two second intervals. A unit may take ten minutes, or an hour to play.

Ursidae
The ursidae are a race of imaginary humanoid bears.

Value
This represents the relative worth of artifacts found under technology. It does not reflect a currency, or economic system.

Vet
Vet is short for veterinarian. A vet is any persona with a leaning towards medical ability. The vet is so called because she must be prepared to work on many different races.

Weapon type
All weapons are classed into different types depending on their combat properties. See also type A, type B, and type C weapons.

Ap

Appendix C
Pre-Rolled Toys

Pre-Rolled Toy Table

Raw Die Roll	Sub Die Roll	Pre-Rolled Toy	Serial Number	Raw Die Roll	Sub Die Roll	Pre-Rolled Toy	Serial Number
	Armour			29	21-28	Plasma rifle	#PD29
01	01-15	Plastix	#PD01	30	29-36	Revolver	#PD30
02	16-30	Combat armour	#PD02	31	37-44	Gauss pistol	#PD31
03	31-40	Force field belt	#PD03	32	45-52	Lazer rifle	#PD32
04	41-50	Proflec	#PD04	33	53-60	Plastix pistol	#PD33
05	51-60	Concussion	#PD05	34	61-68	Napalm gun	#PD34
06	61-70	Compucrafted plate	#PD06	35	69-76	Semi-auto rifle	#PD35
07	71-75	Powered armour	#PD07	36	77-84	Variable lazer pistol	#PD36
08	76-85	Force field belt	#PD08	37	85-92	Slug thrower	#PD37
09	86-90	Vac suit, military	#PD09	38	93-00	Full-auto pistol	#PD38
10	91-00	Ablative	#PD10		*Medical equipment*		
	Artillery			39	01-10	Eye cleanser	#PD39
11	01-10	Whale gun	#PD11	40	11-20	Fever cont. blanket	#PD40
12	11-55	Howitzer	#PD12	41	21-30	Drug box	#PD41
13	56-00	Lazer cannon	#PD13	42	31-40	Translinker	#PD42
	Bombs			43	41-50	Metab counter	#PD43
14	01-33	Diffusion bomb	#PD14	44	51-60	Limb capper	#PD44
15	34-66	Lazer bomb	#PD15	45	61-70	Medical kit	#PD45
16	67-00	Nuclear bomb	#PD16	46	71-80	Medi-kits (TL17)	#PD46
	Grenades			47	81-90	Medi-kits	#PD47
17	01-20	Mini grenade	#PD17	48	91-00	Comfy couch	#PD48
18	21-40	Corrosive grenade	#PD18		*Miscellaneous equipment*		
19	41-60	Frag grenade	#PD19	49	01-11	Timepiece	#PD49
20	61-80	Gas grenade	#PD20	50	12-22	Antigrav belt	#PD50
21	81-00	Pin grenade	#PD21	51	23-28	Antigrav boots	#PD51
	Aerosols			52	29-34	Aerosol regulator	#PD52
22	01-20	Molecular diffusion	#PD22	53	35-40	Food culture	#PD53
23	21-40	Blinding aerosol	#PD23	54	41-46	Video recorder	#PD54
24	41-60	Web aerosol	#PD24	55	47-52	Kirlian Talisman	#PD55
25	61-80	Foam aerosol	#PD25	56	53-58	Padlock	#PD56
26	81-00	Matter detector	#PD26	57	59-64	Robotic override	#PD57
	Guns			58	65-70	Eye filters	#PD58
27	01-08	Full-auto lazer rifle	#PD27	59	71-76	AI computer	#PD59
28	09-20	Bolt action rifle	#PD28	60	77-82	Light	#PD60

Pre-Rolled Toy Table Continued

Raw Die Roll	Sub Die Roll	Pre-Rolled Toy	Serial Number
61	83-88	Compass	#PD61
62	89-94	Vet computer	#PD62
63	95-00	Super Tape	#PD63
	Miscellaneous weapons		
64	01-20	Grapple gun	#PD64
65	21-40	Grenade launcher	#PD65
66	41-60	Inertia scimitar	#PD66
67	61-80	Rocket launcher	#PD67
68	81-00	Temporal disruptor	#PD68
	Pharmaceutical		
69	01-07	Mutation effect	#PD69
70	08-17	Heal	#PD70
71	18-24	DNA	#PD71
72	25-31	DNA	#PD72
73	32-41	Heal	#PD73
74	42-48	Narcotic	#PD74
75	49-58	Periodic intum.	#PD75
76	59-68	Periodic intum.	#PD76
77	69-79	Periodic intum.	#PD77
78	80-86	Mutation	#PD78
79	87-93	Cure	#PD79
80	94-00	Inoculation	#PD80
	Random junque		
81	01-20	Microwave	#PD81
82	21-40	Gum	#PD82
83	41-60	Colouring book	#PD83
84	61-80	Fiddle junk	#PD84
85	81-00	Grimblesnarker	#PD85
	Treasure		
86	01-20	Information	#PD86
87	21-40	Relic	#PD87
88	41-60	Crystal/gem	#PD88
89	61-80	Relic	#PD89
90	81-00	Ornament	#PD90
	Spacevehicle		
91	01-05	Luxury troop trans	#PD91
92	06-35	Long range traveler	#PD92
93	36-65	Ore carrier	#PD93
94	66-70	Police boat	#PD94
95	71-00	Hyper taxi	#PD95
	Vehicle		
96	01-24	Mini car	#PD96
97	25-48	Mineral explorer	#PD97
98	49-52	Transport tank	#PD98
99	53-76	Speed Cycle	#PD99
00	77-00	Pogo planter	#PD00

Armour

PLASTIX
OWNER: Public domain 30/July/90 #PD01
NAME:Armour #9, plastix armour
WATE: 0.70kg **EXPS**: 75 **VALUE**: 1000
TL 19: 0.140kg 105 7000
SUPPORT EQ.: Not applicable
INFO: AR 800, restrictiveness 1, -7 on AID rolls.
DESC: sleek white armour

COMBAT ARMOUR
OWNER: Public domain 30/July/90 #PD02
NAME:Amour #3, combat armour
WATE: 2.0kg **EXPS**: 100 **VALUE**: 2000
TL 1: 20.0kg 200 20
SUPPORT EQ.: None applicable
INFO: AR 725, very low tech
DESC: Very bulky and heavy garment

FORCE FIELD BELT
OWNER: Public domain 30/July/90 #PD03
NAME:Armour #7 force field belt
WATE: 0.75kg **EXPS**: 500 **VALUE**: 15000
TL 10:
SUPPORT EQ.: 1 magnetic cell
INFO: absorbs 75 HPS kinetic dmg per battery set
DESC: heavy thick electronic fanny pack

FLEXION
OWNER: Public domain 29/July/90 #PD04
NAME:Armour #6, Flexion (proflec)
WATE: 1.9kg **EXPS**: 334 **VALUE**: 500
TL 10:
SUPPORT EQ.: None
INFO: projectiles+2 res. +150 **AR** velocity attacks (guns)
DESC: Cloak of random scales on dense cloth

CONCUSSION ARMOUR
OWNER: Public domain 29/July/90 #PD05
NAME:Armour #5, concussion
WATE: 2.0kg **EXPS**: 200 **VALUE**: 1200
TL 10:
SUPPORT EQ.: None
INFO:AR of 625, absorbs 1/2 crushing damage
DESC: Bulky pillowy crash suit

COMPUCRAFTED PLATE MAIL
OWNER: Public domain 29/July/90 #PD06
NAME:Armour #4, compucrafted
WATE: 4.5kg **EXPS**: 300 **VALUE**: 800
TL 10:
SUPPORT EQ.: Can of oil
INFO: AR 775, 1 restrictiveness
DESC: Very black suit of medieval knight's armour

POWERED ARMOUR
OWNER: Public domain 29/July/90 #PD07
NAME:Armour #10, powered armour
WATE: 300.0kg **EXPS**: 1000 **VALUE**: special
TL 10:
SUPPORT EQ.: Special
DESC: enormous semi-dismantled vac suit
INFO: Anyone stepping in vac suit will activate auto surgeon. This will enmesh the persona with the powered armour
AWE +4, CON +2, DEX +5, INT +3, PSTR +8
Head:
Communicator: 10 km range
Vizaud: +1 AWE
Medical system: +2 CON
Left Arm:
3 peripheral points
Right Arm:
3 peripheral points
Vizaud: +3 AWE
Front Torso:
4 peripheral points
2 storage compartments: 2x wate allowance capacity
Computer system: +3 INT
Back Torso:
4 peripheral points
2 storage compartments: 2x wate allowance capacity
Left Leg:
2 peripheral points
2 storage compartments: 1/2 wate allowance capacity
7 grenades: #4, cryoblast 3d10 damage=% freeze, 8hexes
Right Leg:
2 peripheral points
2 storage compartments: 1/2 wate allowance capacity

FORCE FIELD BELT
OWNER: Public domain 29/July/90 #PD08
NAME:Armour #7, Force field belt
WATE: 3.0kg **EXPS**: 500 **VALUE**: 600000
TL 10:
SUPPORT EQ.: 3 x plasmoid batteries
INFO: Absorbs 125 HPS in kinetic damage per battery set.
DESC: Fat green and purple fanny pack

MILITARY VAC SUIT
OWNER: Public domain 29/July/90 #PD09
NAME:Armour #13, vac suit (military)
WATE: 15.0kg **EXPS**: 350 **VALUE**: 250000
TL 10:
SUPPORT EQ.: None
INFO: AR 700, 1/2 damage = %Rupture, 10 h/u ZOG, 6 days endurance, lazer commmunicator, explodes off in 1 unit
DESC: dark black vac suit with stars painted on it

ABLATIVE
OWNER: Public domain 29/July/90 #PD10
NAME: Armour #1, Ablative
WATE: 1.5kg **EXPS**: 200 **VALUE**: 900
TL 10:
SUPPORT EQ.: None, small mirror
INFO: AR 625, absorbs 400 HPS in lazer damage
DESC: Dark silver armour covered with green styrofoam

Artillery

WHALE GUN
OWNER: Public domain 1/Aug./90 #PD11
NAME:Artillery #12, Whale gun (grapple gun)
WATE: 225.0kg **EXPS**: 700 **VALUE**: 400000
TL 10:
SUPPORT EQ.: None
DESC: Large harpoon cannon whale gun.
INFO: type C; 2/150h range; 12d6dmg=5% grapple; 45 malf.; 10 tonne target at 5 h/u

HOWITZER
OWNER: Public domain 1/Aug./90 #PD12
NAME:Artillery #3, Howitzer (bolt action rifle)
WATE: 278.0kg **EXPS**: 400 **VALUE**: 50000
TL 19: 0.8kg 1120 85000
SUPPORT EQ.: ammo 4.5kg and 100 value
DESC: great big gun with great big shells
INFO: c;12,1200h range; 12d12 dmg; 2d6h radius; 1 shell; malf <15

LAZER CANNON
OWNER: Public domain 1/Aug./90 #PD13
NAME:Artillery #15, Lazer cannon (lazer rifle)
WATE: 278.0kg **EXPS**: 500 **VALUE**: 600000
TL 10:
SUPPORT EQ.: 140 liquid batteries
DESC: dark blue pipe with button and dial setting.
INFO: c; 15, 1500h range; 15d10; 2d6 h radius; malf. <30

Bombs

DIFFUSION BOMB
OWNER: Public domain 2/Aug/90 #PD14
NAME: Bomb #24, diffusion (molecular diffusion #35)
WATE: 100.0kg **EXPS**: 700 **VALUE**: 120000
TL 10:
SUPPORT EQ.: None
INFO: 140h radius; 12d8 x 10 damage
DESC: a big gold sphere

LAZER BOMB
OWNER: Public domain 2/Aug/90 #PD15
NAME:Bomb #5, lazer (energy grenade #6)
WATE: 25.0kg **EXPS**: 300 **VALUE**: 250000
TL 10:
SUPPORT EQ.: None
DESC: a big gold bag
INFO: 150 by 150 by 10h area of effect, contours with the terrain; 12d4 x 10 damage

NUCLEAR BOMB
OWNER: Public domain 2/Aug/90 #PD16
NAME:Bomb #7, nuclear (fusion grenade #9)
WATE: 50.0kg **EXPS**: 300 **VALUE**: 100000
TL 10:
SUPPORT EQ.: None
DESC: talking biffy the clown doll, pull string detonator
INFO: 200h radius of effect takes 10d12 x 10 damage
200h tiny, small, or medium will explode
300h immolation
400h blinding 1 to 8 hours
600h radiation attack 1/10 the damage
All effects are cumulative.

Grenades and Aerosols

MINI GRENADES
OWNER: Public domain 2/Aug/90 #PD17
NAME:Grenade#13, mini grenades
WATE: 0.1kg **EXPS**: 170 **VALUE**: 1000
TL 10:
SUPPORT EQ.: None
DESC: 3 small pink bananas
INFO: 1/4 PSTR range; 3d6 damage, must hit target AR t=700, s=600, m=500, l=400, g=300; can throw 3 at once; cap trigger

CORROSIVE GRENADES
OWNER: Public domain 2/Aug/90 #PD18
NAME:Grenade#3, corrosive grenade
WATE: 1.0kg **EXPS**: 200 **VALUE**: 300
TL 25: 0.01kg 660 60000
SUPPORT EQ.: None
DESC: 1 teensy silver bag
INFO: PSTR range; 3h radius; 5d8 damage, corrodes 2d10 for d8 units; twist trigger; note AID -13

FRAGMENTATION GRENADES
OWNER: Public domain 2/Aug/90 #PD19
NAME:Grenade#8, fragmentation grenade
WATE: 0.85kg **EXPS**: 125 **VALUE**: 75
TL 10:
SUPPORT EQ.: None
DESC: 2 pink cubes
INFO: PSTR range; 1h radius; 5d10 damage; fuse trigger

GAS GRENADE
OWNER: Public domain 2/Aug/90 #PD20
NAME:Grenade#10, gas grenade (vomiting)
WATE: 0.95kg **EXPS**: 275 **VALUE**: 250
TL 10:
SUPPORT EQ.: None
DESC: 1 yellow cube
INFO: PSTR range; 13h radius; save vs intens 4d6 or vomit for d6 minutes; cap trigger; cloud lasts d8 units

PIN GRENADE
OWNER: Public domain 2/Aug/90 #PD21
NAME:Grenade#17, pin grenade (unconscious)
WATE: 0.95kg **EXPS**: 275 **VALUE**: 250
TL 10:
SUPPORT EQ.: None
DESC: 1 bar of green Staykleen soap
INFO: PSTR range; 4h radius; damage d10; save vs intens 3d6 or unconscious for d4 hours; fuse trigger

MOLECULAR DIFFUSION AEROSOL
OWNER: Public domain 2/Aug/90 #PD22
NAME:Aerosol #35, molecular diffusion
WATE: 2.0kg **EXPS**: 300 **VALUE**: 2500
TL 19: 0.4kg 480 17500
SUPPORT EQ.: None
DESC: 3 blue canisters
INFO: 10h range; 7h radius; 12d8 damage; note AID -7

BLINDING AEROSOL
OWNER: Public domain 2/Aug/90 #PD23
NAME:Aerosol #24, blinding
WATE: 2.0kg **EXPS**: 300 **VALUE**: 50
TL 10:
SUPPORT EQ.: None
DESC: 8 tan canisters
INFO: 12h range; 3h radius; save vs 2d10 poison or blind for d10 minutes; cloud lasts d12 units

WEB AEROSOL
OWNER: Public domain 2/Aug/90 #PD24
NAME:Aerosol #43, web
WATE: 2.0kg **EXPS**: 300 **VALUE**: 1000
TL 14: 1.4kg 300 1400
SUPPORT EQ.: None
DESC: 3 pink plastic spiders
INFO: 8h range; 8 by 1h swath; in area of effect trapped; lasts in 2d8 minutes; free d1000 PSTR roll; 1% suffocate

FOAM AEROSOL
OWNER: Public domain 2/Aug/90 #PD25
NAME:Aerosol #29, foam
WATE: 2.0kg **EXPS**: 100 **VALUE**: 250
TL 6: 4.0kg 480 150
SUPPORT EQ.: None
DESC: 1 green canister
INFO: no range; 8h radius 2h high pad of foam; permanent and breathable; hardens in 4 minutes

MATTER DETECTOR AEROSOL
OWNER: Public domain 2/Aug/90 #PD26
NAME:Aerosol #33, matter detector
WATE: 2.0kg **EXPS**: 300 **VALUE**: 40000
TL 10:
SUPPORT EQ.: None
DESC: 5 gold canisters, in a six pack of pop
INFO: no range; 12h radius; see all hidden, +65 to hit; d4 minutes

Guns

FULL-AUTO LAZER RIFLE
OWNER: Public domain 2/Aug./90 #PD27
NAME:Gun #16, full-auto lazer rifle (flotto)
WATE: 4.0kg **EXPS**: 700 **VALUE**: 12000
TL 19: 0.8kg 1120 85000
SUPPORT EQ.: 3 x Liquid batz. (45 shots)
INFO: c, f, spec.; 120h -60; 3-30 MP; +50; malf. <30.
DESC: dark blue pipe with button and dial setting.

BOLT ACTION RIFLE
OWNER: Public domain 2/Aug/90 #PD28
NAME:Gun #6, bolt action rifle (low caliber)
WATE: 3.1kg **EXPS**: 400 **VALUE**: 500
TL 2: 21.7kg 800 5
SUPPORT EQ.: Ammo 200 gm per round (15 shots)
INFO: c; 150h -50; 3d8 LP; malf. <10.
DESC: great big, single shot blunderbuss

PLASMA RIFLE
OWNER: Public domain 2/Aug/90 #PD29
NAME:Gun #33, plasma rifle
WATE: 4.0kg **EXPS**: 700 **VALUE**: 360000
TL 10:
SUPPORT EQ.: Small drop heavy water, 3 solar batteries
INFO: f; 160h -50; 4d12; malf. <8 (15 shots)
DESC: sleek energy rifle

REVOLVER
OWNER: Public domain 2/Aug/90 #PD30
NAME:Gun #38, revovler
WATE: 1.0kg **EXPS**: 250 **VALUE**: 200
TL 10:
SUPPORT EQ.: Ammo 10 gm shells (5 shots)
INFO: c; 80h, -66; 2d8; malf< 5 dud shell
DESC: revolver

GAUSS PISTOL
OWNER: Public domain 2/Aug/90 #PD31
NAME:Gun #21, gauss pistol (extra high powered)
WATE: 1.8kg **EXPS**: 500 **VALUE**: 3000
TL 10:
SUPPORT EQ.: Ammo clip of 10 shots
INFO: d; 100h, -55; 5d10 XHP; malf 1
DESC: Bulky pistol that goes klunka when fired

LAZER RIFLE
OWNER: Public domain 2/Aug/90 #PD32
NAME:Gun #29, lazer rifle
WATE: 3.6kg **EXPS**: 500 **VALUE**: 6000
TL 10:
SUPPORT EQ.: 3 solid cells (15 shots)
INFO: c; 150h, -40; 3d10 MP; malf 20
DESC: Rifle with no barrel

PLASTIX PISTOL
OWNER: Public domain 3/Aug/90 #PD33
NAME:Gun #34, plastix pistol (extra low powered)
WATE: 0.9kg **EXPS**: 500 **VALUE**: 2000
TL 10:
SUPPORT EQ.: 90 gm ammo cylinder (10 shots)
INFO: e; 35h, -85; 2d10 XLP; malf 10
DESC: Pistol

NAPALM GUN
OWNER: Public domain 3/Aug/90 #PD34
NAME:Gun #30, napalm gun
WATE: 4.5kg **EXPS**: 900 **VALUE**: 12000
TL 10:
SUPPORT EQ.: special 300 gm shell (5 shots)
DESC: looks like a flame thrower
INFO: c; 15h, -250 (19 by 1h swath); 10d10 damage=% chance immolation, burn d10 units for 2d10; malf<25

SEMI-AUTOMATIC RIFLE
OWNER: Public domain 3/Aug/90 #PD35
NAME:Gun #42, semi-automatic rifle (extra high powered)
WATE: 3.8kg **EXPS**: 600 **VALUE**: 2800
TL 10:
SUPPORT EQ.: 40 gm ammunition (25 shots)
DESC: a big rifle
INFO: c, d, e; 110h, -44; 4d12; malf<20

VARIABLE LAZER PISTOL
OWNER: Public domain 3/Aug/90 #PD36
NAME:Gun #48, variable lazer pistol
WATE: 1.5kg **EXPS**: 700 **VALUE**: 9000
TL 16: 0.7kg 700 22500
SUPPORT EQ.: 4 magnetic batteries(20 charges)
DESC: a big flashlight, with an adjustment dial
INFO: c; 180h, -80; 4d10=3 charges, 4d8=2, 3d10=1, stun 2d8 intens for 3d10 units, flashlight; malf<20

SLUG THROWER
OWNER: Public domain 3/Aug/90 #PD37
NAME:Gun #43, slug thrower
WATE: 0.25kg **EXPS**: 300 **VALUE**: 250
TL 10:
SUPPORT EQ.: 90 gm cartridge (20 shots)
DESC: small stubby encased weapon
INFO: c, d; 40h, -50; 3d6; malf<3

FULL-AUTOMATIC PISTOL
OWNER: Public domain 3/Aug/90 #PD38
NAME:Gun #17, full-automatic pistol
WATE: 1.5kg **EXPS**: 350 **VALUE**: 1000
TL 10:
SUPPORT EQ.: 15 gm ammo (15 shots)
DESC: small stubby pistol-like weapon
INFO: c, d, spec; 60h, -70; 2d8; malf<20

Medical Equipment

EYE CLEANSERS
OWNER: Public domain 3/Aug/90 #PD39
NAME:Medical equipment #24, eye cleansers
WATE: 0.15kg **EXPS**: 250 **VALUE**: 3000
TL 10:
SUPPORT EQ.: 4 pairs (one use)
DESC: opaque swimming goggles
INFO: negate chemical damage, +8 on eye related PT rolls

FEVER CONTROL BLANKET
OWNER: Public domain 3/Aug/90 #PD40
NAME:Medical equipment #25, fever control blanket
WATE: 0.05kg **EXPS**: 50 **VALUE**: 150
TL 10:
SUPPORT EQ.: 1 blanket (as needed)
DESC: crinkly silver sheet
INFO: maintains normal body temp in -10 to +50 degree weather; +10 on temp related PT rolls

DRUG BOX
OWNER: Public domain 3/Aug/90 #PD41
NAME:Medical equipment #23, drug box (analyzer)
WATE: 10.0kg **EXPS**: 250 **VALUE**: 50000
TL 4: 33.0kg 300 20000
SUPPORT EQ.: 5 dynamo batteries (1000 minutes)
DESC: box with small droor, keyboard and printout
INFO: Identifies drugs 4/(TL drug + d6), +50 drug PT rolls

TRANSLINKER
OWNER: Public domain 3/Aug/90 #PD42
NAME:Medical equipment #47, translinker
WATE: 2.0kg **EXPS**: 750 **VALUE**: 1000000
TL 10:
SUPPORT EQ.: None
DESC: electronic hair net, keyboard deck, and variable jack
INFO: +50 artifact PT rolls, allows persona to neurally integrate with an artifact

METAB COUNTER
OWNER: Public domain 3/Aug/90 #PD43
NAME:Medical equipment #34, metab counter
WATE: 1.0kg **EXPS**: 300 **VALUE**: 25000
TL 10:
SUPPORT EQ.: 4 magnetic batteries (1000 units)
DESC: hand held box with different coloured lights
INFO: +15 on vet PT rolls, +10 on biologist PT rolls

LIMB CAPPER
OWNER: Public domain 3/Aug/90 #PD44
NAME:Medical equipment #30, limb capper
WATE: 0.15kg **EXPS**: 50 **VALUE**: 200
TL 13: 0.12kg 50 280
SUPPORT EQ.: One use, 4 items
DESC: flexible rubber bowl, inside coated with goo
INFO: +5 on tissue preserving PT rolls

MEDICAL KIT
OWNER: Public domain 3/Aug/90 #PD45
NAME:Medical equipment #33, medical kit
WATE: 5.0kg **EXPS**: 2000 **VALUE**: 500000
TL 8: 6.5kg 2000 400000
SUPPORT EQ.: 6 solid batteries, 50 uses
DESC: computerized kit full of sensors and bulk medical kits
INFO: +42 on vet PT rolls

MEDI-KITS
OWNER: Public domain 3/Aug/90 #PD46
NAME:Medical equipment #31, medi-kits
WATE: 0.2kg **EXPS**: 100 **VALUE**: 215
TL 17: 0.08kg 100 835
SUPPORT EQ.: 6 kits, one use (melt after opening)
DESC: high tech first aid kit
INFO: +20 on vet PT rolls

MEDI-KITS
OWNER: Public domain 3/Aug/90 #PD47
NAME:Medical equipment #31, medi-kits
WATE: 0.2kg **EXPS**: 100 **VALUE**: 215
TL 10:
SUPPORT EQ.: 10 kits, one use (melt after opening)
DESC: high tech first aid kit
INFO: +20 on vet PT rolls

COMFY COUCH
OWNER: Public domain 3/Aug/90 #PD48
NAME:Medical equipment #19, comfy couch
WATE: 0.2kg **EXPS**: 100 **VALUE**: 215
TL 10:
SUPPORT EQ.: 10 kits, one use (melt after opening)
DESC: oversized couch with stuf hanging off it
INFO: this is an antigrav gurney that raises the patient off the the bed as well as the bed itself. +10 on stabilize PT rolls. Built in equipment is listed below
Cardio Vest (#15): +25 restoration PT rolls
Injury Detector (#27): +50 on diagnostic PT rolls
Respirator (#43): +15 resuscitation PT rolls
Stasis Bags (#45): store 150 kg indefinately safe in any temp up to 10 bags non-reuseable

Miscellaneous Equipment

TIMEPIECE
OWNER: Public domain 3/Aug/90 #PD49
NAME:Miscellaneous equipment #61, timepiece
WATE: Nil **EXPS**: 50 **VALUE**: 2000
TL 10:
SUPPORT EQ.: None
DESC: Paper thin adhesive strip with glowing digits
INFO: Gives time, date, temp, altitude, etc; adheres to flesh

ANTIGRAV BELT
OWNER: Public domain 3/Aug/90 #PD50
NAME:Miscellaneous equipment #6, antigrav belt
WATE: 0.25 **EXPS**: 375 **VALUE**: 5000
TL 10:
SUPPORT EQ.: 1 dynamo
DESC: belt that has a glowing red light
INFO: can hold up trousers via antigrav

ANTIGRAV BOOTS
OWNER: Public domain 4/Aug/90 #PD51
NAME:Miscellaneous equipment #7, antigrav boots
WATE: 16.0kg **EXPS**: 250 **VALUE**: 250000
TL 10:
SUPPORT EQ.: 8 dynamo batteries (532000 units use)
DESC: big silver boots with signal lights, and headlights
INFO: travel at 25 h/u, 150kg; handling level = DEX

AEROSOL REGULATOR
OWNER: Public domain 4/Aug/90 #PD52
NAME:Miscellaneous equipment #2, aerosol regulator
WATE: 0.5kg **EXPS**: 150 **VALUE**: 10000
TL 10:
SUPPORT EQ.: must be attached to an aerosol
DESC: screw on valve
INFO: increase aerosol uses by d4

FOOD CULTURE
OWNER: Public domain 4/Aug/90 #PD53
NAME:Miscellaneous equipment #35, food culture
WATE: 1.5kg **EXPS**: 103 **VALUE**: 5000
TL 10:
SUPPORT EQ.: Does not require knife and fork
DESC: large 20 sided sponge on a stick
INFO: supplies food and water for day, grows back 6 hours

VIDEO RECORDER
OWNER: Public domain 4/Aug/90 #PD54
NAME:Miscellaneous equipment #51, recorders (video)
WATE: 10.6kg **EXPS**: 250 **VALUE**: 29000
TL 13: 8.4kg 250 37500
SUPPORT EQ.: 3 solid cells (532000 units recording)
DESC: computer with monitor and two prtable units
INFO: record edit and reproduce with digital information

KIRLIAN TALISMAN
OWNER: Public domain 4/Aug/90 #PD55
NAME: Miscellaneous equipment #42, kirlian talisman
WATE: nil. **EXPS**: 200 **VALUE**: special
TL 10:
SUPPORT EQ.: As needed, or one use
DESC: hand sized religious artifact
INFO: +15 on knite PT rolls, zap anti-knites d4-1 MSTR

LOCKS
OWNER: Public domain 4/Aug/90 #PD56
NAME:Miscellaneous equipment #45, locks
WATE: 1.0kg **EXPS**: 200 **VALUE**: 10
TL 7: 1.7kg 200 7
SUPPORT EQ.: 3 spare keys
DESC: big padlock
INFO: +20 for spiePT rolls when bypassing similar locks

ROBOTIC OVERRIDE
OWNER: Public domain 4/Aug/90 #PD57
NAME:Miscellaneous equipment #53, robotic override
WATE: 18.0kg **EXPS**: 2006 **VALUE**: 994000
TL 10:
SUPPORT EQ.: 5 solid cells (5 uses)
DESC: computer keyboard with a tiny transmitting dish
INFO: 10h range; takes d4-1 units must hit each unit; then save vs 2d10 poison; +20 on mech PT rolls

FILTERS
OWNER: Public domain 4/Aug/90 #PD58
NAME:Miscellaneous equipment #33, filters (eyes)
WATE: nil. **EXPS**: 350 **VALUE**: 2000
TL 10:
SUPPORT EQ.: 6 pairs
DESC: silver contact lenses
INFO: contact lenses that go opaque vs blinding attacks; double MSTR cannot be less than 16

COMPUTERS
OWNER: Public domain 4/Aug/90 #PD59
NAME:Miscellaneous equipment #26, computer (AI)
WATE: 88.0kg **EXPS**: 1000 **VALUE**: 80.0M
TL 2: 1071.0kg 1500 16.75M
SUPPORT EQ.: power source
DESC: room full of vacuum tubes
INFO: G4MOM (level 5 artificial intelligence) talks kindly and pedantically about the following topics:
Administration
Appraisals
Banking
Combat control (tactics)
History

LIGHTS
OWNER: Public domain 4/Aug/90 #PD60
NAME:Miscellaneous equipment #44, light (target glow)
WATE: 2.0kg **EXPS**: 10 **VALUE**: 15000
TL 10:
SUPPORT EQ.: 1 psionic cell (recharges by sapping MSTR)
DESC: flash light covered in duct tape
INFO: 32h x 2h area of effect; emits no light but targets glow in the dark. +90 to hit them

Ap

COMPASS
OWNER: Public domain 4/Aug/90 #PD61
NAME:Miscellaneous equipment #24, compass
WATE: 1.5kg **EXPS**: 93 **VALUE**: 250
TL 16: 0.75kg 93 675
SUPPORT EQ.: As needed
DESC: compass with buttons
INFO: programmable compass; nomads +12 on travel PT rolls, and +8 on all other PT rolls

COMPUTER
OWNER: Public domain 4/Aug/90 #PD62
NAME:Miscellaneous equipment #26, computer (class)
WATE: 10.0kg **EXPS**: 900 **VALUE**: 3.7M
TL 10:
SUPPORT EQ.: 3 solar batteries
DESC: lap top computer with a red cross painted on it
INFO: veterinarian class computer add 3d10 to all vet PT rolls when searching info; 1 roll per 3 levels take highest roll

JOINER
OWNER: Public domain 4/Aug/90 #PD63
NAME:Miscellaneous equipment #41, joiner (tape)
WATE: 0.5kg **EXPS**: 100 **VALUE**: 250
TL 10:
SUPPORT EQ.: 2 rolls
DESC: roll of tape, with tubes in plastic bag
INFO: programmable tape; use fixers to time tape for adhesion or release; melts a permanent seal of edges

Miscellaneous Weapons

GRAPPLE GUN
OWNER: Public domain 4/Aug/90 #PD64
NAME:Miscellaneous weapon #11, grapple gun
WATE: 3.0kg **EXPS**: 330 **VALUE**: 1006
TL 10:
SUPPORT EQ.: 1 grapple
DESC: pistol with a bundle of barbs sticking out the front
INFO: c; 15h, -1000; 4d6 damage=5% chance of sticking to target; 130kg wate reel in at 3 h/u; no wate 6 h/u

GRENADE LAUNCHER
OWNER: Public domain 4/Aug/90 #PD65
NAME:Miscellaneous weapon #13, grenade launcher
WATE: 4.0kg **EXPS**: 350 **VALUE**: 4500
TL 10:
SUPPORT EQ.: 6 magnetic batteries (10 shots)
DESC: pistol with a huge caliber
INFO: c; 90h, -125; grenade wate 0.5 to 2.0kg; can hold 3

INERTIA WEAPON
OWNER: Public domain 4/Aug/90 #PD66
NAME:Miscellaneous weapon #14, inertia scimitar
WATE: 2.1kg **EXPS**: 300 **VALUE**: 700
TL 10:
SUPPORT EQ.: 2 liquid batteries (10 hits)
DESC: scimitar with a battery pack
INFO: 10 + 3d8 (13-34) damage per hit no to hit bonus

ROCKET LAUNCHER
OWNER: Public domain 4/Aug/90 #PD67
NAME:Miscellaneous weapon #20, rocket launcher
WATE: 10.0kg **EXPS**: 230 **VALUE**: 5000
TL 10:
SUPPORT EQ.: 8 rounds 1 kg rockets
DESC: tube with shoulder pad and clips holding 8 rockets
INFO: c; 200h, -20; 6d10 damage in 5h radius, or tripke for direct hit (-300 to hit); holds 2 rockets; hex behind takes d10; malfunction on less than 40; special rocket d4 decoys +100 to hit per decoy

TEMPORAL DISRUPTOR
OWNER: Public domain 4/Aug/90 #PD68
NAME:Miscellaneous weapon #24, temporal disruptor
WATE: 4.0kg **EXPS**: 475 **VALUE**: 100000
TL 10:
SUPPORT EQ.: 1 solid battery (7 attacks)
DESC: pistol
INFO: c; 20h, -100; 2h radius 3d12=1 year aging

Pharmaceuticals

MUTATION EFFECT
OWNER: Public domain 4/Aug/90 #PD69
NAME:Pharmaceutical #7, mutation effect
WATE: Nil. **EXPS**: 300 **VALUE**: 2.0M
TL 10:
SUPPORT EQ.: canine, hallucinate for d10 minutes
DESC: 3 black and tan pills, no labelling
INFO: 3% of no side effect; skin structure change (physical #45) black and tan thatched skin +80 AR; lasts 2d100 hours

HEAL
OWNER: Public domain 4/Aug/90 #PD70
NAME:Pharmaceutical #4, heal
WATE: Nil. **EXPS**: 100 **VALUE**: 2.0M
TL 10:
SUPPORT EQ.: florian, shakes for d10 days
DESC: 17 applications of green lotion, no labelling
INFO: 30% of no side effect; heals 10 HPS

DNA
OWNER: Public domain 4/Aug/90 #PD71
NAME:Pharmaceutical #2, DNA (sensory)
WATE: Nil. **EXPS**: 100 **VALUE**: 2.0M
TL 10:
SUPPORT EQ.: human, hunger for d10 days
DESC: 2 applications of blue lotion, confusing labelling
INFO: 10% of no side effect; returns function of sensory organ by growing new ones; takes 10 to 100 hours

DNA
OWNER: Public domain 4/Aug/90 #PD72
NAME:Pharmaceutical #2, DNA (extternal structure)
WATE: Nil. **EXPS**: 100 **VALUE**: 2.0M
TL 10:
SUPPORT EQ.: canine, amnesia for d10 hours
DESC: 2 grey nasal suppositories, fully labelled
INFO: 10% of no side effect; returns function of damaged limbs by growing a new one; takes 10 to 100 hours

HEAL
OWNER: Public domain 4/Aug/90 #PD73
NAME:Pharmaceutical #4, heal
WATE: Nil. **EXPS**: 100 **VALUE**: 345000
TL 12: Nil 100 431000
SUPPORT EQ.: insectoid, martyr personality for d10 hours
DESC: 6 blue anal suppositories, mis-labelled
INFO: 30% of no side effect; heals 10% of HPS max plus 3 points of DEX

NARCOTIC
OWNER: Public domain 4/Aug/90 #PD74
NAME:Pharmaceutical #3, Narcotic
WATE: Nil. **EXPS**: 100 **VALUE**: 345000
TL 12: Nil 100 431000
SUPPORT EQ.: equine, aphrodisiac for d10 days
DESC: 2 doses of green lotion, mis-labelled
INFO: 6% of no side effect; euphoria, hallucinations, and outbursts of activity; 10d1000 minutes; 1/2 MSTR, -d6 on DEX, AWE, and INT

PERIODIC INTUMESCENT
OWNER: Public domain 4/Aug/90 #PD75
NAME:Pharmaceutical #8, periodic intumescent (PSTR)
WATE: Nil. **EXPS**: 250 **VALUE**: 200000
TL 10:
SUPPORT EQ.: equine, aichmophobia (edges) for d10 days
DESC: 4 gold injections, fully-labelled
INFO: 10% of no side effect; 90% double, rest triple PSTR, max is 29; duration 10d6 minutes

PERIODIC INTUMESCENT
OWNER: Public domain 4/Aug/90 #PD76
NAME:Pharmaceutical #8, periodic intumescent (MSTR)
WATE: Nil. **EXPS**: 250 **VALUE**: 200000
TL 10:
SUPPORT EQ.: aquarians turn green permanently
DESC: 4 green pills, mis-labelled
INFO: 10% of no side effect; 90% double, rest triple MSTR; duration 10d6 minutes

PERIODIC INTUMESCENT
OWNER: Public domain 4/Aug/90 #PD77
NAME:Pharmaceutical #8, periodic intumescent (DEX)
WATE: Nil. **EXPS**: 250 **VALUE**: 200000
TL 12: Nil 250 250000
SUPPORT EQ.: aquarians: amnesia d10 minutes
DESC: 4 silver injections, mis-labelled
INFO: 10% of no side effect; 90% double, rest triple DEX; max 25; duration 10d6 minutes

MUTATION
OWNER: Public domain 4/Aug/90 #PD78
NAME:Pharmaceutical #6, mutation
WATE: Nil. **EXPS**: 250 **VALUE**: 2000000
TL 12: Nil 250 2500000
SUPPORT EQ.: human: aphrodisiac d10 days
DESC: 4 blue injections, no labelling
INFO: 3% of no side effect; skin colour green, heat generation (#18), warm at -20oC body temp 42oC, flame attack 2h per PSTR, 3d6 +1 per level, heat does 2x damage

CURE
OWNER: Public domain 4/Aug/90 #PD79
NAME:Pharmaceutical #1, cure (thermal problems)
WATE: Nil. **EXPS**: 250 **VALUE**: 1000
TL 3: Nil 325 300
SUPPORT EQ.: ursidae, unconscious d10 minutes
DESC: 10 doses silver liquid, no labelling
INFO: 3% of no side effect; eliminates hypo/ hyprethermia

INOCULATION
OWNER: Public domain 4/Aug/90 #PD80
NAME:Pharmaceutical #5, inoculation (unconsciousness)
WATE: Nil. **EXPS**: 100 **VALUE**: 1000000
TL 18 Nil 140 5000000
SUPPORT EQ.: rodentia, feebleness d10 minutes
DESC: 4 red derms, badly labelled
INFO: 18% of no side effect; half DSS roll, double CON, and 1/2 duration when challenged with unconsciousness

Random Junque

APPLIANCE
OWNER: Public domain 4/Aug/90 #PD81
NAME:Random junk #1, appliance(microwave)
WATE: 40.0kg. **EXPS**: 0 **VALUE**: 1
TL 14: 28.0kg 0 2
SUPPORT EQ.: power source
DESC: oven that goes bing and hums
INFO: will cook, burn and leav luke warm anything cooked in this device

FOODSTUFFS
OWNER: Public domain 4/Aug/90 #PD82
NAME:Random junk #6, foodstuff (gum)
WATE: nil.. **EXPS**: 0 **VALUE**: 7
TL 10:
SUPPORT EQ.: mouth
DESC: wad of lemon flavored chewy stuff
INFO: can chew with flavour indefinately

BOOK
OWNER: Public domain 4/Aug/90 #PD83
NAME:Random junk #3, book (colouring)
WATE: nil.. **EXPS**: 0 **VALUE**: 10
TL 10:
SUPPORT EQ.: coloured pens needed
DESC: book of line drawings ready to be coloured
INFO: colouring book, give a nothing art 1

FIDDLE JUNK
OWNER: Public domain 4/Aug/90 #PD84
NAME:Random junk #5, fiddle junk
WATE: nil. **EXPS**: 0 **VALUE**: 6
TL 19: nil. 0 42
SUPPORT EQ.: none
DESC: small device with levers and springs
INFO: levers cause the toy to randomly go whiz or click

LIVESTOCK
OWNER: Public domain 4/Aug/90 #PD85
NAME:Random junk #8, livestock(grimblesnarker)
WATE: 2.0kg.. **EXPS**: 0 **VALUE**: 8
TL 10:
SUPPORT EQ.: must be fed lemon flavoured gum
DESC: tiny (2kg); Head: anenome, Torso: amoeba, Arms: clam, Legs: paramecium; undefined blob of jelly that comes to the surface of glass bowl to make baying noises
INFO: 15 HPS; 3 h/u water only; no attacks; can survive out of water, but will bay loudly

Treasure

INFORMATION
OWNER: Public domain 4/Aug/90 #PD86
NAME:Treasure #4, information (computer storage)
WATE: Nil. **EXPS**: 0 **VALUE**: 95.0 M
TL 10:
SUPPORT EQ.: Needs computer to be read
DESC: wimpy looking lump of biosoft
INFO: unique accounting procedure for corporations, it will save them billions in taxes; will pay value without question

RELIC
OWNER: Public domain 4/Aug/90 #PD87
NAME:Treasure #5, relic (personal item-hair net)
WATE: Nil. **EXPS**: 0 **VALUE**: 9900
TL 10:
SUPPORT EQ.: sits in a glass case
DESC: soft brown hair net in a glass case
INFO: hair net of a famous media net actress

CRYSTAL/GEM
OWNER: Public domain 4/Aug/90 #PD88
NAME:Treasure #2, crystal/gem (diamond)
WATE: 0.12kg **EXPS**: 0 **VALUE**: 250000
TL 10:
SUPPORT EQ.: None
DESC: diamond
INFO: none

RELIC
OWNER: Public domain 4/Aug/90 #PD89
NAME:Treasure #5, specialized random junque (clothing)
WATE: Nil. **EXPS**: 0 **VALUE**: 65.0 M
TL 10:
SUPPORT EQ.:
DESC: very nice sweater
INFO: sweater worn by religious figure has special value

ORNAMENT
OWNER: Public domain 4/Aug/90 #PD90
NAME:Treasure #3, ornament
WATE: Nil. **EXPS**: 0 **VALUE**: 930
TL 10:
SUPPORT EQ.:
DESC: tube of fine jasper coloured paint
INFO: hand paint ornament full of fine jasper

Spacevehicles

LUXURY TROOP TRANSPORT
OWNER: Public domain 4/Aug/90 #PD91
NAME: spacevehicle, ornament
DESC: great big spaceship
INFO: See below
HULL

Size:	4300 tonnes
Composition:	Alloy
Strength:	1500

DRIVES (starship)

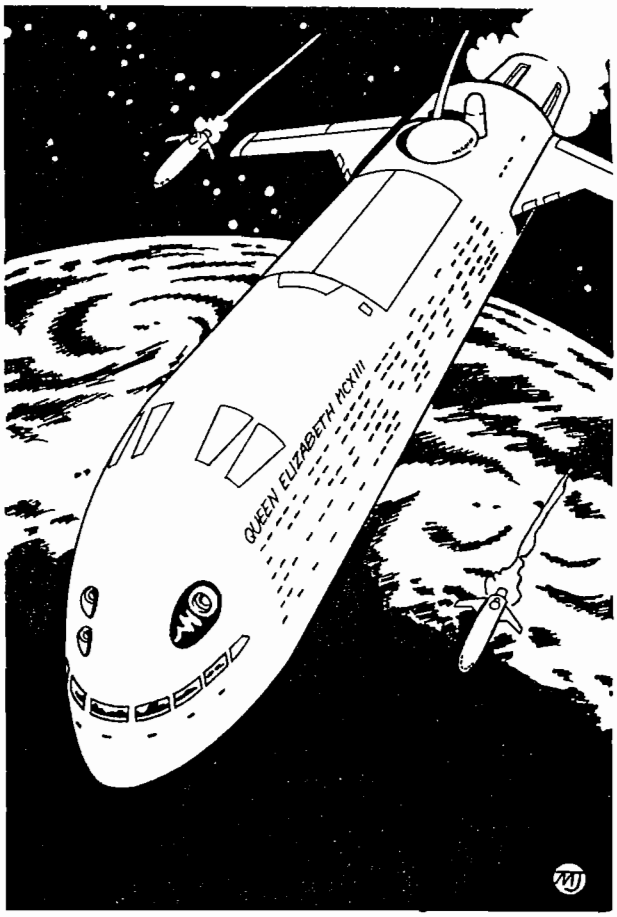
Drive	Type	Size	Level	Effect
Exatmo	Gravetics	301	7	0.7 C
Inatmo	Propellers	301	7	mach 7
Special	Warp	172	4	4 light yrs

FUEL

Type	solid
Total time	12 months
Total tonnes	473
Exatmo drive	301 tonnes
Inatmo drive	86 tonnes
Special drive	86 tonnes

COMPUTERS

Level	8
Wate	344 tonnes
Software	
Crew replace	Astrogation
	Mechanical
	Relations
Defensive	Anti-hijack
	Brig
	Gun control
	Maneuvers
	Mimic
	Surveillance
Miscellaneous	Administration, Advisor
	Appraisals, Book reader
	Communications, Detectors
	Entertainment, Etiquette
	Fuel control, Law
	Library (like a class computer),
	Mapping, Mechanical, Medical
	Navigation, Robot control
	Translation, Xenobiology



DEFENCES
1) Life support, 2) Gravity, 3) Armour
ATTACKS
1) Boarding, 2) Ramming, 3) ECM
6) Artillery: 4 pieces; 375 kg; annihilator (#1); c; 15h to 1500h range;15d10 + 90 damage, 600 kg matter destroyed; 75h radius of effect
CREW REQUIRED
Pilot
Astrogator
Mechanic
Gunner
Doctor
Steward
Administrator

CARGO ALLOTMENT

Total Allotment:	1209 tonnes
80 datalocks	0 tonnes
Airlocks, 5 within ship	0 tonnes
Airlocks, 10 to exatmo	0 tonnes
Cabins, 200	200 tonnes
Cargo airlock, 500 ton.	0 tonnes
Cargo lock, 100 ton.	0 tonnes
Cargo space	900 tonnes
Cold storage, 20	5 tonnes
Corridors, 50 hexes	10 tonnes
Locks, 50	0 tonnes
Luxury cabins, 5	10 tonnes
Recreation room	40 tonnes
Special stuff	34 tonnes
Work spaces, 20	10 tonnes

SPECIAL STUFF

Emergency equipment	
Food machine	
Hyper taxi (#PD95)	5
Gravity couches	15
Life bloats	25
Long range traveler (#PD92)	
Sick bay	
Vac suits, civil	215
Vac suits, industrial	5
Vac suits, military	20

ROBOTS

Analog bot	
Combat robot	
Maintenance bot	
Relations bot	

VALUE

Hull	6450000000
Drives, inatmo	301000000
Drives, exatmo	21070000000
Drives, special	275200000000
Fuel	300000
Computer	57600000
Defences	300000
Attacks	400000
Artillery	150000000
Cargo space	900000
Software	31500000
Total:	303,262,000,000



LONG RANGE TRAVELER

OWNER: Public domain 4/Aug/90 #PD92
NAME:Spacevehicle
DESC: a single passenger space vehicle
INFO: see below

HULL

Size:	5 tonnes
Composition:	Smart metal
Strength:	1100

DRIVES (starship)

Drive	Type	Size	Level	Effect
Exatmo	Gravetics	0.3	6	0.6 C
Inatmo drive	Antigrav	0.15	3	mach 3
Special drive	Time-slip	0.5	10	10 lt. yrs

FUEL
Type solid
Total time 19 months
Total tonnes 0.85
Exatmo drive 0.2 tonnes (4)
Inatmo drive 0.35 tonnes (7)
Special drive 0.3 tonnes (6)
COMPUTERS
Level 10
Wate 0.5 tonnes
Software

Crew replace	Astrogation, Gunnery
	Medical, Pilot aid
Defensive	Anti-hijack, Armada
	Brig, Cammo
	Maneuvers, Surveillance
Miscellaneous	Administration, Banking
	Book reader, Chapel
	Communications, Detectors
	Diplomacy, Entertainment
	Etiquette, Forensics
	Fuel control
	Library (like a class computer)
	Mapping, Mechanical
	Medical, Navigation
	Translation, Weapons
	Xenobiology

DEFENCES
1) Life support, 2) Gravity, 4) Armour, 5) ECM
ATTACKS
1) Boarding

CREW
Mechanic
CARGO ALLOTMENT

Total Allotment:	1.85 tonnes
(Inatmo access only)	
Workspace	0.5 tonnes
Food machine	
Vac suit, industrial	1
Gravity couch	1

ROBOTS
Analog bot
VALUE

Hull	27500000
Drives, inatmo	150000
Drives, exatmo	18000000
Drives, special	5000000000
Fuel	475000
Computer	90000000
Defences	400000
Attacks	100000
Cargo space	1000
Software	31500000
Total:	5,168,126,000



ORE CARRIER
OWNER: Public domain 4/Aug/90 #PD93
NAME:Spacevehicle
DESC: A space bound ore carrier
INFO: see below

HULL

Size:	3600 tonnes
Composition:	Alloy
Strength:	2500

DRIVES (space cruiser)

Drive	Type	Size	Level	Effect
Exatmo	Fusion	288	8	0.8 C

FUEL

Type	liquid
Total time	5 months
Total tonnes	180
Exatmo drive	180 tonnes (5)

COMPUTERS

Level	3
Wate	108 tonnes
Software	
Crew replace	Mechanical
Defensive	Anti-hijack, Brig
	Surveillance
Miscellaneous	Communications, Detectors
	Entertainment, Forensics
	Industrial
	Library (like a class computer)
	Mapping, Mechanical
	Medical, Printout
	Robot, Translation
	Weapons, Xenobiology

DEFENCES
1) LIfe support, 2) Gravity, 3) Armour
ATTACKS
1) Boarding, 2) Ramming
CREW
Pilot
Astrogator
Mechanic
Doctor
Administrator

CARGO ALLOTMENT

remaining cargo	3024 tonnes
Airlocks, 5	0 tonnes
Cabins, 10	10 tonnes
Cargo airlocks, 500 (4)	0 tonnes
Cargo space	3007 tonnes
Cold storage, 10	2.5 tonnes
Corridors, 10 hexes	2 tonnes
Work space, 5	2.5 tonnes

SPECIAL STUFF

Vac suit, civil	10
Vac suit, industrial	2
Food machine	

ROBOTS
Analog bot
Industrial
Medical bot

VALUE

Hull	9000000000
Drives, exatmo	6400000
Fuel	200000
Computer	8100000
Defences	300000
Attacks	100000
Cargo space	307000
Software	5000000
Total:	9,020,407,000

POLICE BOAT
OWNER: Public domain 5/Aug/90 #PD94
NAME: Spacevehicle
DESC: a star traveling police vehicle
INFO: see below
HULL
Size: 300 tonnes
Composition: Alloy
Strength: 1100
DRIVES (starcruiser)

Drive	Type	Size	Level	Effect
Exatmo	Fusion	18	6	0.6 C
Special	Time-slip	18	6	6 lt. yrs

FUEL

Type	plasmoid
Total time	16 months
Total tonnes	48
Exatmo drive	27 tonnes (9)
Special drive	21 tonnes (7)

COMPUTERS

Level	4
Wate	12 tonnes

Software

Crew replace	Gunnery
Defensive	Anti-hijack, Armada Anomaly, Brig Maneuvers, Mimic Surveillance
Miscellaneous	Chapel, Communications Detectors, Diplomacy Mechanical, Xenobiology Medical, Navigation Translation, Weapons



DEFENCES
1) Life support, 2) Gravity, 4) Armour, 5) ECM,
6) Shields
7) Active
ATTACKS
1) Boarding, 2) Ramming, 3) ECM,
4) Grenades (#26) Demagnetizer shuts down electronics 5h radius (240 mines or missiles)
5) Bombs (#2) Corrosive: 60h radius; 50d8, plus 20d10 for10d8 units (1 mine or missile)
6) Artillery (#3) Howitzer: c;12/1200h range; 12d12 2d6 radius
7) Naval artillery (#20) Muckmaker: c; 1300/ 125000h range; 45d12, organics only; not impeded by hulls etc

CREW
Pilot
Astrogator
Mechanic
Gunner
Doctor
Diplomat

CARGO ALLOTMENT

Cargo available:	204 tonnes
Airlocks (exatmo), 15	0 tonnes
Airlocks (in ship), 10	0 tonnes
Cabins, 10	10 tonnes
Cargo space	130 tonnes
Cold storage, 20	5 tonnes
Corridors, 20hexes	4 tonnes
Special stuff	50 tonnes
Work spaces, 10	5 tonnes

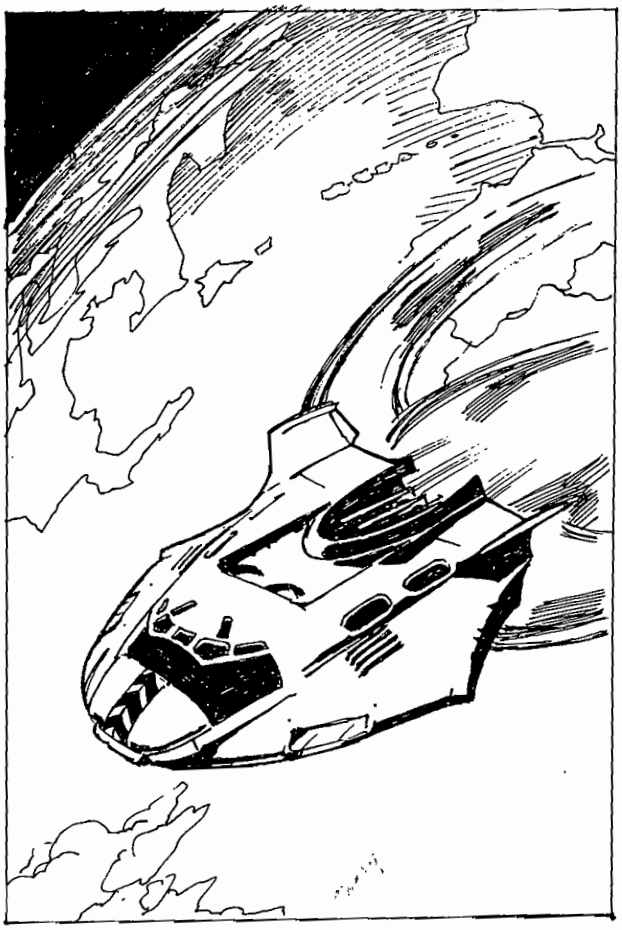
SPECIAL STUFF
Emergency Equip.
Ext-mounted hypertaxi, 2
Food machine
Sick bay

Vac suits, industrial	5
Vac suits, military	50

ROBOTS
Combat robot

VALUE

Hull	330000000
Drives, exatmo	1080000000
Drives, special	6480000000
Fuel	2400000
Computer	14400000
Defences	600000
Attacks	700000
Naval artillery	3000000
Cargo space	130000
Software	5000000
Total:	7,916,230,000



HYPER TAXI
OWNER: Public domain 5/Aug/90 #PD95
NAME: Spacevehicle
DESC: a planet to orbital taxi
INFO: see below

HULL

Size:	10 tonnes
Composition:	Alloy
Strength:	1100

DRIVES (spaceship)

Drive	Type	Size	Level	Effect
Exatmo	Gravetics	0.6	6	0.6 C
Inatmo	Antigrav	0.9	9	Mach 9

FUEL

Type	liqiud
Total time	15 months
Total tonnes	1.5

Ap

Exatmo drive	0.9 tonnes (9)
Inatmo drive	0.6 tonnes (6)
COMPUTERS	
Level	8
Wate	0.8 tonnes
Software	
Crew replace	Astrogation, Mechanical Pilot aid, Relations
Defensive	Anti-hijack, Brig Maneuvers
Miscellaneous	Communications, Entertainment Navigation, Translation

DEFENCES
1) Life support, 2) Gravity, 3) Armour
ATTACKS
1) Boarding
CREW
Pilot
Steward
CARGO ALLOTMENT

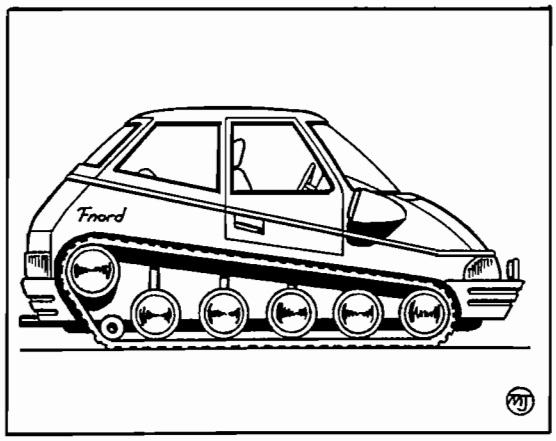
Available space	7.2 tonnes
Airlock,1	0 tonnes
Cabins, 5	5 tonnes
Corridors, 6h	1.2 tonne
Work spaces, 2	1 tonne

SPECIAL STUFF
Emergency equipment

Vac suits, civil	16
Life bloat	3

ROBOTS
Relations
VALUE

Hull	11000000
Drives, exatmo	36000000
Drives, inatmo	900000
Fuel	375000
Computer	14400000
Defences	300000
Attacks	100000
Software	5000000
Total:	68,075,000

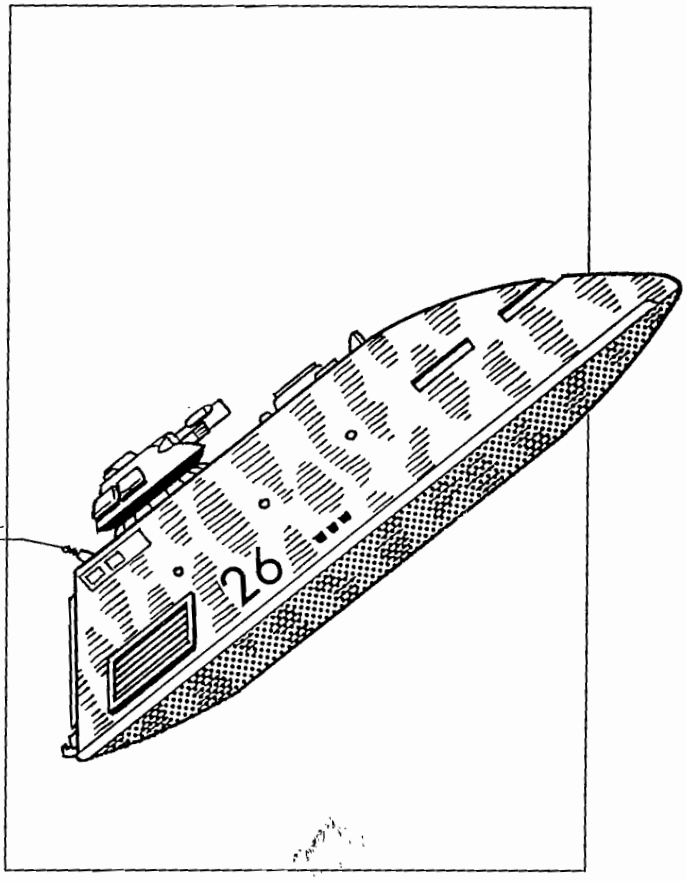


Vehicles

MINI CAR
OWNER: Public domain 5/Aug/90 #PD96
NAME:Vehicle, recreational leisure
WATE: 600.0kg **EXPS**: 0 **VALUE**: 30000
TL 10:
SUPPORT EQ.: needs gaseous fuel
DESC: Looks like an Austin mini with tank tracks
INFO: See below
PRIMARY FORMAT: Leisure
Vehicle type Mini: 4 passengers; 60 kg cargo
SECONDARY USE: Recreational
Awning that rolls out on all sides
SPEED: 45 h/u (162 kmh)
ACCELERATION: 5 h/u2
LOCOMOTION: Tracks

ENGINE TYPE: runs on gaseous fuel; 1600 km per tank
MANEUVERABILITY: handling level of 4
ACCESSORIES: multitude of lights

MINERAL EXPLORATIONS TRUCK
OWNER: Public domain 5/Aug/90 #PD97
NAME:Vehicle, cargo industrial
WATE: 7.0t **EXPS**: 0 **VALUE**: 350000
TL 10:
SUPPORT EQ.: needs liquid fuel
DESC: Jet propelled flat bed with a sluice box and diamond drill mounted on it.
INFO: see below
PRIMARY FORMAT: Cargo
Vehicle type Van: 2 passengers; 2500 kg cargo
SECONDARY USE: Industrial
Drill for drilling deep into the earth
Sluice box for separating minerals from soil
SPEED: 38 h/u (136 kmh)
ACCELERATION: 8 h/u2
LOCOMOTION: Jets
ENGINE TYPE: runs on liquid fuel; 1200 km per tank
MANEUVERABILITY: handling level of 7
ACCESSORIES: High gravity tested



TRANSPORT TANK
OWNER: Public domain 5/Aug/90 #PD98
NAME:Vehicle, passenger military
WATE: 9.0t **EXPS**: 0 **VALUE**: 1800000
TL 10:
SUPPORT EQ.: needs solid fuel
DESC: Artillery mounted, camouflaged troop carrier
INFO: see below
PRIMARY FORMAT: Passenger
Vehicle type Short bus: 22 passengers; 880 kg cargo
SECONDARY USE: Military
1/2 all damage
Grenade launcher (#13, misc. wep.): c; 90h, -125; cache of frag grenades (#8), 1h radius, 5d10, 74 rounds.
Artillery, Howitzer (#3): c;12/1200h range; 12d12 2d6 radius, 11 rounds
Camouflage
High performance accessory: improve all 20%
SPEED: 64 h/u (230 kmh)
ACCELERATION: 13 h/u2
LOCOMOTION: Antigrav
ENGINE TYPE: runs on solid fuel; 480 km per tank
MANEUVERABILITY: handling level of 8
ACCESSORIES: Off road tested

Ap

SPEED CYCLE
OWNER: Public domain 5/Aug/90 #PD99
NAME:Vehicle, leisure high performance
WATE: 150.0kg **EXPS**: 0 **VALUE**: 28000
TL 10:
SUPPORT EQ.: needs solid fuel
DESC: Aerodynamic 3 wheeled two seater donor cycle
INFO: see below
PRIMARY FORMAT: Leisure
Vehicle type Motorcycle: 2 passengers; 20 kg cargo
SECONDARY USE: High performance
Maneuverability +d6
Overhaul, all +10%
Speed +50%
SPEED: 71 h/u (256 kmh)
ACCELERATION: 14 h/u2
LOCOMOTION: 3 wheels in series
ENGINE TYPE: runs on solid fuel; 440 km per tank
MANEUVERABILITY: handling level of 12
ACCESSORIES:
Fuzzy dashboard
Insect deflector
Off road tested
No blind spot

POGO PLANTER
OWNER: Public domain 5/Aug/90 #PD00
NAME:Vehicle, self powered industrial
WATE: 2.0kg **EXPS**: 0 **VALUE**: 500
TL 10:
SUPPORT EQ.: needs no fuel
DESC: Tree planter's pogo stick used to reforest clear-cut at high speeds
INFO: see below
PRIMARY FORMAT: Self powered
Vehicle type pogo stick: 1 passengers; 0 kg cargo
SECONDARY USE: Industrial
Seed planter
Sweepers
SPEED: 31 h/u (108 kmh)
ACCELERATION: 5 h/u2
LOCOMOTION: Pogo stick with antigrav recoil
ENGINE TYPE: runs on energy of persona
MANEUVERABILITY: handling level of 4
ACCESSORIES:
Strange paint job, psychadelic tree planter colours
Insect deflector
Lights
No blind spot

Ap

Appendix D
Pre-Rolled Personas

Pre-Rolled Persona Table

RAW DIE ROLL	SUB DIE ROLL	PRE-ROLLED PERSONA	SERIAL NUMBER	RAW DIE ROLL	SUB DIE ROLL	PRE-ROLLED PERSONA	SERIAL NUMBER
Biologist				*Veterinarian*			
01-03	01-50	Bertrand Byrde	#RP01	49-51	01-50	Koko Mbali	#RP17
04-06	51-00	Dr. Fange Zervensays	#RP02	52-54	51-00	Stigera Wrenchwilli	#RP18
Knite				*Alien*			
07-09	01-10	Iliana Rambov	#RP03	55-57	01-10	Mini Car Muncher	#RP19
10-12	11-00	Deanna Mlcarlovich	#RP04	58-60	11-15	Burrowing Wigwut	#RP20
Mechanic				61-63	16-27	Nomadic Sumpsucker	#RP21
13-15	01-40	Billings Fische	#RP05	64-66	28-40	Boat Killer	#RP22
16-18	41-60	Shawna Cassetey	#RP06	67-69	41-65	Prey	#RP23
Mercenary				70-72	66-84	Five Legged Scuttler	#RP24
19-21	01-50	GI Jane #RP07		73-75	85-94	Snake Elephant	#RP25
22-24	51-60	Solaris Polar	#RP08	76-78	95-00	Talking Blob Thing	#RP26
25-27	61-00	Viry Shortale	#RP09	*Robots*			
Nomad				79-81	01-15	QT1 (analog bot)	#RP27
28-30		George Sekir	#RP10	82-84	16-20	Combot	#RP28
31-33		Clarissa Pinefirster	#RP11	85-87	21-36	Industrial lifter	#RP29
Nothing				88-90	37-52	Maintenance bot	#RP30
34-36	01-50	Joe/Jane Civil	#RP12	91-93	53-68	Medical bot	#RP31
37-39	51-75	Horace Punko	#RP13	94-98	69-84	Clever Phil (relations)	#RP32
40-42	76-00	Gilgamesh Vene	#RP14	99-00	85-00	The Robot Driver	#RP33
Spie							
43-45	01-75	Sandy Hed	#RP15				
46-48	76-00	Hal	#RP16				

Bertrand Byrde

5/Aug/90 #RP01

AWE	CHA	CON	DEX	INT	MSTR	PSTR
18	14	12	13	14	14	3

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Canine-poodle(male)	66, aged	154	49	Biologist/3	

COMBAT DATA

	BP	BNP	MR	DA
A	105	0	730	3
B	93	0	743	2
C	202	26	879	0

Hit Points	Move: 5 h/u	Unenc:<1.7
Maximum: 46	AR: 572	Enc:<10.2
Total	REC: 9	Lift:>17

ROLE-PLAYING INFORMATION
ORIGIN: Long history of biological study
PRESENCE:
GOAL: To find an ointment for that lovely specimen
PERSONALITY: Cowardly and craven
POLITICAL: Supports autocracy
RELIGIOUS: Believes in anonymous writings
PHILOSOPHICAL: Pantheist
DESCRIPTION: Arabian dress
COMMENTS: "my what a lovely specimen", "there should be an ointment for that"
CLASS INFORMATION
Camouflage
Scavengers
Animals, echinoderms
Animals, ceoloenterata
DNA
PERSONAL EQUIPMENT
2 Lazer bombs, #PD15
Mineral explorer, #PD97
Periodic intumescent, #PD77

Dr. Fange Zervensays

5/Aug/90 #RP02

AWE	CHA	CON	DEX	INT	MSTR	PSTR
16	13	13	13	15	7	13

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Humanoid-elf (female)	29, adult	168	61	Biologist/4	

COMBAT DATA

	BP	BNP	MR	DA
A	156	0	781	13
B	126	0	776	7
C	226	29	901	0

Hit Points	Move: 5 h/u	Unenc:<4.5
Maximum: 41	AR:	Enc:<24.5
Total	REC: 9	Lift:>45

ROLE-PLAYING INFORMATION

ORIGIN: Recently fired by corporation since she was such a burden on their health care plan

PRESENCE: Bitter about terminating her research

GOAL: Get back to her study of sneaky poisonous insects, and maybe get some revenge

PERSONALITY: Unforgiving

POLITICAL: Believes in autocracy

RELIGIOUS: Believes in anonymous writings

PHILOSOPHICAL: None

DESCRIPTION:

Sickly, pale, and hairless. Looks like a punk rock elf except for glasses.

COMMENTS: "achoo, sniffle", "let's go lie nude in the sun", "I respect things well hidden", "it's going to rain"

CLASS INFORMATION

Animals, arthropoda (insects); Animals, vertebrata; Animals, annelida (worms)

Camouflage; Predators; Protista; Scavengers

Toxic (poisonous)



MUTATIONS

Mental #17 Heightened Brain Talent: fall into trance to solve most difficult problems

Mental #42 Polar Disruption: Attract magnetic objects (3%) when under stress; up to 30 kg

Mental #63 Thought Imitation: 44h range; +25 on imitative PT rolls imitate mental attacks predict actions

Mental #69 Weather Tell: Determine course of natural meteorological events

Physical #30 No Resistance to Disease: 3x susceptibility

Physical #33 Photosnth skin

Physical #55 Vision Defect: Near sighted

PERSONAL EQUIPMENT

Relic #PD89

Full-auto lazer rifle #PD27

Pet grimblesnarker #PD85

Speed cycle #PD99

Translinker #PD42

Semi-auto rifle #PD35

Iliana Rambov

5/Aug/90 #RP03

AWE	CHA	CON	DEX	INT	MSTR	PSTR
7	14	20	15	14	19	13

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
PSH-caucasian (female)	20, adult	183	80	Anti-knite/7	

COMBAT DATA

	BP	BNP	MR	DA
A	270	76	895	13
B	228	46	878	7
C	351	105	1026	0

Hit Points Maximum: 70 Total

Move: 6 h/u
AR: 725
REC: 6

Unenc:<4.5
Enc:<24.5
Lift:>45

ROLE-PLAYING INFORMATION

ORIGIN: Trained at Kinder Kilner Military High School since age 12.

Received artificial larynx when some one tried to slit her throat, affects her speech

PRESENCE: Evil. Hates mutants pathologically.

GOAL: Instill chaos in the universe, and live as long as possible

PERSONALITY: Egotistical and self centered, hate mutants and has a strong fear of death

POLITICAL: Anarchism

RELIGION: Single Creator

PHILOSOPHICAL: None

DESCRIPTION: Large woman in black combat armour and a mechanical device around her neck

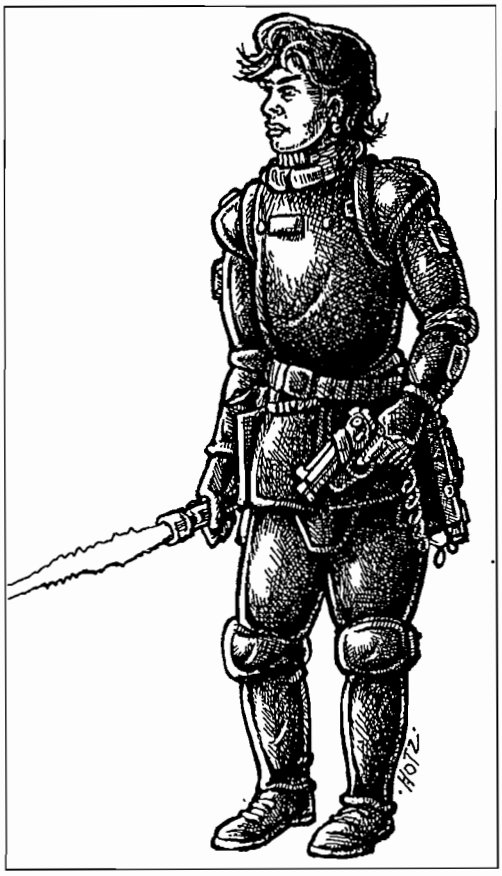
COMMENTS: "you didn't...sssss...need that limb anyway", "I don't...sss...like mutants", "just try and kill me"

CLASS INFORMATION

Some knite skills

Defence shield: make PT roll, outstretched arms absorb 35 Hps, and increase AR by 210

Pre-empting: psionically force target to say or think something



Telekinesis: 26h range; up to 109 kg; up to 2 targets

Pressure: Incapacitate target with fear, 2 targets, new save every 5 units

Psionic defence: PSTR increased to 26, negate attacks with save

Light saber deflections: DD 1/50 of to hit roll, 14 attacks per unit

Initial merc skills

Rifle, semi-auto, MP

Rifle, lazer, MP

Pistol, lazer, MP

Hand to hand, striking

MUTATIONS

Mental #66 Total Recuperation: (doesn't know she has this). 2 times a day return to full, 1/2 aging effects

PERSONAL EQUIPMENT

Semi-auto rifle #PD35

Pin grenade #PD21

Combat armour #PD02

Mutation pharmac. #PD78

(Access) transp. tank #PD98

Grapple gun #PD64

Light saber: solid beam, 6d6 damage=5% chance amputate, 3 attacks per unit, plus deflections

Ap

Deanna Mlcarlovich

5/Aug/90 #RP04

AWE	CHA	CON	DEX	INT	MSTR	PSTR
9	12	9	16	12	22	9

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
PSH-caucas. (female)	25, adult	170	45	Knite/6	

COMBAT DATA

	BP	BNP	MR	DA
A	239	67	864	9
B	213	43	863	5
C	340	102	1015	0

Hit Points	Move: 6 h/u	Unenc:<3.5
Maximum: 41	AR: 725	Enc:<21
Total	REC: 10	Lift:>35

ROLE-PLAYING INFORMATION

ORIGIN: Tragic orphaned life. Unknowingly caused the deaths of parents, family, babysitters. Could also read minds of those around her, saying that she wasn't the cause, but thinking otherwise.

PRESENCE: Trying to right the unright and serve justice to the unjust.

GOAL: Find balance in universe between good and evil. And to cope with her guilt

PERSONALITY: Defensive, guilty conscious, basically rude

POLITICAL: Capitalist

RELIGIOUS: None

PHILOSOPHICAL: None

DESCRIPTION: Small, frail tired looking woman dressed in denim.

COMMENTS: "don't#@%! with me", "sorry about the limb", "try again, you're lying"

CLASS INFORMATION

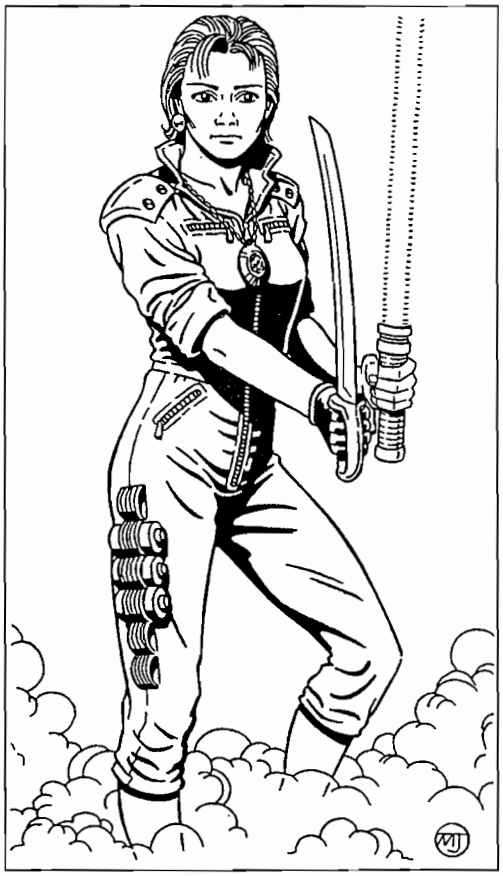
Some knite skills

Defence shield: make PT roll, outstretched arms absorb 30 HPS, and increase AR by 180

Pre-empting: Force target to say or think something

Telekinesis: 28h range; up to 156 kg, up to 2 targets

Pressure: Incapacitate target with guilt, 2 targets, new save every 5 units



Psionic defence: PSTR increased to 28, negate attacks with save

Light saber deflections: DD 1/50 of to hit roll, 12 attacks/unit

Initial nothing skills

Inspector; Nut threader

MUTATIONS

Mental #7, Death field generation: 2h radius; exclude 2 targets; kill all in radius; unconc 1 minute/HPS

Mental #14, Extra sensory perception: 56h range; read thinkspaces; +20 on pressure, and pre-empting PT rolls

Mental #67 Ventriloquism: 56h range; 5 times; min 18 minutes; throw noises and voices

PERSONAL EQUIPMENT

Light saber: solid beam, 6d6 damage=5% chance amputate, 3 attacks/unit, plus deflections

Metab counter #PD43

Kirlian talisman #PD55: +15 on PT rolls, or attack for d4-1 points off MSTR

Inertia scimitar #PD66

Frag grenades #PD19

Bolt action rifle #PD28

Billings Fische

5/Aug/90 #RP05

AWE	CHA	CON	DEX	INT	MSTR	PSTR
10	14	10	7	19	14	6

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Equine-moose(male)	16, adolesc.	172	79	Mechanic/4	

COMBAT DATA

	BP	BNP	MR	DA
A	137	18	762	6
B	119	12	769	3
C	171	26	846	0

Hit Points	Move: 3 h/u	Unenc:<2.5
Maximum: 32	AR: 542	Enc:<12
Total	REC: 10	Lift:>25

ROLE-PLAYING INFORMATION
ORIGIN: Had a bad experience with a robot in his youth.
PRESENCE: Seeking out errant robots.
GOAL: Get humanocentric robots under proper control
PERSONALITY: Fanatic pursuer of errant robots (extroverted personality)
POLITICAL: Anarchist
RELIGIOUS: None
PHILOSOPHICAL: None
DESCRIPTION: D i r t y lumberjack clothing, with a two holed toque for his antlers
COMMENTS: "dis robot ees sufring from da humano-centric envy"



CLASS INFORMATION
Mending 3
Powered weapons 2
Robotics 3
MUTATIONS
None
PERSONAL EQUIPMENT
Access to a long range traveler #PD92
Treasure, diamond #PD88 drives a mineral explorer #PD97
Robotic override PD#57: +20 on all robotic actions

Ap

Shawna Cassetey

5/Aug/90 #RP06

AWE	CHA	CON	DEX	INT	MSTR	PSTR
17	19	15	12	21	16	15

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Rodent.-mouse(female)	86, aged	161	66	Mechanic/13	

COMBAT DATA

	BP	BNP	MR	DA
A	252	33	877	15
B	276	28	926	8
C	326	49	1001	0

Hit Points	Move: 5 h/u	Unenc:<5
Maximum: 51	AR: 572	Enc:<30
Total	REC: 8	Lift:>50

ROLE-PLAYING INFORMATION

ORIGIN: Recently retired from hustle bustle of tech work

PRESENCE: On a retirement vacation

GOAL: Enjoy a peaceful retirement

PERSONALITY: Loquacious, talkative to excess

POLITICAL: Environmentalist

RELIGIOUS: She is a charismatic technocratic cult leader

PHILOSOPHICAL: Cynicism is the proper moral outlook

DESCRIPTION: Aged, clean punker mouse

COMMENTS: "that ain't gonna work, and let me show you why"

CLASS INFORMATION

Aerosols 2
Carpentry
Chemistry
Detectors
Explosives
Magnetics
Medical equipment 3 (biorganic implants)
Metallurgy; Piloting; Plastics; Power plants



MUTATIONS

None

PERSONAL EQUIPMENT

Antigrav brassiere, #PD50
Combat armour, #PD02
Concussion armour #PD05
Corrosive grenades, #PD18
Corrosive grenades, #PD18
Full-auto lazer rifle, #PD27
Gauss pistol, #PD31
Kirlian Talisman, #PD55
Pharmaceutical, DNA #PD71
Pharmaceutical, mutation #PD78
Pharmaceutical, mutation effect, #PD69
Pogo planter, #PD00
Slug thrower, #PD37
Treasure, relic #PD87

GI Jane (Generic Infantry)

5/Aug/90 #RP07

AWE	CHA	CON	DEX	INT	MSTR	PSTR
9	9	9	9	9	9	9

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Any-generic infantry	19, young	188	70	Mercenary/1	very little

COMBAT DATA

	BP	BNP	MR	DA
A	0	0	900	9
B	0	0	1000	5
C	0	0	1500	0

Hit Points	Move: 4 h/u	Unenc:<3.5
Maximum: 30	AR: 625	Enc:<21
Total	REC: don't	Lift:>35

ROLE-PLAYING INFORMATION

ORIGIN: The need for easy to run dogmeat in lethal personal combat

PRESENCE: After the expedition for some reason or another

GOAL: To trash, apprehend, or exterminate the expedition

PERSONALITY: Monomanian on trashing the expedition, quite suicidal

POLITICAL: Any

RELIGIOUS: Believe they are their own martyrs

PHILOSOPHICAL: None

DESCRIPTION: Clean cut, combat crazed military personas.

COMMENTS: "dead or alive you're coming with me", "take that", "resistance is useless", "aaagh...thud"

CLASS INFORMATION

Ignore life preserving tactics, raely use grenades or full-auto

MUTATIONS

None



PERSONAL EQUIPMENT

Combat armour, #PD02

Full-auto lazer rifle, #PD27

Slug thrower, #PD37

Frag grenade, #PD19

Food culture, #PD53

Ap

Solaris Polar

5/Aug/90 #RP08

AWE	CHA	CON	DEX	INT	MSTR	PSTR
10	13	10	13	11	10	22

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Ursidae-polar (male)	66, older	198	135	Mercenary/7	

COMBAT DATA

	BP	BNP	MR	DA
A	297	297	922	22
B	261	261	911	11
C	323	323	998	0

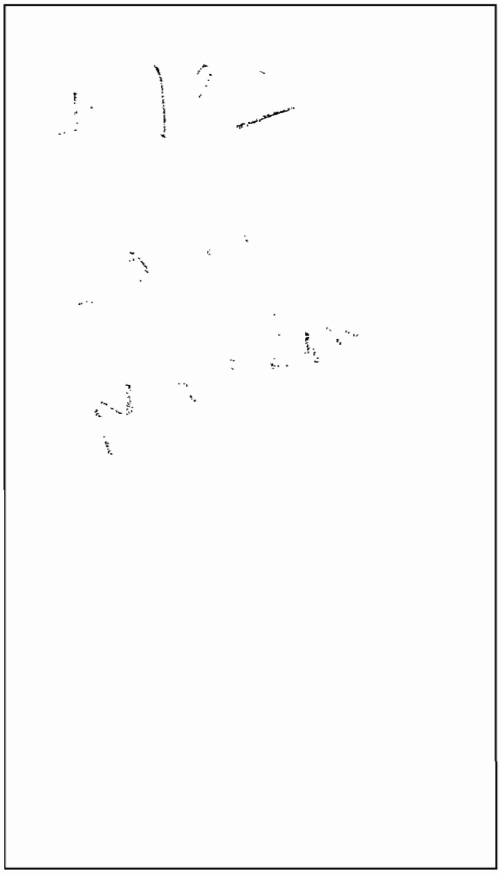
Hit Points Maximum: 67 Total
Move: 5 h/u AR: 578 REC: 10
Unenc:<11.3 Enc:<67.5 Lift:>112.5

ROLE-PLAYING INFORMATION
ORIGIN: From some place
PRESENCE: On his way some where
GOAL: To get some where
PERSONALITY: Optimist
POLITICAL: Facism
RELIGIOUS: One creator, and heirarchy
PHILOSOPHICAL: Existentialism
DESCRIPTION: Well groomed, greying polar bear in a mexican hat, or a suit of powered armour
COMMENTS: "it could be worse", "aren't we lucky", "this is gonna be great"

CLASS INFORMATION

Skills

Hand to hand, striking
Hand to hand, striking
Hand to hand, thrusting
Pistol, revolver, MP
Pistol, semi-auto, XLP
Rifle, full-auto lazer, MP
Rifle, full-auto, MP
Rifle, lazer, MP
Unarmed combat



Maneuvers

Bolster AR: AR +280 from BP
Multiple attacks: non-powered weapons divide BP amongst 4 attacks
Ambidextrous combat: attack with 2 weapons, if fail -200, -300

MUTATIONS

None

PERSONAL EQUIPMENT

Full-auto lazer rifle, #PD27: skills +120 to final roll (can exceed MR)
Inertia scimitar, #PD66: skills +100 to final roll (can exceed MR)
Robotic override, #PD57
Powered armour, #PD07 eek! wow!
Relic, #PD87
Aerosol regulator, #PD52
Foam aerosol, #PD25

Viry Shortale

5/Aug/90 #RP09

AWE	CHA	CON	DEX	INT	MSTR	PSTR
11	9	13	23	15	10	9

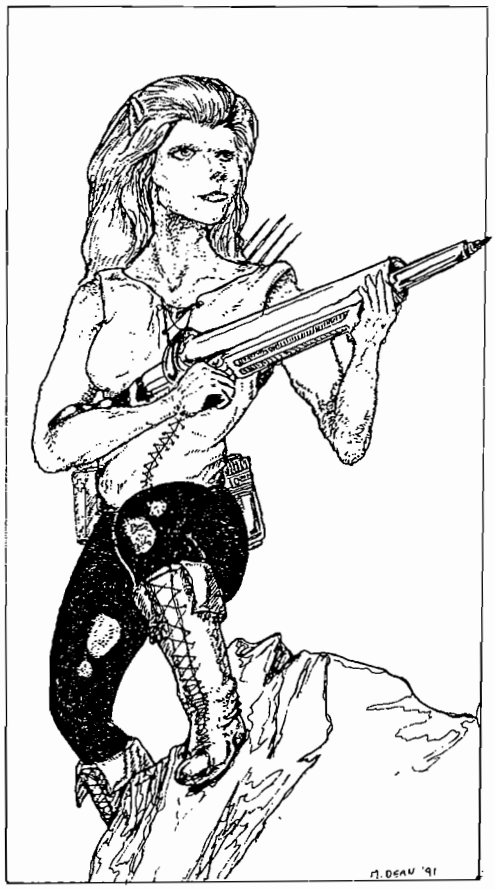
RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Feline-manx (female)	37, adult	157	47	Mercenary/3	

COMBAT DATA

	BP	BNP	MR	DA
A	217	217	842	9
B	234	234	884	5
C	353	353	1028	0

Hit Points	Move: 13 h/u	Unenc:<3.1
Maximum: 46	AR: 638	Enc:<25
Total	REC: 9	Lift:>35

ROLE-PLAYING INFORMATION
ORIGIN: Finished doing some work in the area.
PRESENCE: Between jobs.
GOAL: Get another job.
PERSONALITY: Sadist (extroverted personality, not an insanity)
POLITICAL: Capitalist
RELIGIOUS: One creator, and hierarchy
PHILOSOPHICAL: None
DESCRIPTION: Manx cat dressed like a medieval serf
COMMENTS: "that must hurt, darling"
CLASS INFORMATION
Skills
Pistol, semi-auto, lazer MP
Rifle, bolt action, MP
Rifle, full-auto, lazer, MP
Rifle, full-auto, LP
Rifle, full-auto, LP
Rifle, full-auto, LP
Rifle, semi-auto, lazer MP
Maneuvers
Bolster AR: AR +120 from BP
Multiple attacks: non-powered weapons divide BP amongst 2 attacks
Ambidextrous combat: attack with 2 weapons, if fail -200, -300



MUTATIONS
Physical #22, Launchable quills: 12h range; 11 quills; hold back 3 per attack; d8 type B
Physical #46, Smoke screen: d12 minutes duration; 8 times a day; 5h radius, 2h high if still; 2 unit trail if moving
PERSONAL EQUIPMENT
Full-auto lazer rifle, #PD27: skills +220 to final roll (can exceed MR)
Medical kit, #PD45
AI computer, #PD59

Ap

George Sekir

5/Aug/90 #RP10

AWE	CHA	CON	DEX	INT	MSTR	PSTR
15	12	11	14	13	5	9

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Insectoid-mantis (none)	60, adult	185	68	Nomad/3	

COMBAT DATA

	BP	BNP	MR	DA
A	165	25	790	9
B	198	45	848	5
C	228	11	903	0

Hit Points	Move: 5 h/u	Unenc:<3.1
Maximum: 33	AR: 584	Enc:<25
Total	REC: 10	Lift:>35

ROLE-PLAYING INFORMATION
ORIGIN: Paid to track down expedition member
PRESENCE: Found expedition member
GOAL: Give said member a message
PERSONALITY: Barbaric (introverted personality)
POLITICAL: Monarchist
RELIGIOUS: Believes in the balance of many creators
PHILOSOPHICAL: Realist
DESCRIPTION: Clean arabian dressed preying mantis
COMMENTS: "I've been looking for you", "_____ I presume", "I'll find that for a dollar"
CLASS INFORMATION
Oceanic, mountains
Tropical grassland, aboveground
Tropical forest, aboveground
MUTATIONS
Mental #2 Alternate banishment: 3h range; once per 2 days; bansish up to 49 kg; save or disappear from material plane
Mental #18 Hostility field: 1h radius; -25 on negotiation; increase likelyhood of attack



Mental #55 Sonic attack: 13h range; 2 times a day; 4d8 1h, 3d8 7h, 2d8 13h, d8 hearing; 15 HPs is deafened
Mental #61 Telempathy: Project emotions; +70 on neg rolls; 2h radius; +1 per thinkspace
Mental #62 Teleport: instant travel; 4000 kms range; failure, very familiar 2/1000, Unknown 135/1000; d20 d6 damage
PERSONAL EQUIPMENT
Medical kit, #PD45
Pharmaceutical, heal #PD70
Frag grenade, #PD19

Clarissa Pinefirster

6/Aug/90 #RP11

AWE	CHA	CON	DEX	INT	MSTR	PSTR
13	11	14	13	13	7	12

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Florian-pine (female)	82, adult	151	46	Nomad/4	

COMBAT DATA

	BP	BNP	MR	DA
A	203	30	828	12
B	206	48	856	6
C	240	12	915	0

Hit Points	Move: 5 h/u	Unenc:<4.3
Maximum: 53	AR: 578	Enc:<24.5
Total	REC: 9	Lift:>42.5

ROLE-PLAYING INFORMATION

ORIGIN: Coming from a food bank somewhere.

PRESENCE: Asking the expedition for some money.

GOAL: Heading to the nex place for food.

PERSONALITY: Scheme (extroverted personality)

POLITICAL: None

RELIGIOUS: None

PHILOSOPHICAL: None

DESCRIPTION: Dirty pine needled florian dressed in unfitted suit and high white socks (mod)

COMMENTS: "could ya spare a nibble", "I'll find that for a nibble", "I'm off to get a quick nibble"

CLASS INFORMATION

Industrial, dense atmosphere

Megalopolis (big city), above ground

Megalopolis (big city), under ground

Ruin, mountainous

MUTATIONS

None

PERSONAL EQUIPMENT

Has keys for a mini car, #PD96

Molecular diffusion aerosol, #PD22

Metab counter, #PD43

Colouring book, #PD83

Grapple gun, #PD64

MISSING #195 MALE

Ap

Joe or Jane Civil (sidewalk civilians)

6/Aug/90 #RP12

AWE	CHA	CON	DEX	INT	MSTR	PSTR
6	6	6	6	6	4	6

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Any-race	Varies	Varies	Varies	Nothing/0	

COMBAT DATA

	BP	BNP	MR	DA
A	0	0	None	0
B	0	0	None	0
C	0	0	None	0

Hit Points	Move: 3 h/u	Unenc:<2.5
Maximum: 9	AR: 500	Enc:<15
Total	REC: Don't	Lift:>25

ROLE-PLAYING INFORMATION

ORIGIN: Referee needs useless cannon fodder for villages, sidewalks and shopping malls

PRESENCE: Getting in expedition's way, screaming in terror, running for cover, fainting, etc.

GOAL: To go home and watch the televid

PERSONALITY: Stupid and terrified

POLITICAL: None

RELIGIOUS: None

PHILOSOPHICAL: None

DESCRIPTION: Civilians

COMMENTS: "eeeeeek", "isn't that illegal?", "help police", "aaagh"

CLASS INFORMATION

Civilian Age Table

Die Roll	Age of Civilian
01-05	Child
06-15	Adolescent
16-65	Adult
66-90	Older
91-00	Aged

All other information should be determined by rolling Sphincter dice, as described in chapter 16, Special rolls.

MUTATIONS

None

PERSONAL EQUIPMENT

None



Horace Punko

6/Aug/90 #RP13

AWE	CHA	CON	DEX	INT	MSTR	PSTR
21	14	10	6	13	15	14

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Reptilian-lizard (male)	101, adult	163	67	Nothing/4	

COMBAT DATA

	BP	BNP	MR	DA
A	199	16	824	14
B	159	6	809	7
C	184	18	859	0

Hit Points	Move: 3 h/u	Unenc:<4.8
Maximum: 23	AR: 536	Enc:<28.5
Total	REC: 10	Lift:>47.5

ROLE-PLAYING INFORMATION

ORIGIN: On vacation from Tuckswellooska, Prairygon

PRESENCE: Vacationing, and observing loudly

GOAL: Take as many pictures as possible, to accumulate the longest slide show possible.

PERSONALITY: Loquacious and loud

POLITICAL: None

RELIGIOUS: None

PHILOSOPHICAL: None

DESCRIPTION: Large bellied lizard wearing shorts and short sleeves. The material is bright and tropical.

COMMENTS: "Oooooweeee, well would ya lookie that!!", "hold it right there fer a photo", "hot dang!"

CLASS INFORMATION

SOCIAL STANDING: 557

ORIGIN: Farming town

SKILLS

Tax collector 2

Baker



MUTATIONS

Mental #4, Calculations: +15 on calc involving PT rolls. Automatic and instant calc. of all mathematics (wicked gambler).

PERSONAL EQUIPMENT

Video recorder, #PD54: each time he uses it the camera says, "thank you for using Snappy film"

Autostrike cigars: simply stroke cigar end against a rough surface and the stogie will light (12 cigars)

Comfy couch #PD48: using it to carry his luggage around, won't give it up unless someone is willing to carry his bags.

Inertia scimitar, #PD66: some relic he bought from some local.

Ap

Gilgamesh Vene

6/Aug/90 #RP14

AWE	CHA	CON	DEX	INT	MSTR	PSTR
8	6	10	11	12	13	9

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Aqu.-beluga(female)	120, aged	166	65	Nothing/9	

COMBAT DATA

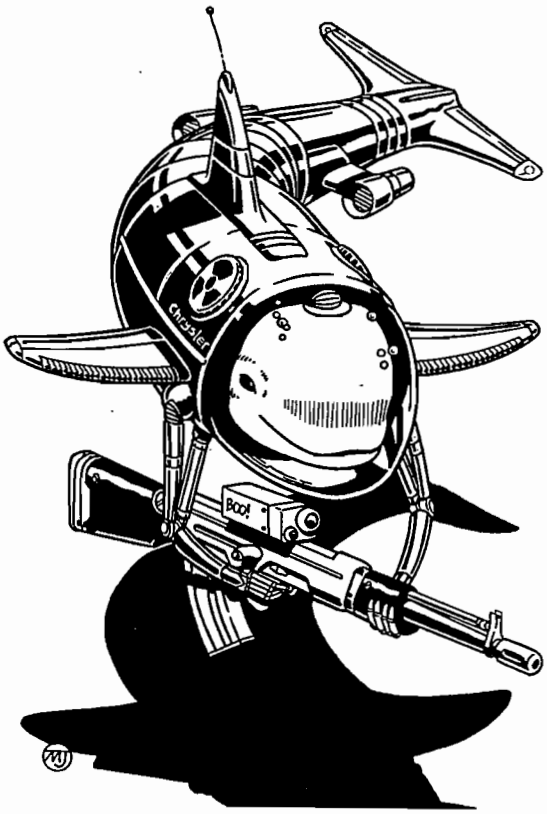
	BP	BNP	MR	DA
A	191	10	816	9
B	186	7	836	5
C	242	24	917	0

Hit Points Maximum: 21 Total

Move: 4 h/u
AR: 566
REC: 10

Unenc:<3.1
Enc:<21
Lift:>35

ROLE-PLAYING INFORMATION
ORIGIN: From her oceanic place of work
PRESENCE: Hunting land based creatures
GOAL: Bring back a good trophy
PERSONALITY: Aloof (introverted personality)
POLITICAL: Democracy
RELIGIOUS: Follows a charismatic leader
PHILOSOPHICAL: Pantheist
DESCRIPTION: Beluga whale face peering out of a suit of powered armour (chromes and fins 1950's)
COMMENTS: via a transmitter, "any good game around here?", "aren't you afraid something's going to fall on your head?"
CLASS INFORMATION
SOCIAL STANDING: 829
ORIGIN: Underwater fully operational city



SKILLS
Cashier; Farmer, fish; Maid Operator
Tax collector 4
MUTATIONS
None
PERSONAL EQUIPMENT
Powered armour, #PD07: simply used to get around with on land, aquarians must be surrounded by water
Variable lazer pistol, #PD36
Speed cycle, #PD99
Blinding aerosol, #PD23
Napalm gun, #PD34
Howitzer, #PD12
Inoculation, #PD80
Aerosol regulator, #PD52
Hyper taxi, #PD95

NAME: Sandy Hed

6/Aug/90 #RP15

AWE	CHA	CON	DEX	INT	MSTR	PSTR
18	17	14	18	14	8	14

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Avarian-ostrich(female)	120, aged	191	75	Spie/3	

COMBAT DATA

	BP	BNP	MR	DA
A	204	51	829	14
B	182	36	832	7
C	242	56	917	0

Hit Points	Move: 8 h/u	Unenc:<4.8
Maximum: 43	AR: 686	Enc:<28.5
Total	REC: 9	Lift:>47.5

ROLE-PLAYING INFORMATION

ORIGIN: Running away from something tougher than her

PRESENCE: Might be hiding

GOAL: Get someplace safer

PERSONALITY: Phobophobia (insane personality, fear of fear)

POLITICAL: Ismism (one must be an ist as in part of an ism)

RELIGIOUS: Follows a charismatic leader

PHILOSOPHICAL: Idealist

DESCRIPTION: Dishevelled romanesque ostrich.

COMMENTS: "EEEEEK!", "sqwuak, ruffle ruffle", "I'm getting out of here", "we're all toast man"

CLASS INFORMATION

Martial arts: AR +120; 2 attacks at d6, one preceding

Many other deceptive skills, Sandy likes to hide a lot

SKILLS

Bribery; Cryptography; Interrogation

MUTATIONS

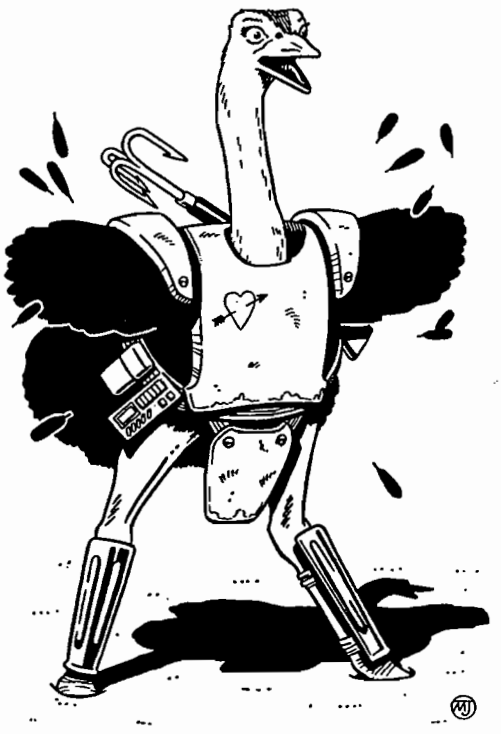
Physical #13, Electric shock: touch or 8h range; +13 on stun PT rolls; d10 +9; every second unit

PERSONAL EQUIPMENT

Combat armour, #PD02

Vet computer, #PD62: gives bonus for poisons and interrogation

Grapple gun, #PD64



Ap

Halligareum P'Ara-Tusminorium (Hal)

6/Aug/90 #RP16

AWE	CHA	CON	DEX	INT	MSTR	PSTR
15	15	15	22	17	7	10

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Feline-tabby (male)	15034, adult	152	50	Spie/15	

COMBAT DATA

	BP	BNP	MR	DA
A	273	68	898	10
B	271	54	921	5
C	371	85	1046	0

Hit Points	Move: 12 h/u	Unenc:<3.8
Maximum: 49	AR: 1026	Enc:<22.5
Total	REC: 8	Lift:>37.5

ROLE-PLAYING INFORMATION

ORIGIN: Recently revived from a stasis chamber, catching up on the world, biological age is 36

PRESENCE: Asks curious and irrelevant questions about obvious things

GOAL: Regain his previous status and wealth, and pull off a few practical jokes.

PERSONALITY: Prankster, extroverted personality

POLITICAL: Capitalist

RELIGIOUS: One creator

PHILOSOPHICAL: Likes to have a good laugh

DESCRIPTION: Plump wild eyed tabby cat dressed as a renaissance peasant

COMMENTS: "Ah who's counting", "Gotcha!", "I'll make you rich beyond your wildest dreams", "You sure is a resourceful bunch"

CLASS INFORMATION

Martial arts: AR +400; 6 attacks at d12, 2 before all, 2 during, 2 normal; prefers to stun targets

Many other deceptive skills, Hal loves slight of hand tricks



SKILLS

Assassination; Disguise; Interrogation
Lock picking, electronic
Lock picking, mechanical 2
Lying 2
Slight of hand 2
Stealth
Stunning 3

MUTATIONS

None

PERSONAL EQUIPMENT

Ablative armour, #PD10
Mutation effect pharmaceutical, #PD69
Access: police boat, #PD94
Narcotic, #PD74
Compucrafted-plated armour, #PD06
Period. intumesc., #PD75
Drug box, #PD41
Slug thrower, #PD37
Force field belt, #PD08
Watch on his nail, #PD49
Heal, #PD73
Web aerosol, #PD24
Howitzer, #PD12
Matter detector aerosol, #PD26
Medical kit, #PD45

Koko Mbali

6/Aug/90 #RP17

AWE	CHA	CON	DEX	INT	MSTR	PSTR
12	17	13	6	12	4	12

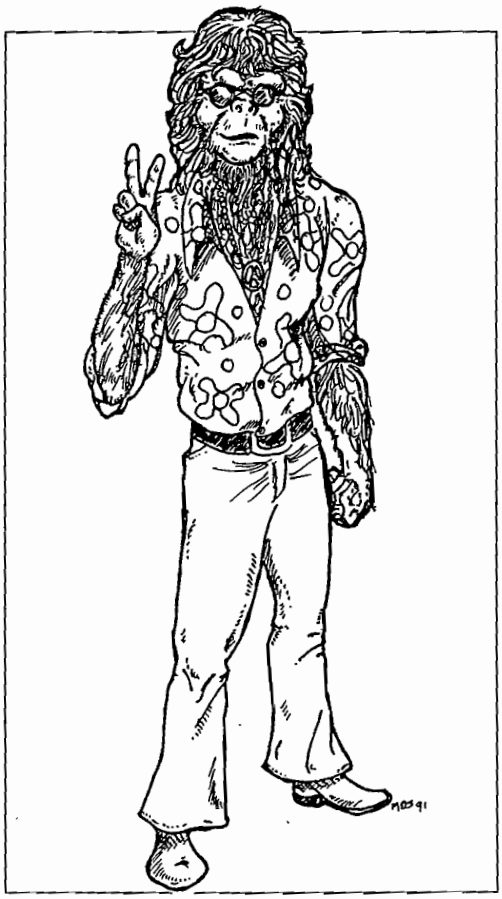
RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	Exps
Humanoid-gorilla (male)	34, adult	166	60	Vet/3	

COMBAT DATA

	BP	BNP	MR	DA
A	126	13	751	12
B	90	9	740	6
C	118	12	793	0

Hit Points	Move: 3 h/u	Unenc:<4.3
Maximum: 31	AR: 625	Enc:<24.5
Total	REC: 9	Lift:>42.5

ROLE-PLAYING INFORMATION
ORIGIN: None
PRESENCE: None
GOAL: None
PERSONALITY: Miserly (introverted personality)
POLITICAL: Bureaucrat
RELIGIOUS: Follow a messiah
PHILOSOPHICAL: None
DESCRIPTION: Hippy gorilla.
COMMENTS: "Praise the messiah, stand up and be healed!"
CLASS INFORMATION
Chiropractic
Neurology
Psionics
MUTATIONS
None
PERSONAL EQUIPMENT
Eye cleansers, #PD39
Limb capper, #PD41
Proflec, #PD06
Translinker #PD42
Treasure, relic #PD89



Stigera Wrenchwilli

6/Aug/90 #RP18

AWE	CHA	CON	DEX	INT	MSTR	PSTR
12	17	15	15	16	8	10

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Canine-shepard (female)	59, older	150	48	Vet/10	

COMBAT DATA

	BP	BNP	MR	DA
A	168	17	793	10
B	154	15	804	5
C	239	24	914	0

Hit Points	Move: 6 h/u	Unenc:<3.8
Maximum: 53	AR: 590	Enc:<22.5
Total	REC: 8	Lift:>37.5

ROLE-PLAYING INFORMATION
ORIGIN: Years of local veterinarian work
PRESENCE: Offering services to the expedition
GOAL: None
PERSONALITY: Aesthetic
POLITICAL: Totalitarianism
RELIGIOUS: Follows medical martyr.
PHILOSOPHICAL: None
DESCRIPTION: German shepard in paramilitary dress.
COMMENTS:
CLASS INFORMATION
Burns
Chiropractic
Forensic medicine
Genetics 2
Internal organs
Mental mutations
Neurological
Physical mutations
Radiation therapy
MUTATIONS
None



PERSONAL EQUIPMENT
Temporal disruptor, #PD68
Pharmaceutical, DNA #PD71
Mini grenade, #PD17
Speed cycle, #PD99
Pharmaceutical, periodic intumescent #PD76
Force field belt, #PD03
Mini grenade, #PD17
2 x Medi-kits, #PD46
Food culture, #PD53

Mini Car Muncher

6/Aug/90 #RP19

AWE	CHA	CON	DEX	INT	MSTR	PSTR
14	11	20	15	9	19	11

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Large	570	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	100	0	800	0
B	90	0	840	0
C	150	0	950	0

Hit Points: (20d10) 134

Attacks: 1 per unit AR: 643
Type A
3d10 damage

Move: (h/u)
Land: 11
Air: 0
Water: 4

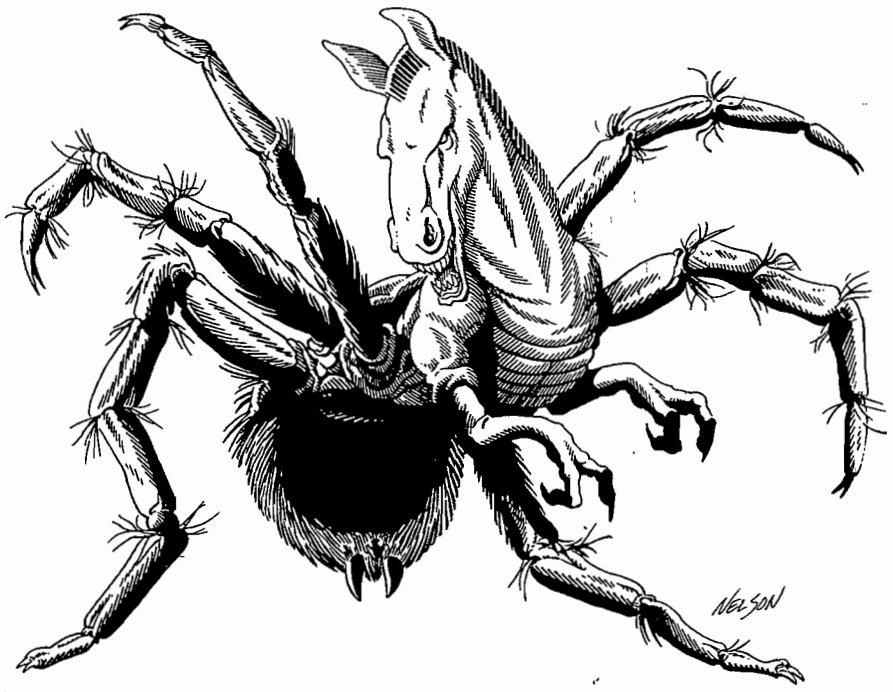
ROLE-PLAYING INFORMATION
ORIGIN: Tunnels and dark recesses of the city
PRESENCE: Tearing apart the expedition's vehicle to get at the fuel
GOAL: Have a good lunch of vehicle fuel, will munch expedition members along the way
DESCRIPTION
HEAD: Mule (l)
TORSO: Tarantula (l)
ARMS: Tyranosaurus (l)
LEGS: Paramecium (w)
ALIEN INFORMATION
Life span 300 years:

Child	0-6
Adolescent	6-24
Adult	25-144
Older	145-296
Aged	297-300

ALIEN BIOME:
Low gravity megalopolis
PROCUREMENT OF: Trap
ENERGY SOURCE: Vehicle engine fuel
REPRODUCTION: Injects larvae into car engines
HABITATION: Dam
AROMA: Chocolate and rubber

NOISE: Whimpering
TOOL USER/EDUCAT.: No/No

MUTATIONS
None



Ap

Burrowing Wigwut

6/Aug/90 #RP20

AWE	CHA	CON	DEX	INT	MSTR	PSTR
12	10	15	10	16	16	15

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Large	423	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	150	0	850	0
B	160	0	910	0
C	100	0	900	0

Hit Points: (15d10) 87

Attacks: 2 per unit AR: 607 Type A 3d10 damage

Move: (h/u) Land: 8 Air: 0 Water: 3

TOOL USER/EDUCAT.: No/No
MUTATIONS: None

ROLE-PLAYING INFORMATION
ORIGIN: Chasing flutterers
PRESENCE: Mistaking expedition for flutterers
GOAL: Trying to eat expedition
DESCRIPTION
HEAD: tyranosaurus(l)
TORSO: triceritops(l)
ARMS: lynx(l)
LEGS: manta ray(w)
ALIEN INFORMATION
Life span 110 years
Child 0-1
Adolescent 2-4
Adult 5-14
Older 15-105
Aged 106-110
ALIEN BIOME: high gravity ruin
PROCUREMENT OF: hunt
ENERGY SOURCE: omnivore
REPRODUCTION: mitosis
HABITATION: cave
AROMA: bologna and HP sauce
NOISE: Yapping



Nomadic Fluttering Sumpsucker

6/Aug/90 #RP21

AWE	CHA	CON	DEX	INT	MSTR	PSTR
5	16	15	7	16	11	23

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	medium	85	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	230	0	930	0
B	70	0	820	0
C	160	0	960	0

Hit Points: (15d8) 74

Attacks: 1 per unit AR: 732 Type A 3d12 damage

Move: (h/u) Land: 8 Air: 0 Water: 3

ROLE-PLAYING INFORMATION
ORIGIN: Migrated from somewhere
PRESENCE: Rooting about for Prey #RP23
GOAL: Trying to get some prey
DESCRIPTION
HEAD: tyranosaurus(l)
TORSO:rabbit(l)
ARMS: do-do bird(l,a)
LEGS: do-do bird(l,a)
ALIEN INFORMATION
Life span 20years
Child 0-2
Adolescent 3-4
Adult 5-6
Older 17-18
Aged 19-20
ALIEN BIOME: high gravity ruin
PROCUREMENT OF: ambush
ENERGY SOURCE chemosynthetic
REPRODUCTION: viviparous
HABITATION: none
AROMA: grease and tuna
NOISE:crackling

TOOL USER/EDUCAT.: No/No
MUTATIONS: None



Boat Killer

6/Aug/90 #RP22

AWE	CHA	CON	DEX	INT	MSTR	PSTR
10	13	19	10	16	9	13

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Small	18	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	130	0	830	0
B	160	0	910	0
C	100	0	900	0

Hit Points: (19d6) 68

Attacks: 1 per unit AR: 584 Type A d10 damage

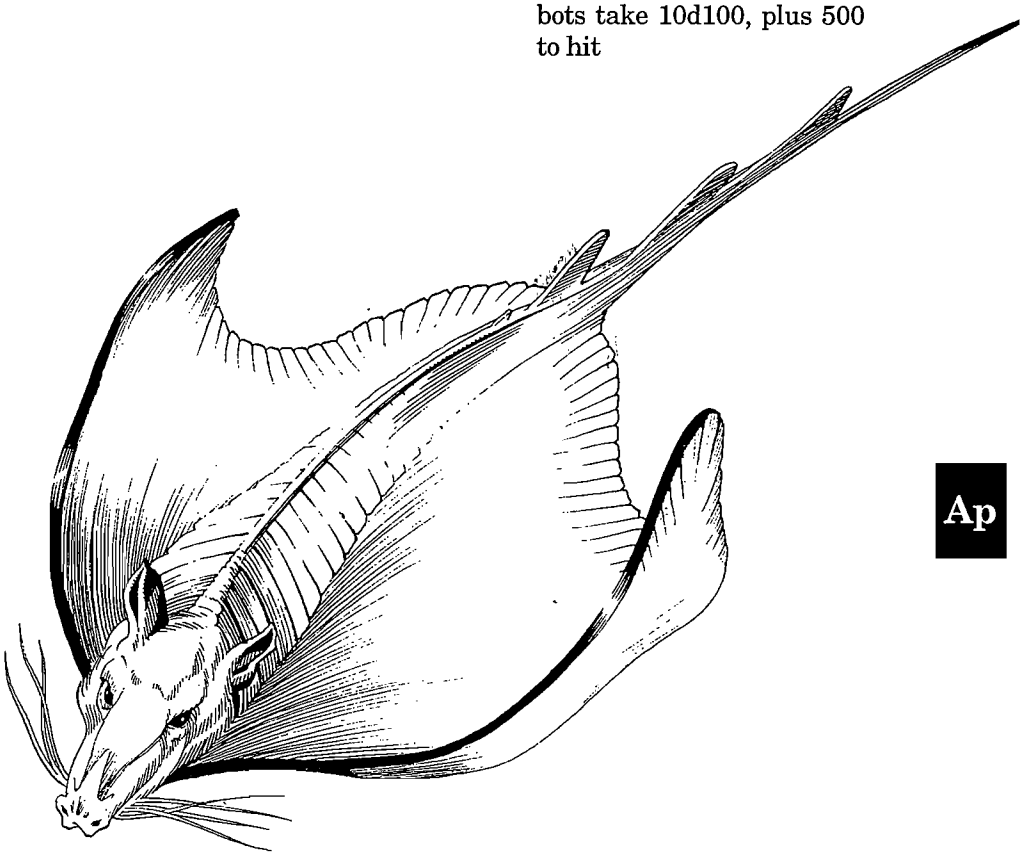
Move: (h/u) Land: 3 Air: 0 Water: 5

ROLE-PLAYING INFORMATION
ORIGIN: From under the water
PRESENCE: Eating the expedition's boat
GOAL: Eat the expedition's boat
DESCRIPTION
HEAD: Opossum (l)
TORSO: None (n)
ARMS: Planaria (w)
LEGS: Manta ray (w)
ALIEN INFORMATION

Life span	100 years
Child	0-6
Adolescent	7-11
Adult	12-81
Older	82-97
Aged	98-100

ALIEN BIOME: Tropical forest
PROCUREMENT OF: Chase
ENERGY SOURCE Photosynthetic
REPRODUCTION: Spores
HABITATION: None
AROMA: Oats and rubber
NOISE: Moaning in pain

TOOL USER/EDUCAT.: No/No
MUTATIONS: Physical #41, Rust: disintigrates metal on touch; 9 kg of metal; bots take 10d100, plus 500 to hit



Prey

6/Aug/90 #RP23

AWE	CHA	CON	DEX	INT	MSTR	PSTR
10	12	7 (wimpy)	5(slow)	3 (dumb)	24	3 (weak)

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Small	22	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	30	0	730	0
B	30	0	780	0
C	50	0	850	0

Hit Points: (7d6) 24

Attacks: 2 per unit Type A 1d6 damage AR: 726

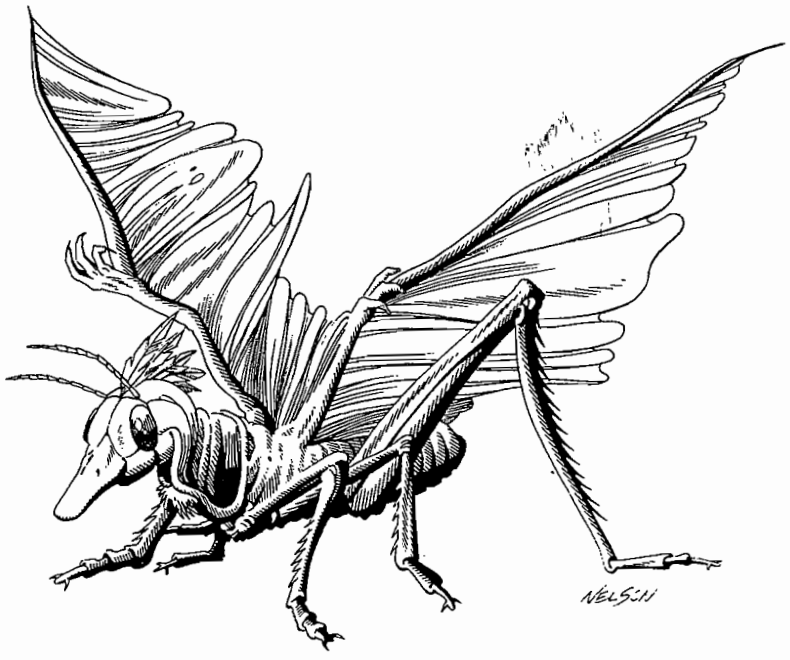
Move: (h/u)
Land: 3
Air: 3
Water: 1

ROLE-PLAYING INFORMATION
ORIGIN: Running from predators
PRESENCE: Found by expedition
GOAL: Not get eaten
DESCRIPTION
HEAD: Duck (l, a, w)
TORSO: Pterosaur (a)
ARMS: Grasshopper (l, a)
LEGS: Conifer (n-l)
ALIEN INFORMATION

Life span	40 years
Child	0-0.4
Adolescent	0.5-2.8
Adult	2.9-17
Older	18-38
Aged	39-40

ALIEN BIOME: Thin atmosphere desert
PROCUREMENT OF: None specified
ENERGY SOURCE: None specified
REPRODUCTION: Vivaporous
HABITATION: Hollow
AROMA: Cinnamon and oats
NOISE:Sounds like an orchestra warming up

TOOL USER/EDUCAT.: No/No
MUTATIONS: Mental #64, Time stop: Uses time stop for 24 units to make for an excellent escape. Eats during time stop.



Ap

Five Legged Scuttler

6/Aug/90 #RP24

AWE	CHA	CON	DEX	INT	MSTR	PSTR
14	10	3 (wimpy)	3 (slow)	7 (dumb)	7 (docile)	5 (weak)

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Tiny	4	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	50	0	750	0
B	70	0	820	0
C	30	0	830	0

Hit Points: (3d4) 7

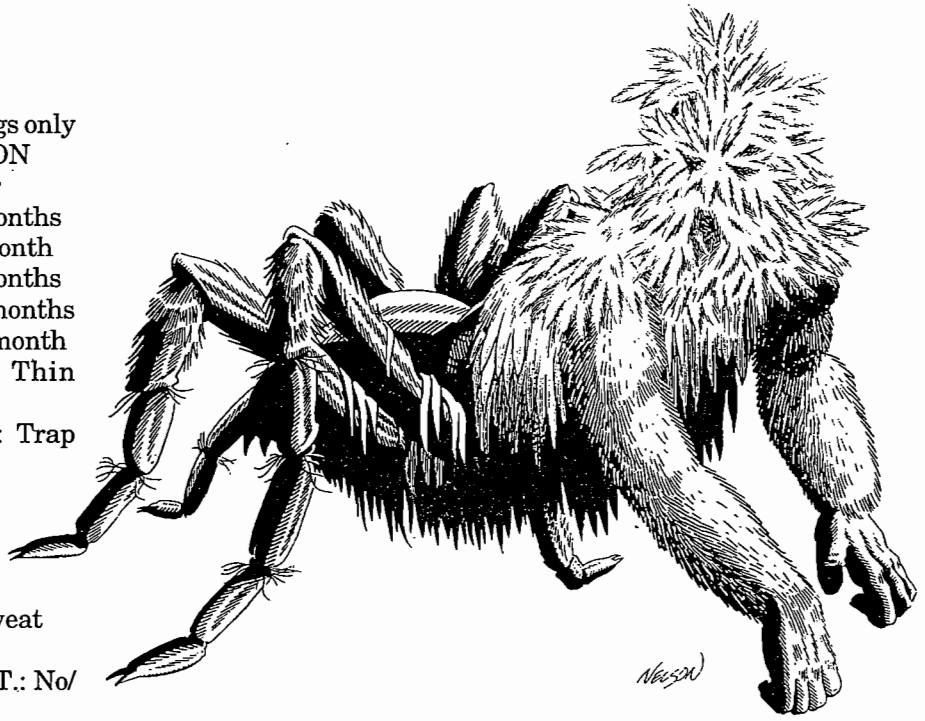
Attacks: 1 per unit Type A 1d4 damage AR: 586

Move: (h/u)
Land: 2
Air: 1
Water: 1

ROLE-PLAYING INFORMATION
ORIGIN: From holes in the ground
PRESENCE: Scuttling about
GOAL: Not get eaten, find something to eat
DESCRIPTION
HEAD: Conifer (n-l)
TORSO:Kelp (a, w)
ARMS: Ape (l)
LEGS: Spider (l), 5 legs only
ALIEN INFORMATION

Life span	1 year
Child	1-2 months
Adolescent	3rd month
Adult	4-7 months
Older	8-11 months
Aged	12th month

ALIEN BIOME: Thin atmosphere desert
PROCUREMENT OF: Trap
ENERGY SOURCE: Carnivore
REPRODUCTION: Vivaporous
HABITATION: Hole
AROMA: Beer and sweat
NOISE: Meowing
TOOL USER/EDUCAT.: No/No
MUTATIONS
None



Ferocious Amphibious Snake Elephant

6/Aug/90 #RP25

AWE	CHA	CON	DEX	INT	MSTR	PSTR
13	11	10	16	2 (dumb)	4 (docile)	18

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Gigantic	5202	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	180	0	880	0
B	20	0	770	0
C	160	0	960	0

Hit Points: (10d20) 86

Attacks: 1 per unit Type A 4d10 damage AR: 852

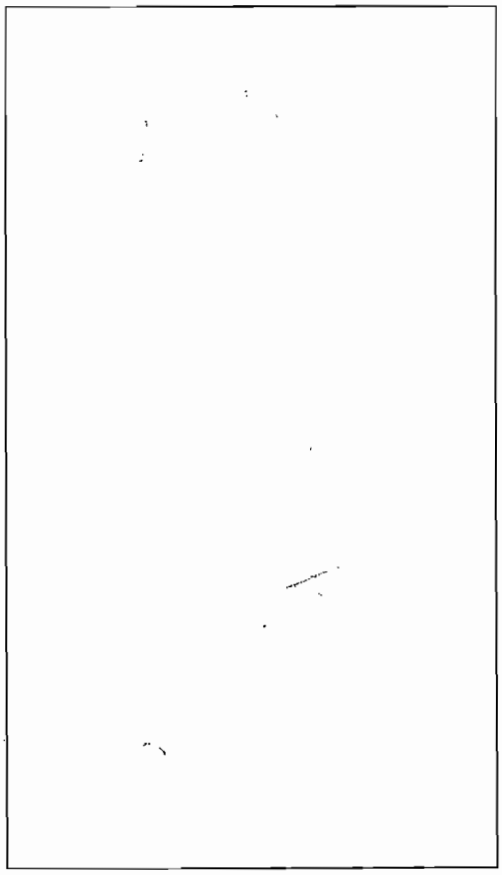
Move: (h/u)
Land: 8
Air: 0
Water: 8

ROLE-PLAYING INFORMATION
ORIGIN: Rushing from the deep recesses of the ocean
PRESENCE: Ferociously attacking on land or water
GOAL: Eat everything that it can see
DESCRIPTION
HEAD: Elephant (l)
TORSO: Snake (l)
ARMS: Seal (w)
LEGS: Shark (w)
ALIEN INFORMATION

Life span	150 years
Child	0-11
Adolescent	12-17
Adult	18-92
Older	93-143
Aged	144-150

ALIEN BIOME: Oceanic/ grassland
PROCUREMENT OF: Chase
ENERGY SOURCE: Omnivore
REPRODUCTION: Oviparous
HABITATION: Nest
AROMA: Apples and ashes
NOISE: Howls and growls

TOOL USER/EDUCAT.: No/No
MUTATIONS: Physical #45, Sking structure change: Plated skin, increased AR



Ap

Talking Blob Thing

6/Aug/90 #RP26

AWE	CHA	CON	DEX	INT	MSTR	PSTR
13	10	18	10	23	7	15

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
Alien	Large	125	Alien/1	

COMBAT DATA

	BP	BNP	MR	DA
A	150	0	850	0
B	230	0	980	0
C	100	0	900	0

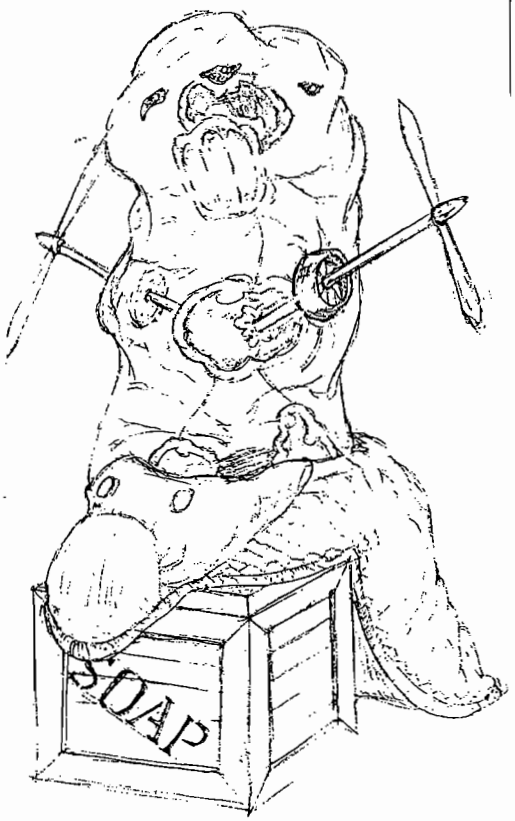
Hit Points: (18d10)

Attacks: 1 per unit AR: 750
Type A
3d10 damage

Move: (h/u)
Land: 3
Air: 0
Water: 3

ROLE-PLAYING INFORMATION
ORIGIN: Finished talking to something.
PRESENCE: Like to talk.
GOAL: Find people to talk to.
DESCRIPTION
HEAD: Ameoba (w)
TORSO:None
ARMS: Blimp (n-a)
LEGS: Slug (l)
ALIEN INFORMATION
Life span 74500 years
Child 0-3725
Adolescent 3726-7450
Adult 7451-37250
Older 37251-73009
Aged 73010-74500
ALIEN BIOME: Tundra
PROCUREMENT OF: Buy at store
ENERGY SOURCE: Omnivore
REPRODUCTION: Oviparous
HABITATION: Home
AROMA: Double shot of whiskey
NOISE: Talk constantly

TOOL USER/EDUCAT.: Yes/Yes
MUTATIONS: Mental #5, Communicate: Each blob can speak up to 23 different languages



QT1

6/Aug/90 #RP27

AWE	CHA	CON	DEX	INT	MSTR	PSTR
11	15	13 (II)	2 (I)	24 (IV)	0	12 (II)

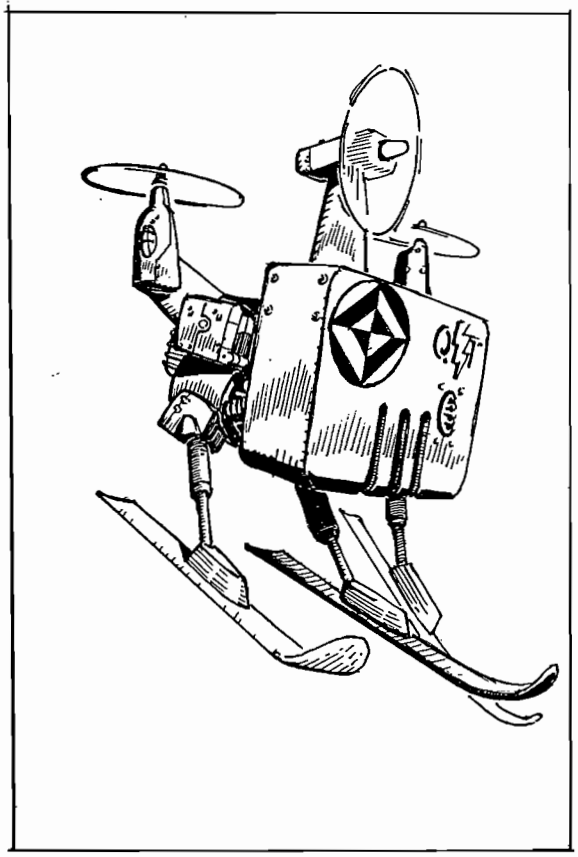
RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
A. Analog bot	100 x 100 x 100	79	Robot/2	

COMBAT DATA

	BP	BNP	MR	DA
A	70	0	none	12
B	76	0	none	6
C	130	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
39	700	34 kg	2 h/u	26

ROLE-PLAYING INFORMATION
ORIGIN:
PRESENCE:
GOAL:
DESCRIPTION: Flattened cube with skis and 3 propellers. Reaching from it is an articulation. QT1 is quite hot tempered.
ROBOT INFORMATION
BASE RACE: Human
POWER SOURCE: Basic liquid plant; 13 months
SENSORS: Video; Alternate, IR; Other, eyes; Video
LOCOMOTION: propellers, 3 pushing skis
ATTACKS: make CF roll to ram
DEFENCES: Run away
PERIPHERALS: Damage analysis; Articulation
ADAPTIBILITY: +15
VALUE: 60000
MUTATIONS
Mental #17 Heightened Brain Talent: Robot can figure anything out by simply putting its mind to it.



Ap

Decay Table For Analog Bot (#RP27)

AWE	CHA	CON (I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
11	15	13	2	24	0	12	39		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
11	15	13	2	24	0	12	39		39
11	15	13	2	24	0	12	35	Peripheral	74
9	15	13	2	23	0	12	31	Sensors	105
8	15	13	2	22	0	12	27	Sensors	129
7	15	13	2	21	0	12	24	Sensors	153
6	15	13	2	20	0	12	21	Sensors	174
6	15	12	2	20	0	11	18	Power plant	192
6	15	12	2	20	0	11	16	Peripheral	208
5	14	11	1	19	0	10	14	Control unit	222
5	14	11	1	19	0	10	12	Peripheral	234
		0					10	Control unit	244

Combot

6/Aug/90 #RP28

AWE	CHA	CON	DEX	INT	MSTR	PSTR
15	11	23 (IV)	15 (III)	17 (III)	0	20 (IV)

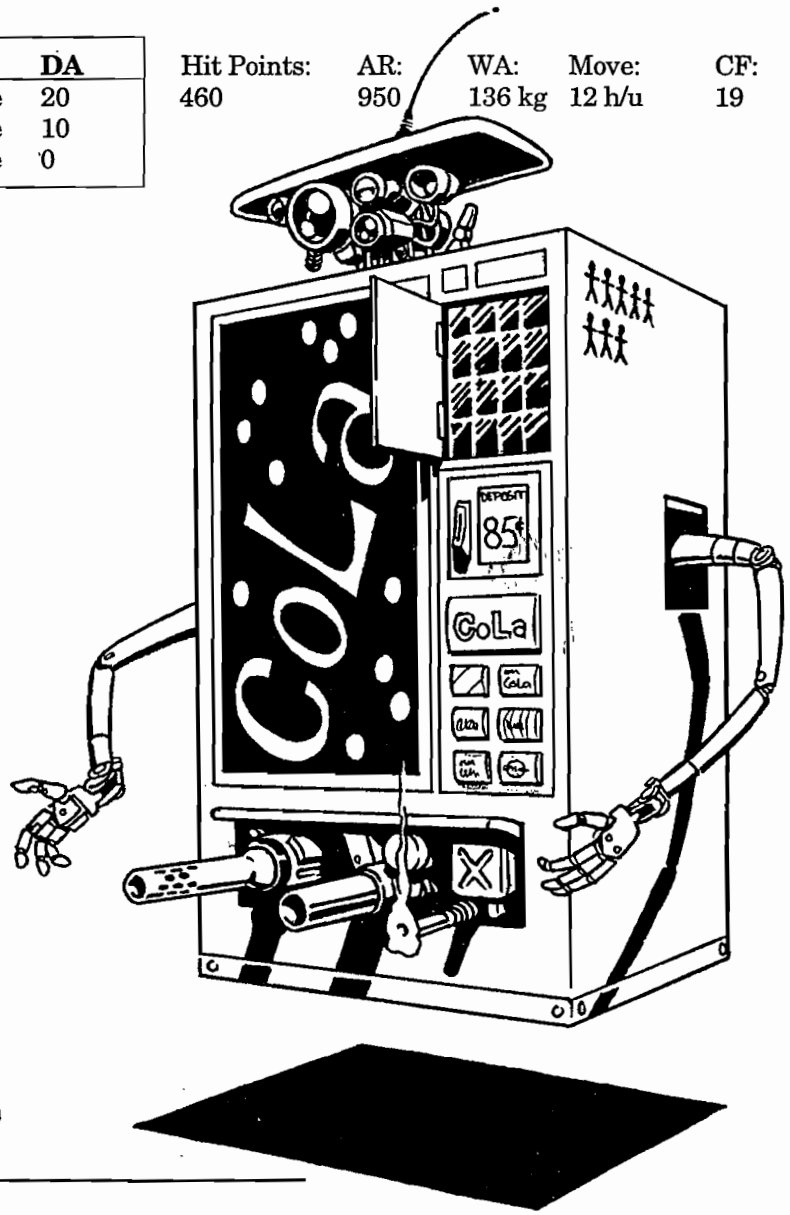
RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
G. Light offensive combat	Pop machine	64	Robot/2	

COMBAT DATA

	BP	BNP	MR	DA
A	175	0	none	20
B	160	0	none	10
C	160	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
460	950	136 kg	12 h/u	19

ROLE-PLAYING INFORMATION
ORIGIN: Corporate cola wars
PRESENCE: Mistaken for pop machine by expedition
GOAL: Unspecified
DESCRIPTION: Shaped like a pop dispenser.
ROBOT INFORMATION
BASE RACE: Human
POWER SOURCE: Solar (23 hours in darkness)
SENSORS: Video times 5
LOCOMOTION: Magnetic
ATTACKS:
Ramming: Blunt Protruberance, d6+d6/3 h/u
Type A weapon: Morning star d6 plus d4
Type B weapon: Arrow d6, 20h range
Gun: Variable lazer pistol #PD36
DEFENCES: Anti-personel: 3d6 pain, save or avoid bot
Amrour rating increase +250
PERIPHERALS: Tactics
ADAPTIBILITY: -3DD
VALUE: 20,000,000
MUTATIONS None



Ap

Decay Table For Light Offensive Combat Robot (#RP28)

AWE	CHA	CON(I)	DEX(IV)		INT(III)	MSTR	PSTR(II)	HPS	TTL
15	11	23	15	17	0	20	460		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
15	11	23	15	17	0	20	460		460
15	11	23	15	15	0	20	414	Brain (+2CF)	874
13	11	23	14	15	0	20	373	Articulations	1247
11	11	23	13	15	0	20	335	Articulations	1582
11	11	23	12	15	0	18	301	Locomotion	1883
10	11	23	11	15	0	18	270	Articulation	2153
10	11	23	11	15	0	18	243	Peripheral	2396
9	10	22	10	14	0	17	218	Control unit	2614
9	10	22	10	14	0	17	196	Peripheral	2810
7	9	21	9	13	0	16	176	Control unit	2986
5	9	21	9	12	0	16	158	Sensors	3144
4	9	21	9	11	0	16	142	Sensors	3284
4	9	20	9	11	0	15	127	Power plant	3411
4	9	20	8	11	0	15	114	Brain	3525
3	8	19	6	10	0	14	102	Control unit	3627
2	8	19	6	9	0	14	91	Sensors	3718
1	8	19	6	8	0	14	81	Sensors	3799
0							72	Sensors	3871

Industrial Lifting Robot

7/Aug/90 #RP29

AWE	CHA	CON	DEX	INT	MSTR	PSTR
17	11	11 (II)	8 (II)	8 (II)	0	29 (IV)

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
C. Industrial lifting bot	200 tall	242	Robot/8	

COMBAT DATA

	BP	BNP	MR	DA
A	135	0	none	29
B	125	0	none	15
C	80	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
110	700	460 kg	6 h/u	16

ROLE-PLAYING INFORMATION

ORIGIN: Works in cargo bays of spacevehicles

PRESENCE: Probably getting something for the expedition from an enormous cargo hold

GOAL: Do everything right.

DESCRIPTION: Symmetrical 3 wheeled, three armed flattened cone.

ROBOT INFORMATION

BASE RACE: Human

POWER SOURCE: Basic solid

SENSORS: Video times 4 Vibrations

LOCOMOTION: 3 wheels

ATTACKS: Roll under CF to ram: blunt flat, d4+d4 per 3 h/u

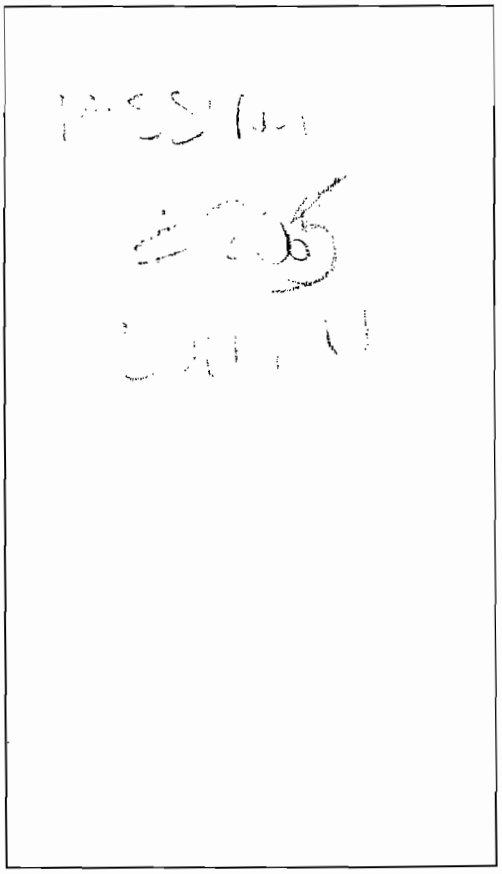
DEFENCES: Run away

PERIPHERALS: Hairdressing

ADAPTIBILITY: +5

VALUE: 30000

NOTES Can lift up to 3 things at once, sinlge arm can lift up to 1380 kg. Lift up to 5 hexes.
Dropping things would require CF roll.



Ap

Decay Table For Industrial Lifting Robot (#RP29)

AWE	CHA	CON(I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
17	11	11	8	8	0	29	110		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
17	11	11	8	8	0	29	110	——	110
17	11	11	6	8	0	27	99	Locomotion	209
17	11	11	6	8	0	27	89	Peripheral	298
17	11	11	6	7	0	27	80	Brain	378
17	11	10	6	7	0	25	72	Power plant	450
16	10	9	5	6	0	24	64	Control unit	514
16	10	7	5	6	0	23	57	Power plant	571
15	10	7	4	6	0	23	51	Articulations	622
15	10	7	2	6	0	21	45	Locomotion	667
14	10	7	2	5	0	21	40	Sensors	707
14	10	7	2	5	0	21	36	Peripheral	743
12	10	7	2	3	0	21	32	Sensors	775
11	10	7	2	2	0	21	28	Sensors	803
			0				25	Locomotion	828

Maintenance bot

7/Aug/90 #RP30

AWE	CHA	CON	DEX	INT	MSTR	PSTR
13	12	11 (II)	17 (III)	12 (II)	0	7 (I)

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
K. Maintenance	66 diameter	33	Robot/4	

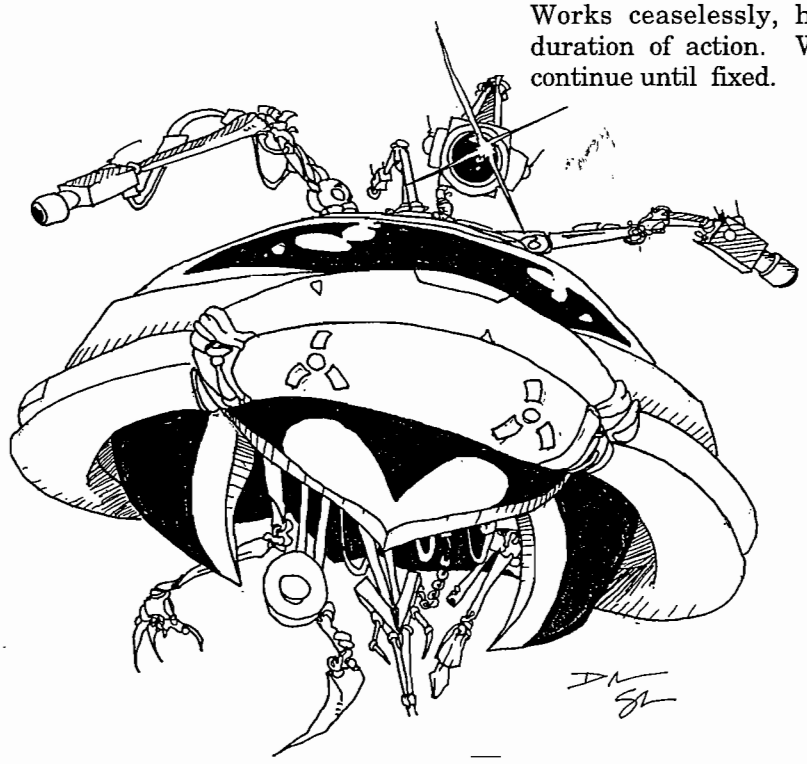
COMBAT DATA

	BP	BNP	MR	DA
A	120	0	none	7
B	150	0	none	4
C	145	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
33	700	12 kg	14 h/u	16

ROLE-PLAYING INFORMATION
ORIGIN: Works in drives of spacevehicle.
PRESENCE: Probably fixing something for the expedition.
GOAL: Do everything right.
DESCRIPTION: Hovering disc. Doors open and utensils hang out from the bottom.
ROBOT INFORMATION
BASE RACE: Human
POWERSOURCE: Nuclear
SENSORS: Video times 4
LOCOMOTION: Antigrav
ATTACKS: Roll under CF to ram: blunt flat, d4 +d4 per 3 h/u
Deadly random ability: thwack with handle of srewdriver, d6
DEFENCES: Run away
PERIPHERALS: Lash
ADAPTIBILITY: +37
VALUE: 105000

NOTES: Works as a 4th level mech. Add INT to PT roll, plus 32 DD bonuses. Special drives 10, Inatmo drives 5
Exatmo drives 5. If fails roll simply start again. Works ceaselessly, half duration of action. Will continue until fixed.



Ap

Decay Table for Maintenance Robot (#RP30)

AWE	CHA	CON (I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
13	12	11	17	12	0	7	33		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
13	12	11	17	12	0	7	33		33
12	12	11	17	11	0	7	29	Sensors	62
10	12	11	16	11	0	7	25	Articulation	87
8	12	11	16	9	0	7	22	Sensors	109
7	12	11	15	9	0	7	19	Articulations	128
6	12	11	14	9	0	7	17	Articulations	145
6	12	11	14	8	0	7	15	Brain	160
5	12	11	14	7	0	7	13	Sensors	173
5	12	11	13	7	0	5	11	Locomotion	184
5	12	11	13	7	0	5	9	Power plant	193
5	12	11	13	5	0	5	8	Brain	201
5	12	11	13	5	0	3	7	Power plant	208
3	11	10	12	4	0	1	6	Control unit	214
						0	5	Locomotion	219

Medical bot

7/Aug/90 #RP31

AWE	CHA	CON	DEX	INT	MSTR	PSTR
17	8	8 (II)	17 (III)	19 (III)	0	1 (I)

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
I. Diagnostic medical bot	59 long	49	Robot/7	

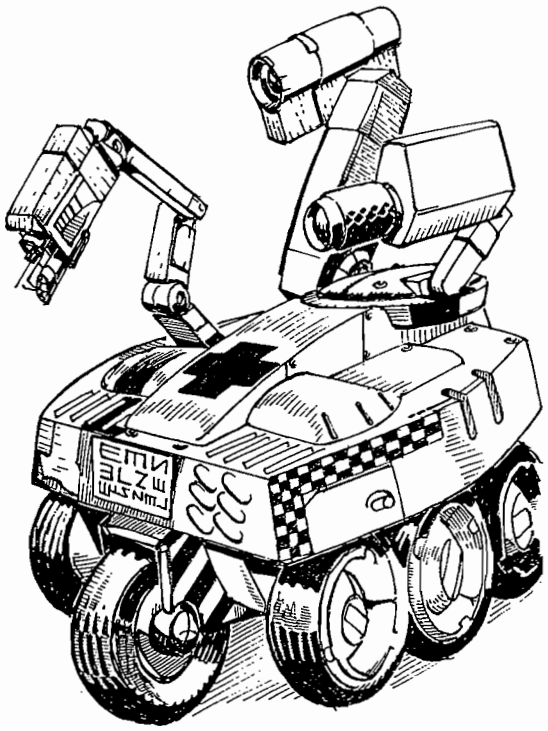
COMBAT DATA

	BP	BNP	MR	DA
A	90	0	none	1
B	190	0	none	1
C	180	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
16	700	4.5 kg	14 h/u	26

ROLE-PLAYING INFORMATION
ORIGIN: Works in sick bays of spacevehicles.
PRESENCE: Probably fixing someone in the expedition.
GOAL: Do everything right.
DESCRIPTION: Elongated square on wheels, with a host of sensors and gadgets sticking out of the top.
ROBOT INFORMATION
BASE RACE: Human
POWER SOURCE: Nuclear
SENSORS: Video times 5
LOCOMOTION: 9 wheels
ATTACKS: Roll under CF to ram: blunt flat, d4 +d4 per 3 h/u. It would never do this.
DEFENCES: Camouflage: d100 AWE roll to find when actively searching
PERIPHERALS: Self damage analysis
ADAPTIBILITY: +10
VALUE: 225000

NOTES: Works as a 7th level vet. Add 38 to PT rolls, and subtract 6 DDs. AID on medical equipment is 95%.



Ap

Decay Table For Diagnostic Medical Robot (#RP31)

AWE	CHA	CON(I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
17	8	8	17	19	0	1	16		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
17	8	8	17	19	0	1	16		16
						0	14	Control unit	30

Clever Phil the Relations robot

7/Aug/90 #RP32

AWE	CHA	CON	DEX	INT	MSTR	PSTR
11	11	8 (II)	5 (I)	22 (IV)	0	7 (I)

RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
D. Relations robot	170	85	Robot/2	

COMBAT DATA

	BP	BNP	MR	DA
A	60	0	none	7
B	165	0	none	4
C	135	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
24	700	12 kg	4 h/u	24

ROLE-PLAYING INFORMATION

ADAPTIBILITY: +5

ORIGIN: Works in cabins of spacevehicles.

PRESENCE: Probably tending to the expedition.

GOAL: Do everything right.

DESCRIPTION: Clever Phil appears as an upright bipedal robot modelled after an avarian.

His exterior is modelled after 1940's dress, and he has a slightly depressed attitude.

ROBOT INFORMATION

BASE RACE: Avarian

POWER SOURCE: Broadcast

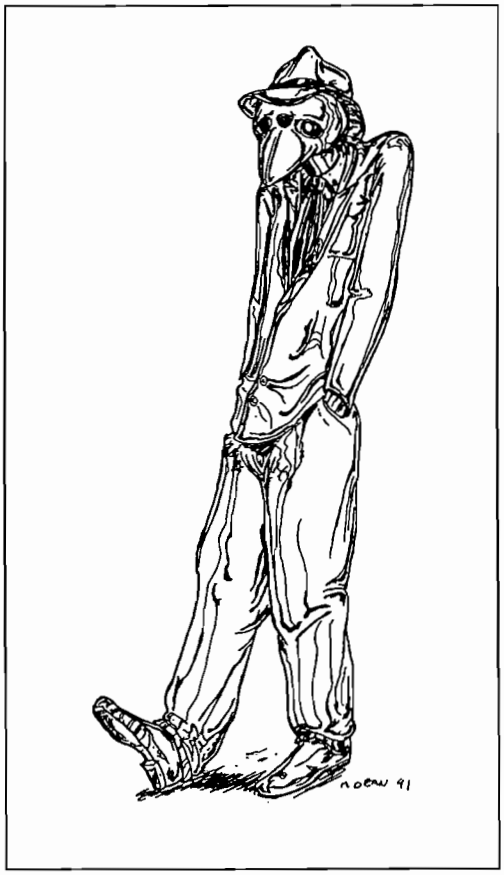
SENSORS: Video times 3 Sonar

LOCOMOTION: Bipedal legs

ATTACKS: Roll under CF to ram: blunt protruberance, d6 +d6 per 3 h/u. May head butt in self defense.

DEFENCES: Force field: 50 HPS, stays down for 50 minutes

PERIPHERALS: Communications



VALUE: 100000

NOTES: Fluent in 220 different languages at once. New language 22% chance understand, or learn it in d4 days.

Tend to 44 guests with ease.

Understand the etiquette of 22 different cultures.

Ap

Decay Chart For Clever Phil (#RP32)

AWE	CHA	CON (I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
11	11	8	5	22	0	7	24		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
11	11	8	5	22	0	7	24		24
11	11	8	5	22	0	7	21	Peripheral	35
9	11	8	5	21	0	7	18	Sensors	53
8	11	8	5	20	0	7	16	Sensors	69
7	11	8	5	19	0	7	14	Sensors	83
7	11	8	5	19	0	7	12	Peripheral	95
6	11	8	5	18	0	7	10	Sensors	105
6	11	8	4	18	0	6	9	Locomotion	114
5	9	7	2	17	0	5	8	Control unit	122
			0				7	Locomotion	129

The Driver Robot

7/Aug/90 #RP33

AWE	CHA	CON	DEX	INT	MSTR	PSTR
10	13.	11 (II)	24 (IV)	23 (IV)	0	3 (I)

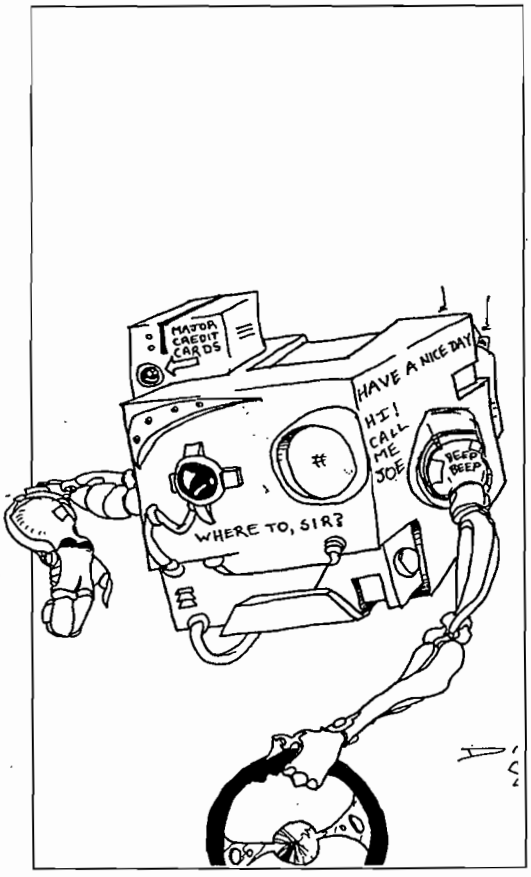
RACE	SIZE (cms)	WATE (kgs)	CLASS/LVL	EXPS
L. Transport robot	50	24	Robot/2	

COMBAT DATA

	BP	BNP	MR	DA
A	70	0	none	12
B	76	0	none	6
C	130	0	none	0

Hit Points:	AR:	WA:	Move:	CF:
39	700	34 kg	2 h/u	26

ROLE-PLAYING INFORMATION
ORIGIN: Works in bridge of spacevehicles.
PRESENCE: Probably flying the expedition some where.
GOAL: Do everything right.
DESCRIPTION: Floating cube.
ROBOT INFORMATION
BASE RACE: Rodentia
POWER SOURCE: Dynamo 11 months
SENSORS: Video times 2 Radar
LOCOMOTION: Antigrav
ATTACKS: Roll under CF to ram: edge (of serving tray), d8 +d8 per 3 h/u.
Deadly random ability: spray water from server for d3 HPS
DEFENCES: Override interrupt
PERIPHERALS: Serving Articulation Exatmo hardened
ADAPTIBILITY: +22
VALUE: 900000



NOTES: 92% chance to pilot a vehicle. Can replace a pilot on space vehicle. 33 DDs to specialize in space maneuvers.

Ap

Decay Table For Extraplanetary Transport Bot (#RP33)

AWE	CHA	CON (I)	DEX(IV)	INT(III)	MSTR	PSTR(II)	HPS		TTL
10	13	11	24	23	0	3	143		0
AWE	**CHA**	**CON**	**DEX**	**INT**	**MSTR**	**PSTR**	**HPS**	**PART**	**TTL**
10	13	11	24	23	0	3	143		143
10	13	11	24	23	0	3	128	Peripheral	271
10	13	10	24	23	0	2	115	Power plant	386
9	13	10	24	22	0	2	103	Sensors	489
8	12	8	23	21	0	1	92	Control unit	581
7	12	8	23	20	0	1	82	Sensors	663
7	12	8	23	19	0	1	73	Brain	736
						0	65	Locomotion	801

Ap

Appendix E
The Scenario

What this adventure is about.

This is a beginning level adventure for players and referees to familiarize themselves with the **EXP** role-playing system. The players will be required to make personas as described in Chapter 2, and the referee will be required to set into motion the events of the adventure. The referee will be called upon to help the players with the creation of their personas, play several of the pre-generated RPs detailed in Appendix D, as well as run combat, and crisis situations. Finally he will be required to issue experience points to his players.

Any referee who is experienced or bold enough to modify this adventure is free, and in fact encouraged to do so. Quite often the players will attempt something not outlined in the course of the adventure, which means the referee most throw away all of his notes and make it up as he goes. In fact, I did exactly the same thing during the play-testing of this scenario when my players insisted on stealing one of the hoverboats and getting lost in Big Lake.

So, my advice to the referees is to be prepared to have to abandon the events outlined here, and know the motivations of all of the RPs so you can portray them accurately for your players.

Planet Rillieb'glaike

Planet Rillieb'glaike is the fourth planet in System 91L42. 91L42 is an Imperial "Fringe" system, meaning that it lies on the edge of explored Imperial Space. Planet Rillieb'glaike is considered to be the tourist "hot spot" by most people in this sector of space.

"Rillieb'glaike", when translated into Universal from the Rodent tongue, means "Really Big Lake." An Imperial Scout Vessel discovered Rillieb'glaike one hundred and seventy three years ago, and the Rodent Captain named it after the big lake located near the equator which is fed by glacial waters from the planets only mountain range. The waters run over a cliff at the northwestern edge of the lake. The cliff is thirteen kilometres high. Here the waters are divided into the thousands of streams which feed most of Rillieb'glaike's jungles and forests. The lake, the mountains and the cliff are referred to respectively as; Big Lake, Big Mountains, and Big Cliff.

The Lost Cultures of Rillieb'glaike.

Centuries before the Empire expanded into the Fringe systems to accommodate their ever expanding population, there were many alien races out there in the great void. One of these races originated on Rillieb'glaike. Before they all died off, they had established a small civilization there, and have left behind inumerable ruins. They seemed to have died off due to an alteration in the planets orbit around five thousand years ago—not very long before the planet was discovered and turned into a resort world. The civilization seemed to have reached a technology level of 5 or early 6. Then, the planet was torn closer to the star, and the ice in the Big Mountains melted, flooding out their civilization and changing their ecology enough to kill them all off.

Imperial anthropologists that have studied them and what they have left behind. Statues show they were a bipedal canine species, probably related to any number of canine species in the known galaxy at present. Their society was very similar to Roman society. They had arenas where contestants would be pitted against wild animals and against each other, as well as a studied approach to art and the figure.

In fact, almost everything that will ever be found out about them has already been found out, which is why the course that the characters have signed up for is a beginning level anthropology course. Imperial Anthropologists have named the race Homo precanis upsilon caste 0014296/A. This

relates them, numerically to back to a canine race believed to have seeded part of the Fringes about 800 centuries ago.

The Dig Site

The location of the site that the personas are to excavate for their class is indeed a unique one. When the planet was moved closer to its star thousands of years ago, most of the villages on the planet were flooded and destroyed by melting glaciers from the Big Mountains. This site is an excellent example of that. One of the true benefits of these submerged sites is that they have not been exposed to the water long enough to erode, which has given the archaeologists an excellent opportunity to study the process of erosion itself.

The referee should thoroughly prepare himself for this adventure by making sure he has a fair understanding of the effects of being underwater (Chapter 19).

The site is only 22 metres under water, or 11 hexes, and consists of a few dozen households, mostly in ruin, a religious temple, several dozen statues, depicting Gods and Goddesses, and an Arena, which is the primary object of excavation for the characters. During the first dive, the characters will be basically vacuuming large quantities of sediment out of the Arena, which is a pit dug into the ground with stone seats rising in tiers from its floor. The vacuum is a large hose which runs up to a ship on the surface. Mechanic characters may not only be able to learn about the course material, but they could gain an understanding of industrial vacuum operation as well. Anthropologists will obviously be kept busy doing their thing. Knites may find the religion aspects interesting, and Mercs will always enjoy digging through the muck to find weapons and dead guys.

During the second (secret) dive, the characters should find the entrance to the arenas ante-chamber which is where the Boat Killer has laid its eggs. This area should NOT be found before the second dive, even if they are looking for it. The simple fact is that not enough of the muck has been sucked away to reveal the opening yet.

Planet Rillieb'glaike Power Company.

Once Rillieb'glaike was colonized, an enormous dam was built with turbines running the full length of Big Cliffs thirteen kilometre drop. "The Dam" as it is called is eight kilometres long and completely dams the mouth of Big Lake.

Rillieb'glaike Power Company built and owns The Dam, and they have managed to increase the efficiency of their equipment to continue to supply power to all of Rillieb'glaike, even though its population has quintupled since it was built.

The Real Story.

Forty years ago the power demands for Planet Rillieb'glaike exceeded the amount of power that the Company was able to provide with its dam. Fortunately someone had an idea.

The power company hired a genetic engineering firm to develop a creature which could drain the life force from living beings and turn it directly into electrical energy. They succeeded. For purposes of the adventure, the creature is a **Boat Killer** with the additional mutations; **Life Leech** and **Electricity Producing Organ.** Even these mutations are modified such that the Hit points the creature drains from its victims generate billions of joules of electrical power. The exact game mechanics of this special combination are black-boxed. It is, for example unfair to allow the creature to discharge enough electricity to power a planet for a week in a single shock attack. Perhaps the power company has some special technological device for extracting the power. Hopefully your players will not try too hard to find out, or else you will have to be an excellent fast-talker indeed.

At any rate, this creature swims about in Big Lake, and about once a week it drains the life force from some hapless tourist, which provides the energy which the power company needs. The tourist is invariably written off by investigators as "drown" or "missing and presumed drown".

Now, losing only one or two tourists a month

this way is acceptable at any massive resort. The problem is that over the last six weeks the number of deaths of this type has increased into the HUNDREDS. The power company does not know what is going on, the resort staff do not know what is going on, no one does. The problem is that if the power company is found to have been murdering people to increase their earnings, the Empire will come down hard. They must cover up their alien at all costs except one: they cannot kill it. That would put them out of business also. Basically, the power company has decided to let this continue and try to wait it out. Maybe it is part of the creatures life cycle that will only continue for a couple of months.

The fact of the matter is that the creature has lain eggs. The eggs are near the point of hatching, and the way the mother feeds them is by charging them with the same electricity it gives to the power plant. The eggs, of course use hundreds of times the energy that the planet does.

The personas have come to Rillieb'glaike for an archeology course. It is a mid-semester course that not only gives them an arts credit, but lets them go to the best resort in this sector of space to do their studying. Good all around. Good except for the fact that people turning up dead.

The Role of Horace Punko

The RP Horace Punko is fundamental to this adventure. He is the comic relief and the ironic hero. It is his job to continually annoy the hell out of the players with his cameras, his cigars and his loud mouth (not to mention loud shirts). Horace Punko is to the vacationing tourist what an Anti-Knite is to a Knite. Horace Punko will complain to the highest possible authority anytime something isn't completely satisfactory to him. He should always be present to annoy the players and it is crucial that the referee make him annoying. The other important thing about Horace Punko is that he is, for theatrical reasons, completely indestructible. Any personas who wish to shoot at him will have to deal with their aim being disrupted by camera flashes and cigar smoke in their eyes etc. etc. etc. If you enjoy playing Horace Punko, he could become a regular RP in your ongoing **EXP** campaign, tripping up the players anywhere they go, defying all probability by showing up in the most out of the way places, never giving them a moments grace. If you don't like Horace Punko, you may freely allow the players to lynch him, his family, dog, friends, neighbors and everyone he ever knew. This could also become a campaign in itself. It is, however, imperative that Horace Punko be present through this entire adventure. If you let him die, then he won't be there to save the players at the end.

Outline of Events

DAY 1: The personas arrive at Big Lake Resort Space Port and meet with Doctor Fange Zervensays, the Archeology 142 Professor.

The characters board a transport boat and cross Big Lake, to Big Lake Resort. (see "Boat Disaster").

The "Meet the Guests" brunch is cancelled while the accident is sorted out. Zervensays holds her first on-shore class, with a lesson on the use of the diving equipment, and how to excavate while underwater.

Late the first evening a rowboat with four fishers drifts ashore, and all are dead.

DAY 2: First underwater classes. Students in the Arena are attacked by the alien (see "First Dive"). Once the incident is reported, Power Company Officials call for an investigation. The investigation calls for Zervensays and all of her students to be quarantined for medical reasons until they can be examined by Doctor Wrenchwilli.

DAY 3: The Power company has quarantined all classrooms, and has revoked all diving privileges. Boating is unrestricted, and the investigation has determined that it is "safe".

Zervensays holds a secret meeting with her students, and asks for volunteers to go back under and see what exactly is going on.

Attack guards at the docks, and steal diving gear. (see "Second Dive").

DAY 4: Zervensays asks her students to keep an eye on Doctor Wrenchwilli while she examines the egg.

A tour bus headed to The Dam is found half submerged in Big Lake, all 20 passengers are dead. Wrenchwilli leaves the scene and heads toward the Power Company, seemingly very upset, and knowing something that no one else does.

DAY 5: (see "Wrenchwilli and Zervensays: Kidnapped.").

DAY6: Captives of the Power Company, Gilgamesh Vene explains their evil plans. (see "Gilgamesh Vene's Big Speech"). Just as they are about to be killed, they are rescued in "The Final Battle".

DAY 7: The Empire has been called in by the Planetary Government to set up a standard series of Fusion Reactors to power the planet. The Dam will be repaired and its functions will be able to provide nearly half of the power that the planet requires.

Part 1 The Boat Disaster

The personas have landed at the spaceport on Planet Rillieb'glaike, and are loading onto the boats that are to take them across Big Lake. Many boats go before, but the Personas, Fange Zervensays, and Horace Punko (RPs) all end up on the last boat. Each of the two boats to leave last has 20 people and 5 crew. The crew of the boat the personas are on consists of Viry Shortale, and Shawna Cassety (RPs), plus three others. Make up the remaining compliment with generic Joe and Jane Civil's.

These boats are very exciting, and travel at hundreds of kilometres an hour, skimming across the water toward the resort on a cushion of air.

Approximately half way across the lake, the personas notice the passengers on the deck of the boat beside theirs all collapse onto the deck. The boat drifts out of control and rams into the side of the boat the personas are on—ruining the magnetic gangplank and tractor beam controls.

Shawna Cassety tells the players that if they don't get across to the other boat and program it to stop safely it will crash into the resort, killing thousands of tourists. They must leap across to the other boat and activate its gangplank so that she can cross to it and program it to safely dock. The gangplank, however, is a complicated mechanism, and requires all of the personas plus two people to operate it. The other two to volunteer are Horace Punko, and Viry Shortale. Shawna will try her best to keep the players' boat within two meters of the other boat, but because of the high winds between the ships (which are blocked by forcefields when you are on deck), the jump will be extraodinarily difficult.

To leap safely from one boat to the other will require a D50 DEX check. Failure results in the jumper clinging by one hand to the rail of one of the boats (50% chance of each). Any character who attempts to fly across will realize that the wind is far to strong and that flight is impossible. They must jump.

To pull a person onto the deck who is hanging will require a D50 PSTR check. Failure means that the helper is now hanging from the side as well.

If two people attempt to pull one person up they must EACH make a D12 PSTR check, or suffer the same fate.

A person can also pull himself onto the boat using a D50 PSTR check, and a D50 DEX check. Failure means he will continue to hang there.

This is a very difficult series of attribute challenges that will help the personas understand their stats. It can be a lot of fun if played properly. Remember that Horace Punko is INFINITELY more interested in getting exciting action photos of people dangling from the sides that he is in helping them up.

It is also possible that one of your players could have a toy or mutation that will make this section of the adventure really boring. Someone who rolled a super strong flying rescue bot as a toy could easily ruin this by ordering it to escort the necessary individuals across to the other boat. As the ref you must find a way to make this interesting. For example: the radio-frequency emissions of the boats force field could interfere with the rescue

bot's programming causing him to develop an insane fear of flying. The players may choose to attempt to "trick" the bot into saving them instead of risking their lives. This should be just as challenging for them.

One more thing: this part of the adventure is designed to help both the players and the referee familiarize themselves with their personas and RPs, as well as with some of the rules. It is not designed to be dangerous. If a player fails a roll particularly badly, do not drop him in the lake, simply make the entire situation more extreme. This part of the adventure is designed so that no one gets killed their first time out.

Part 2: First Dive.

The personas have all suited up in their underwater gear and are about to take the plunge into the dig site. About half an hour into the class, they are suddenly attacked by the Boat Killer. Fange Zervensays will attempt to lead the personas safely back to the boat. The boat killer is a very dangerous monster, but its primary motives here are not to kill the personas, but rather, to scare them away from her eggs. The personas will not find the eggs on this dive. That part of the site has not been excavated yet.

If the monster sustains dangerous amounts of damage in the fight, it will flee, knowing that its eggs have not actually been uncovered yet. Similarly, it will "let" the players escape rather than kill them all. After all, it doesn't want a search party to come looking for them.

In order to limit the amount of ammunition expenditure in this fight, the ref should keep in mind that not all weapons work underwater. There are detailed rules for the effects of atmospheric conditions on weapons in Chapter 19. The ref should do everything in his power to keep the Alien from being killed here. If, by some fluke, it should be, then that is the way it goes. Remember, though, the alien does not wish to fight to the death, only to scare the players away.

It may be wise to make the ruling that a disintegration pistol does not work under water (or that it disintegrates the water right in front of the barrel), if one of the personas has rolled one. Similarly, you may wish to say that a persona with Time Stop is unable to move underwater because all of the water molecules are frozen in place, or to say that the player starts losing Hit Points from Life Leech when he tries to get to close to the temporally frozen alien and slit its throat. Suggest maybe he should use his head start to get back to the boat, and maybe drag a wounded persona with him.

Part 3: Second Dive.

Although the personas and Zervensays have been quarantined, Zervensays is determined to find out everything she can about this creature and what it is. She calls the player personas to her bungalow where she asks for volunteers to return to the dive site and see what happens. She is in the position to offer an automatic A in the course to anyone who is reluctant.

The plan is to go to the diving shed and knock out the two Power Company guards. Then they will steal the scuba equipment and a boat and head out to the excavation site. Also available in the shed are several (as many as needed) XLP laser pistols in the blue-green spectrum, designed specifically for underwater use.

The two guards at the diving shed are RPs #07. They should be easily ambushed, and knocked out. This should be run as an ordinary combat. Of course, there is nothing stopping the players from using excessive force here—there may be a mercenary (read P.E. major) in the party. If there are spies or mechanics, you may wish to put locks or security systems on the doors to the shed. If there is a nomad, perhaps one of the security guards could run off in the jungle with the keys. Make it more than just a shootout.

Once the personas get out to the dig site and are in the water, they will eventually find the aliens nest. There are dozens of eggs here and Zervensays wants one of them brought back for study. Once the players are on their way with the egg, the monster will attack them once again. This

time it will try to kill them. Zervensays will encourage the characters not to try to kill it, so that it can be studied, but this may be impossible. If the players do kill it, you could always inform them that one of the eggs they left behind has just hatched releasing a new monster.

Part 4: Wrenchwilli and Zervensays Kidnapped.

When the personas report for class the next day, Zervensays is gone. If the go to her bungalow the will find the opened egg, the dissected alien, and pages of notes which explain that the alien drains peoples life forces and turns the energy into raw electricity. A biologist persona may wish to spend a little while examining these notes and learning more in depth about the aliens physiology.

At any rate, the players conclude that Zervensays has been kidnapped by the power company and they have to go and rescue her.

They travel to the dam, where they are ambushed by security and fired on with a **whale stunner** (artillery # 25). Any of them who remain conscious through that will be subdued by a seemingly endless stream of security forces. The fight should continue until all of the players are stunned or unconscious. The Ref should fell free to crack out any non-lethal weapon he wishes in order to subdue the players—including tear gas, stun weapons, and security guards with Sensory Deprivation (mutation # 52). The fight is designed so that the players will be captured and the adventure will flow into the next part.

Part 5: Gilgamesh Vene's Big Speech.

Gilgamesh Vene (RP#14) is the owner/operator of the Power Company. She is totally crazy. She is the classic egomaniacal villain, and after capturing the players along with Wrenchwilli and Zervensays, she must reveal the entire evil plan before she kills them. The personas are all handcuffed to chairs in a flood bay within the dam. Vene plans to fill the room with water after she explains everything. The players are still armed, but they are completely bound.

The enterprising ref may wish to make up his own speech to better suit what has happened in his campaign. The flambouyant ref may wish to bellow out the memorized speech while standing on a chair, and the conservative ref may wish to simply explain the fact of the speech. Here it is, do with it what you will:

"Fools. Fools.
Fools—ignorant fools!!
Did you reeallllly think that you could thwart the plans of the Planet Rillieb'glaike Power Company?
HA!
We are not just a 'power' company—we are a Powerful company!!
What? What is that you ask? You ask "What is so powerful about electricity?"

Well....
I'll tell you!

Every person in this sector takes their vacation here. When you go on vacation, what do you bring with you?
Bathing suits? NO!!
Deodorant? NO!!
You bring hair dryers. You bring curling irons. You bring electric toothbrushes. You bring little fucking toys that plug into the wall and go whiz and click!!! But do you bring ELECTRICITY???

NO!!!

And that, that is where our power lies!

Yes— we do questionable things here. Yes, we have a nasssty alien beasssty that eats tourists and turns their life force into electricity. But it's all part of the excitement!!
Don't you see???
Isn't this exciting???

Oh...my...Friends... this is not the FULL scope

of my plan.

First, I take this planet.
Next, this sector.
And soon, the Empire itself will crumble in my wake.

hahahahahahahahahahahahahahahahaha!!!!!!

But now...now that you...know...my eeevil plans, I am afraid that I cannot simply let you go.

Yes, I am afraid that you are going to have to die now.

...good...day."

There it is. Immediately after the speech, the personas, who are guarded by thirty security guards and Gilgamesh Vene will hear a bellow from above, as Horace Punko slips from the rafters while trying to get a good angle to take pictures of the characters as they die. He will fall straight down on Gilgamesh Vene, knocking a small device from the glove of her powered armour, which, when it hits the floor, deactivated the handcuff that the players are bound by. Vene and the Guards are all so stunned that the players will have time to pick up their weapons and prepare for combat before they even get a shot off.

Part 6: The Final Battle.

There are 30 security guards here, (RP #07). They will all fight to the death. If the players appear to be in deep trouble, you may wish to give the bad guys penalties to hit due to blinding camera flashes. The bad guys will not take any cover, but will allow the players to take any cover they wish. Remember—these guys are STUPID. If the players still seem to be in too great a danger of dying Shawna Cassety and Viry Shortale may show up as back up. It would be very cinematically inappropriate for the players to all be slain in this battle. This is not to say that you should let them win, but maybe you should weigh things in their favour. They are the heroes, and besides, everyone is still learning the rules. Have fun with it.

Ap

The Index

Abbreviations Glossary 683
Ablative Armour 374
Absorbers 481
Absorption 605
Acceleration, vehicles 578
Accessories, vehicle 580
Accident Damage 222
Accidents 221
Acidic Enzymes 650
Acquiring Proficiencies 140
Activities, Movement 175
Adaptability, Robot 41
Adaptability, Robot 72
Adaptation 651
Aerosol Pistol 436
Aerosol Regulator 482
Aerosol Rifle 437
Aerosol, pharmaceuticals 528
Aerosols 305
Aerosols 412
Aerosols, Area of Effect 305
Aerosols, Stream Effect 306
Aerosols, To Hit Rolls 305
Age Determiner 457
Age, Aging 181
Age, Referee Persona 154
Age, start age 181
Aging 181
AI computers 492
AID 249
Aiming 335
Air Conditioning, Powered Arm. 387
Alarm detector 496
ALIEN COMBAT 317
Alien Armour Rating 318
Alien attack types 317
Alien combat table 318
Alien Damage 179
Alien damage 317
Alien Hit Location 337
Alien Hit Points 79
Alien Hit points 318
Alien identification 191
Alien Proficiencies 140
Alien Record Sheet 96
Alien Society 92
Alien, Armour Rating 82
Alien, Attack Type 81
Alien, Attributes 78
Alien, Biology 90
Alien, Classes 104
Alien, Combat ratio 162
Alien, Combat Table 81
Alien, Communications 93
Alien, Damage per Attack 80
Alien, Death 80
Alien, Description 82
Alien, Experience 95
Alien, Lifespan 89
Alien, Movement 87
Alien, Mutations 89
Alien, Name 94
Alien, Number of Attacks 80
Alien, Size 79
Alien, Tool Users 93
ALIENS 77
Aliens, Experience 202
Aliens, generating 78
Aliens, pre-rolled 732
Aliens, Referee Personas 147
Alternate Banishment 605
Ambidextrous Combat, Merc 117
AMBUSH 325
Ambush Effect 325
Ambush, detection 325
Ambush, Encumbrance 230
Ammo, Artillery 394
Ammunition 482
Ammunition 586
Analog monitor, Robot 43
Android, Robot 55
Anesthetics Mask 457
Animal Attachment 605
Annihilator, Artillery 396
Anoxia 242
Anthropomorph Hit Location 336
Anthropomorph, combat ratio 164
ANTHROPOMORPHS 21
Anthropomorphs, Referee personas 149
Anti lazer Aerosol 424
Anti-cancer Beam 457
Anti-grav Backpack 482
Anti-grav Beam 483
Anti-grav Belt 483
Anti-grav Boots 483
Anti-grav Neutralizer 484
Anti-grav Pushcart 484
Anti-mutation Beam 458
Anti-virus Beam 458
Antimat Pistol 437
Antimat Rifle 437
Appearance, persona 142
Appearance, referee persona 156
Appliances 539
Aquarian 26
Architecture, HPS 258
Area of Effect Weapons, Mundane 292
Area of Effect, Aerosols 305
Area of Effect, Aerosols 307
Area of Effect, Bombs 401
Area of Effect, Grenades 307
Area of Effect, Mutation 99
Area of effect, aerosol 413
Area of effect, artillery 393
Area of effect, grenade 413
Arm of Ephro 515
ARMOUR RATING 295
Armour and movement 175
Armour piercing, Ammunition 482
Armour rating Alien 318
Armour Rating, Alien 82
Armour Rating, Robot 56
Armour Rating, robots 311
Armour Rating, Spie 127
Armour Rating, Tactical 283
Armour Rating, Toys, Armour 373
Armour rating, Theatrical 277
Armour rating, vehicle 359
Armour Wate, Toys, Armour 373
ARMOUR, Toy 373
Armour, Ablative 374
Armour, Ballistic 375
Armour, Banded 298
Armour, Chain 298
Armour, Combat Armour 375
Armour, Compucrafted 375
Armour, Concussion 376
Armour, Cured Hide 298
Armour, Flexion (-flect) 377
Armour, Fur, Skins 297
Armour, Helmets 299
Armour, Helmets 379
Armour, Leather 298
Armour, Padded 298
Armour, Plant fiber 298
Armour, Plastix 298

Armour, Plastix 380
Armour, Plate 298
Armour, Plate armour 298
Armour, Powered (PA) 380
Armour, pre-rolled 692
Armour, Protex 389
Armour, Ring 298
Armour, Scale 298
Armour, Shield 390
Armour, Shielding 299
Armour, Spacevehicle combat 353
Armour, Splint 298
Armour, Vac Suit 391
Arms 652
Artfact Identification 250
ARTIFACT IDENTIFICATION 249
Artifact Damage 250
Artifact Identification and Int. 251
Artifact Identification and tech level 251
Artifact identification, mechanic 193
ARTILLERY (Toys) 393
Artillery, Accuracy 394
Artillery, Ammo/Malfunction 394
Artillery, Damage/area of effect 393
Artillery, Naval 352
Artillery, pre-rolled 694
Artillery, Spacevehicle combat 352
Artillery, Type/Range 393
Assassinate, Spie 129
Atmospheric effects 241
Attack Type, Alien 81
Attacking in combat 277
Attacks, Robot 41
Attacks, Robots 63
Attacks, Spacevehicle combat 344
Attacks, Spacevehicle combat 348
Attacks, spacevehicles 559
Attentive Pupils: Essay 13
Attraction Aerosol 424
Attraction Odor 651
Attractor Bomb 406
Attractors 484
Attribute Adjustments, Races 25
Attribute bonus, Performance table 186
Attribute Bonuses, Combat Table 136
Attribute Challenge Rolls 213
Attribute heals, pharmaceuticals 533
Attribute Requirements, Classes 104
Attribute Rolls 211
Attribute Rolls, Encumbrance 230
ATTRIBUTES 11
Attributes, Alien 78
Attributes, generating 11
Attributes, Robot 42
Attributes, robotic loss of 312
Auto Holster 485
Auto Lockpick 485
Autobrush 485
Autocard 486
Automatic Tourniquet 458
Autostrike, rocket ammo 521
Autostrike, scope 507
Avarian 27
Awareness, 12
Awareness, enhancer 535
Awareness, increaser 536
Ballistic Armour 375
Bandage Box 459
Banded, Armour 298
Barter 263
Base Race, Robot 56
Batteries 586
Batteries detector 496
Battery Bomb 404
Battery Power Plug 486
Battery Recharger 487
Battery Slut 486
Beegun 437
Beehive, Artillery 396
Beliefs, referee persona 158
Bertrand Byrde 716
Big Bertha Grenade 414
Billings Fische 720
Binoculars 511
Binox 511
Biological effects, High Gravity 234
Biological effects, Low Gravity 237
Biological effects, No Gravity 240
BIOLOGIST 106
Biologist Performance Table 191
Biologist Proficiencies 140
Biologist, Experience 108
Biologist, Skills 107
Biologists, pre-rolled 716
Biology, Alien 90
Biorganic Attachments 459
Biorganic Replacements 460
Black Hole 516
Blind Goggles 463
Blinding Aerosol 425
Bloater drive, spacevehicles 553
Blood Clot Disrupter 463
Blood Congealator 463
Blood filters 461
Boarding 348
Boat Killer 737
Body Armour, Cost 267
Body Structure Change 652
Bolstering Armour Rating, Merc 116
Bolt Action Rifle 438
Bomb, Damage 402
Bomb, description 402
Bomb, Generic 404
BOMBS (Toys) 401
Bombs, Area of Effect 401
Bombs, pre-rolled 694
Bombs, Spacevehicle combat 352
Bone hardener 461
Bone Setter 463
Bonus Non-Proficient (BNP), Combat 138
Bonus Non-Proficient, Tactical 286
Bonus Proficient (BP), Combat Table 136
Bonus Proficient, Tactical 286
Books 540
Bot Neutralizer 487
Brainstorming, Mechanic 114
Brawling 339
Breath Ball 464
Broadcast battery 587
Bucksaw 495
Bug Bomb 410
Bullet Pen 516
Burrow, Ammunition 482
Burrowing Wigwut 735
Calculations 606
Cancellors 488
Canine 28
Carapace 653
Cardio Vest 464
Cargo allotment, spacevehicles 563
Cargo vehicles 574
Caseless, Ammunition 482
Cash register 503
Catabolic Dismodulator Aerosol 425
Cauterizing Ray 468

Cells 586
Cerebro Converter 464
Chain, Armour 298
Chameleon Ability, Reptilian 34
Chameleon Power 654
Charisma 13
Charisma, enhancer 535
Charisma, increaser 536
Chemical Explosive Grenade 415
Civilian Vac Suit 391
Clarissa Pinefirster 726
Class computers 492
Class Equipment, Costs 270
Class Pursuits, Nothing 125
Class, Minimum Equipment 269
Class, referee persona 152
Class, Selection 104
CLASSES 103
Classes, Alien 104
Classes, Biologist 106
Classes, Knite 108
Classes, Mechanic 113
Classes, Mercenary 115
Classes, Multiple 105
Classes, Nomad 120
Classes, Nothing 123
Classes, Robot 104
Classes, Role-playing 103
Classes, Spie 127
Classes, Veterinarian 131
Clever Phil (relations) 752
Climate Band 488
Climate Portent 488
Climate, scope 507
Climbing 330
Climbing, Movement 172
Cloning Equipment 466
Clothing 489
Clothing 541
Coma Control Unit 467
Comatose vs Unconscious 132
COMBAT 273
COMBAT ADJUSTMENTS 327
COMBAT TABLES 135
Combat Armour 375
Combat Ratio, Alien 162
Combat ratio, anthropomorph 164
Combat ratio, robot 166
Combat ratios 162
Combat T, Bonus Non-Proficient (BNP) 138
Combat Ta, Damage Adjustment (DA) 139
Combat Table Referee Persona 155
Combat Table, Alien 81
Combat Table, Bonus Proficient (BP) 136
Combat Table, Generation 135
Combat Table, Maximum Roll (MR) 139
Combat Table, Proficiencies 140
Combat Table, Tactical 285
Combat table, Alien 318
Combat table, robotic 310
Combat, Defensive, Robot 48
Combat, Expendable, Robot 47
Combat, experience 204
Combat, High Gravity 233
Combat, Low Gravity 236
Combat, No Gravity 239
Combat, Non-lethal 339
Combat, Offensive Heavy, Robot 49
Combat, Offensive Light, Robot 49
Combat, Robot 47
Combat, scope 507
Combot 47
Combot 744
Comfy Couch 467
Communicate 606
Communications detector 496
Communications, Alien 93
Communicators 490
Compass 491
Compucammo, clothing 489
Compucammo, Powered armour 387
Compucrafted Armour 375
Compucrafted Weapon 517
Compukit 491
Computer Peripherals 493
Computer software, spacevehicles 556
Computerized clothing 489
Computers 492
Computers MOM 493
Computers, AI 492
Computers, class 492
Computers, spacevehicles 555
Concealment 328
Concuflect Armour 377
Concussion Armour 376
Concussion, Ammunition 482
Consciousness Headband 468
Constitution 14
Constitution, enhancer 535
Constitution, increaser 536
Control Baton 494
Control Factor, Robot 70
Controlling robots 313
Cords 494
Corrosive Bomb 404
Corrosive Grenade 416
Cover 328
Cover and concealment 328
Cover and concealment 328
Cover Bomb 409
Crawl, rocket ammo 521
Crawling 330
Crawling, Movement 172
Crew, spacevehicles 561
Critical Rolls 215
Crouching 330
Crouching, Movement 173
Cryoblast Grenade 416
Cryocannon, Artillery 396
Cryogun 438
Cryogun 517
Cryokinesis 607
Cured Hide, Armour 298
Cures, pharmaceuticals 531
Cutters 495
Cutting Lazer 517
Damage 177
Damage Adjustment (DA), Combat Ta 139
Damage Adjustment, Tactical 287
Damage and hit location 336
Damage Effects, Spacevehicle 346
Damage per Attack, Alien 80
Damage System Schock, Constitution 14
Damage System Shock 20
Damage System Shock Roll 177
Damage, aerosol 413
Damage, alien 179
Damage, alien 317
Damage, Artillery 393
Damage, Bomb 402
Damage, grenade 413
Damage, Guns 434
Damage, Robot 73
Damage, robots 178
Damage, robots 311
Damage, Spacevehicle combat 345
Damage, Theatrical 279
Danger detector 496
Darkness, scope 507
Deaf Head Phones 468
Deanna Mlcarlovich 719
Death 180
Death Field Generation 607
Death Pinch, Vet 133
Death Ray Pistol 438

Death, Alien 80
Decay table, Robot damage 313
Decoy 654
Decoy, rocket ammo 521
Defence Shield 192
Defences, Robot 41
Defences, Spacevehicle combat 353
Defences, spacevehicles 558
Defenses, Robots 66
Deg. Diff. bonus, Performance table 186
Degree of Difficulty 185
Dehydrator 495
Dekes 331
Delay, rocket ammo 521
Demagnitizing Aerosol 425
Density Control 607
Density Control 655
Depressurization 242
Depressurization, water 245
Derm patch, pharmaceuticals 528
Derringer 438
Description, Alien 82
Description, Robot 69
Detection of ambush 325
Detections 608
Detectors 496
Detectors detector 496
Detonator Box 497
Dexterity 15
Dexterity, enhancer 535
Dexterity, increaser 536
Diffusion Bomb 409
Diminished Sense 655
Directional Sense 608
Disarming 341
Disintegration Gun 439
Disintegration, Artillery 396
Disintegrator Aerosol 426
Dismodulator Bomb 408
Displacement clothing 489
Displacement Gloves 518
Disrupter Bomb 406
Distance, Mutation 99
Diversion Bomb 407
Diving, Movement 173
DNA, pharmaceuticals 531
Dodges 331
Double physical pain 656
Dr. Fange Zervensays 717
Dress, referee persona 156
Drives, spacevehicles 551
DRIVING 219
Driving Performance Table 199
Driving perfromance Table explained 220
Driving PT and Vehicle combat 362
Driving, Accidents 221
Driving, Encumbrance 230
Driving, Loss of Control 221
Drug Box 469
DSS 177
DSS Roll 212
Duration of performance table 187
Duration, Mutation 99
Dynamo battery 587
ECM, Attack 350
ECM, Defensive 354
Edible Tissue 656
Electric Shock 657
Electro Weapons 518
Electroflect Armour 377
Electron cannon, Artillery 396
Electron Pistol 439
Electron Rifle 439
Electronic Counter Measures (ECM) 354
Electronic Counter Measures 350
Emergency, Robot 53
EMP Bomb 408
Empathy 608
Encumbered 228
ENCUMBRANCE 227
Encumbrance effects 228
Encumbrance, Ambush 230
Encumbrance, Attribute Rolls 230
Encumbrance, Driving 230
Encumbrance, Encumbered 228
Encumbrance, Initiative 229
Encumbrance, Lift only 228
Encumbrance, Movement 229
Encumbrance, Overencumbered 228
Encumbrance, Performance Tables 228
Encumbrance, Unencumbered 228
Enerflect Armour 377
Energy Attraction 609
Energy detector 496
Energy Drain Grenade 416
Energy Grenade 417
Engine type, vehicles 579
Enthalpy Attack 657
Epilepsy Projection 609
Equimpment, Class Minimum 269
Equine 29
EQUIPMENT COSTS 265
EQUIPMENT DAMAGE 255
Equipment 367
Equipment damage, extent 256
Equipment HPS 255
Equipment referee persona 155
Equipment, performance table 188
Escape, Spie 130
Essay: Chronovores 642
Essay: Combat Complexities 332
Essay: Kilo-die 276
Essay: Mercenaries 119
Exatmo drives, spacevehicles 552
Expando Dagger 518
EXPERIENCE 201
Experience Level To Hit Bonus 137
Experience points 201
Experience, Alien 95
Experience, aliens 202
Experience, Artifacts 203
Experience, Biologist 108
Experience, Combat 204
Experience, Knite 112
Experience, level 201
Experience, Mechanic 115
Experience, Mercenary 117
Experience, money 202
Experience, Nomad 122
Experience, Nothing 125
Experience, Practice 203
Experience, referee persona 153
Experience, Robot 72
Experience, robots 202
Experience, role playing 206
Experience, Spie 131
Experience, Veterinarian 133
Exploding Aerosol 426
Exploding Pin Grenade 417
Explorations, Extraplanetary, Robot 46
Explorations, Planetary, Robot 46
Explorations, Robot 46
Explosive detector 496
Explosive, Ammunition 482
EXPS and toys 369
Extent of Damage, Spacevehicle 346
Extent of Damage, Vehicle combat 361
Extra Sensory Perception 610
Extreme rolls 213
Eye Cleansers 470

Falling 231
Fat cell generation 657
Feline 30
Fever Control Blanket 470
Fiddle Junk 542
Filters 497
Fire 245
Fire Logs 498
Firing Blind 328
Fission Pistol 440
Fission Rifle 440
Fission, Artillery 397
Five Legged Scuttler 739
Flame thrower, Artillery 399
Flare Gun 518
Flasher light 502
Flashless, Ammunition 482
Flexion Armour 377
Flexiscope, Visual aids 511
Florian 31
Foam Aerosol 426
Foam Bomb 408
Food Culture 498
Foodstuffs container 542
Foostuffs 542
Force Armour, Field Belt 378
Force Field Belt, Armour 378
Force Field Generation 610
Force field, Ammunition 482
Fragmentation Grenade 417
Free, Encumbrance 227
Freezing Aerosol 427
Frenzy, Ursidae 37
Frequency, Mutation 100
Fresh fruit detector 496
FTL drive, spacevehicles 553
Fuel 589
Fuel, spacevehicles 554
Full-automatic Lazer Pistol 440
Full-automatic Lazer Rifle 440
Full-automatic Pistol 441
Full-automatic Rifle 441
Fur, Skins, Armour 297
Furniture 542
Fusion Grenade 418
Fusion Pistol 441
Fusion Rifle 442
Garbage can-on, Artillery 398
Gas Aerosol 427
Gas battery 587
Gas generation 658
Gas Grenade 418
Gauss Pistol 443
Gauss Rifle 443
General Performance Table 198
Generating a To Hit Roll, 277
Generating Equipment 370
Generation, Combat Table 135
Generator 498
George Sekir 725
GI Jane 722
Gilgamesh Vene 729
Glass Gun (Rifle) 443
Gloosary of Abbreviations 683
Glossary of terms 685
Glossary, introductory 4
Glow light 502
Glue 500
Grand slam Bomb 404
Grapple Gun 444
Grapple Gun 519
Grapple Whip 519
Grapples 341
Grav cannon, Artillery 398
Grav line 494
Gravity 231
Gravity, scope 507
Gravity, Spacevehicle combat 353
Gravrupter Gun 444
Gravruptor Bomb 406
Gravruptor Grenade 419
GRENADE AND AEROSOL COMBAT 303
Grenade description 412
Grenade Launcher 519
Grenade Misses, Tables 306
Grenade trigger 411
GRENADES AND AEROSOLS 411
Grenades 303
Grenades 411
Grenades and Areosols 695
Grenades, Area of Effect 307
Grenades, Homemade 292
Grenades, Malfunctions 304
Grenades, Misses 304
Grenades, Range 304
Grenades, Spacevehicle combat 351
Grenades, To Hit Rolls 304
GUNS (Toys) 433
Guns, Defensive 355
Guns, pre-rolled 696
Guns, Spacevehicle combat 355
Gyrokinesis 611
Hal 731
Haste 659
Head 1
Healing 179
Heals, pharmaceuticals 533
HEALTH 177
Heat Generation 659
Heightened Attribute 660
Heightened Brain Talent 612
Heightened vision 661
Helmets, Armour 379
Helmets, Mundane 299
Hibernation, Ursidae 36
High Atmosphere 241
High Gravity 232
High Gravity and combat 233
High Gravity and movement 232
High Gravity and PTs 234
High Gravity and ranges 233
High Gravity biological effects 234
High Gravity mechanical effects 235
High perf., vehicles 576
Hills, Movement 174
History, persona 143
HIT LOCATIONS 335
Hit location and damage 336
Hit Location, Alien 337
Hit Location, Anthropomorph 336
Hit Location, Quick 337
Hit Location, Robot 337
Hit Location, Vehicle combat 360
Hit location, space vehicle 345
Hit point determination 19
Hit Points 18
Hit Points 177
Hit Points, Alien 79
Hit Points, Alien 318
Hit Points, Robot 71
Hit Points, Theatrical 278
Hit points, and dying 20
Hit points, Constitution 14
Hit points, enhancer 535
Hit points, increaser 536
Hobbot, Robot 43
Holy Trinity, of referee persona 146
Hooks 499
Horace Punko 728
Hostility Field Generation 613
How to use this book 2
Howblitzer, Artillery 397
Howglitzer, Artillery 397
Howitzer, Artillery 396
HPS heals, pharmaceuticals 533
HPS, architecture 258
Hull, spacevehicles 549
Humanoid 32
Hyper drive, spacevehicles 553
Hypodermic, Ammunition 482
Ice, Movement 174

Iliana Rambov 718
Illusion Generation 613
Inatmo drives, spacevehicles 552
Incapacitation, Ammunition 482
Incendiary, Ammunition 482
INCIDENTALS 141
Increased metabolism 662
Incubator 470
Industrial lifter 746
Industrial Vac Suit 391
Industrial, Construction, Robot 44
Industrial, Lifting, Robot 44
Industrial, Moving, Robot 44
Industrial, Robot 44
Industrial, vehicles 576
Inertia Weapon 520
Inertiaflect Armour 377
Inflicting Damage, Theatrical 278
Information Eradication 615
Information Storage, Treasure 571
Infrared goggles 511
Infrared light 502
INITIATIVE 319
Initiative and attacks 322
Initiative and movement 322
Initiative roll 320
Initiative, Encumbrance 229
Initiative, Tactical combat 320
Initiative, Theatrical combat 319
Initiative, waited actions 320
Injection, pharmaceuticals 528
Injury Detector 471
Injury detector 496
Inoculations, pharmaceuticals 534
Insane personalities 160
Insectiod 33
Instant Stuff 499
Instruction books 589
Intelligence 16
Intelligence, Artifact ident 251
Intelligence, enhancer 535
Intelligence, increaser 536
Internal powered armour 388
Internal Viewer 471
Intuition 616
Invisibility Aerosol 427
Janitorial, Robot 45
Jet Backpack 500
Jet Boots 499
Job Pistol 445
Job Rifle 446
Joe/Jane Civil 727
Joiners 500
Jump clothing 489
Jumping jack Bomb 406
Jumping, Movement 173
Junk to buy 271
Kinds of Currency 263
Kirlian Sight 110
Kirlian Talisman 501
KNITE 108
Knite Performance Table 192
Knite Proficiencies 140
Knite, Conduct 109
Knite, Experience 112
Knite, Lite Sabre 112
Knite, Mythos 108
Knite, Sects 109
Knite, Skills 110
Knites, pre-rolled 718
Knowledge Transmission 616
Koko Mbali 732
Launchable Quills 662
Lazer Bolos 520
Lazer Bomb 404
Lazer cannon, Artillery 398
Lazer cover Bomb 408
Lazer cutter 495
Lazer joiner 500
Lazer light 502
Lazer Pen 501
Lazer Pistol 446
Lazer Rifle 446
Leather, Armour 298
Leisure vehicles 574
Level, experience 202
Levitation 617
Lie detector 496
Life detector 496
Life Leech 618
Life Ray 471
Life Support 353
Lifefspan, Alien 89
Lift only 228
Light generation 663
Light Sabre 520
Light Wave Manipulation 618
Lights 502
Limb Capper 472
Liquid battery 587
Liquid Constitution: Essay 14
Liquid, pharmaceuticals 528
Lite Sabre Abilities 192
Livestock 543
Locks 502
Locomotion, Robot 60
Locomotion, vehicles 578
Loss of gravity, Spacevehicle 344
Low Atmosphere 242
Low atmosphere, and equipment 243
Low Gravity 235
Low Gravity and combat 236
Low Gravity and movement 235
Low Gravity and PTs 237
Low Gravity and ranges 236
Low Gravity biological effects 237
Low Gravity mechanical effects 237
Macroscopic goggles 511
Mag cannon, Artillery 397
Magnetic battery 587
Magnetic Control 619
Magnetic Disrupter Grenade 419
Maintenance bot 748
Maintenance, Robot 54
Malfunction, Artillery 394
Malfunction, Guns 434
Malfunctions, Grenades 304
Maneuverability, vehicle 580
Manuals 589
Mapper 503
Martial Arts, Spie 127
Mash net 521
Mass Mind 619
Material 543
Matter Detector Aerosol 428
Maximum Roll (MR), Combat Table 139
Maximum Roll, Tactical 286
MECHANIC 113
Mechanic Performance Table 193
Mechanic Proficiencies 140
Mechanic, Experience 115
Mechanic, Skills 114
Mechanical effects, High Gravity 235
Mechanical effects, Low Gravity 237
Mechanical effects, No Gravity 240
Mechanical Insertion 663
Mechanical Prosthesis 664
Mechanical Sense 620
Mechanics, pre-rolled 720
Medi-kit 472
Medi-wraps 472
MEDICAL EQUIPMENT (Toys) 455
Medical bot 750
Medical equipment, pre-rolled

698
Medical Kit 473
Medical, Cosmetic, Robots 52
Medical, Diagnostic, Robot 51
Medical, Robot 51
Medical, Surgical, Robots 52
Memory, rocket ammo 522
MENTAL MUTATIONS 601
Mental Blast 620
Mental Control 621
Mental Control Over Physical State 622
Mental Defenselessness 623
Mental Patenting, Mechanic 114
Mental Strength 17
Mental strength, enhancer 535
Mental strength, increaser 536
Merc, Ambidextrous Combat 117
Merc, Bolstering Armour Rating 116
Merc, Multiple Attacks 117
Merc, Snap Reload 117
Mercenaries, pre-rolled 722
MERCENARY 115
Mercenary Performance Table 194
Mercenary Proficiencies 140
Mercenary, Experience 117
Mercenary, Skills 116
Metab Counter 473
Metal detector 496
Meteorological Conditions 327
Microscope 511
Microscopic goggles 511
Military Vac Suit 391
Military, vehicles 577
Mindlink 503
Mineral detector 496
Mines, Spacevehicle combat 351
Mini Car Muncher 734
Mini Grenade 420
MISCELLANEOUS EQUIPMENT 479
MISCELLANEOUS WEAPONS 513
Miscellaneous equip., pre-rolled 699
Miscellaneous Junk 546
Miscellaneous weap., pre-rolled 701
Misses, Grenades 304
Missiles, Spacevehicle combat 351
Mistor Aerosol 428
Mitosis 665
Mnemonic Trapping, Mechanic 114
Molecular Diffusion Aerosol 428
Molecular Disrupter Grenade 420
Molecular Disruption 623
Molecular Examination 623
Molecular Phase Transformation 624
Molecular Phase Transmutation 626
Molotovs 292
MOM computers 493
MONEY 263
Money Counter 503
Money, experience 202
Money, persona start 141
Monofilament wire 494
Mood Ball 473
Movement 169
Movement and combat 330
Movement detector 496
Movement penalties 171
Movement Rate, Robot 57
Movement, Activities 175
Movement, Alien 87
Movement, Climbing 172
Movement, Crawling 172
Movement, Crouching 173
Movement, Diving 173
Movement, Encumbrance 229
Movement, High Gravity 232
Movement, High gravity 232
Movement, Hills 174
Movement, Ice 174
Movement, Jumping 173
Movement, Low Gravity 235
Movement, Low gravity 235
Movement, Mud 174
Movement, No Gravity 238
Movement, No Gravity 238
Movement, Righting 173
Movement, Rolling 173
Movement, Sand 174
Movement, Shrubs 174
Movement, Snow 174
Movement, Standing up, Righting 173
Movement, terrain 173
Movement, Underwater 244
Movement, Underwater 244
Movement, Water 174
Muckmaker, Artillery 399
Mud, Movement 174
Multi-class Personas 105
MULTI-EQUIPMENT 599
Multiple Attacks, Merc 117
Multiple Body Parts 665
Multiple Explosive Grenade 421
Multiscope, scope 507
Mundane Armour Types 297
Mundane Body Armour 300
Muscle Manipulation 627
Musical Instruments 543
Mutant detector 496
Mutation Detector 473
Mutation effect, pharmaceuticals 535
Mutation, Area of Effect 99
Mutation, Distance 99
Mutation, Duration 99
Mutation, enhancer 535
Mutation, Frequency 100
Mutation, increaser 536
MUTATIONS 97
Mutations, Acquiring 101
Mutations, Alien 89
Mutations, Generation 98
Mutations, pharmaceuticals 534
Name, Alien 94
Napalm Aerosol 428
Napalm Bomb 407
Napalm Grenade 422
Napalm Gun 446
Narcotics, pharmaceuticals 531
Naval Artillery 352
Needler 447
Negative Maintaining 180
NEGOTIATION 259
Negotiation, Administrative 260
Negotiation, Combative 260
Neophytes 2
Nerve gas Bomb 405
Neural jack 478
Neural jack 503
Neuro Cap 474
Neuronegation 628
Neutron Bomb 407
New Mutation 101
New Organs 666
New procedures, Perf tables 190
NIX M^2V^2, Visual aids 511
No Gravity 238
No Gravity and combat 239
No Gravity and movement 238
No Gravity and ranges 239
No Gravity biological effects 240
No Gravity mechanical effects 240
No Resistance to Disease 669
No Resistance to Poison 669
NOMAD 120
Nomad Performance Table 195
Nomad Proficiencies 140
Nomad, Experience 122

Nomad, Skills 121
Nomadic Biomes 121
Nomadic Sumpsucker 736
Nomads, pre-rolled 725
Non Breathing 668
Non-Essential Survival Equipment 271
NON-LETHAL COMBAT 339
NOTHING 123
Nothing Performance Table 198
Nothing Proficiencies 140
Nothing, Class Pursuits 125
Nothing, Experience 125
Nothing, Skills 125
Nothing, Social Standing 124
Nothing, Wealth 124
Nothings, pre-rolled 727
Nuclear Bomb 405
Nuk-o-matic, Artillery 397
Number of Attacks, Alien 80
Offensive Eyes, Defensive Ears: Essay 12
Offensive Systems, Robot 63
OTHER VEHICLE COMBAT 359
OUTLINE OF TOYS 367
Overencumbered 228
Oversized Body Parts 669
Pacifist, scope 507
Padded, Armour 298
Paint Aerosol 429
Paint Bomb 409
Paralyzing Pinch, Vet 132
Parents 3
Passenger vehicles 575
Passenger, rocket ammo 522
Perf. Tables, Attribute bonuses 186
Perf. Tables, Deg. Diff. bonuses 186
PERFORMANCE TABLES 185
Performance table roll adjustments 186
Performance table rolls 185
Performance Table, Biologist 191
Performance Table, Knite 192
Performance Table, Knite 196
Performance Table, Knite 197
Performance Table, Knite 198
Performance Table, Knite 198
Performance Table, Knite 199
Performance Table, Mechanic 193
Performance Table, Mercenary 194
Performance Table, Nomad 195
Performance table, failure 187
Performance table, Success 186
Performance Tables, Encumbrance 228
Performance Tables, new maneuvers 190
Performance Tables, role playing 190
Performance tables, equipment 188
Performance tables, REsearch teams 189
Periodic Intumescent, pharm 535
Peripheral Systems, Robots 68
Peripherals, computer 493
Permanent intumescent, pharm. 536
Persona essentials 7
Persona types 8
Personal items 544
Personality, referee persona 156
Personas, introduction 7
Pharmaceutical Ejector Aerosol 429
PHARMACEUTICALS 527
Pharmaceuticals, application 528
Pharmaceuticals, dose 528
Pharmaceuticals, duration 527
Pharmaceuticals, Markings 529
Pharmaceuticals, pre-rolled 702
Pharmaceuticals, purity 528
Pharmaceuticals, Racial producer 529
Pharmaceuticals, Side effects 530
Phase 629
Phosphorescent Skin 670
Photosynthesis, Florian 31
Photosynthetic Skin 669
PHYSICAL MUTATIONS 647
Physical Strength 18
Physical strength, enhancer 535
Physical strength, increaser 536
Pills, pharmaceuticals 528
Pin Grenade 422
Pins, Holds 341
Pipe Bombs 292
Planal Hideaway 629
Planal Holdaway 630
Plant fiber, Armour 298
Plasma Pistol 447
Plasma Rifle 447
Plasma, Artillery 399
Plasmoid battery 587
Plastic Explosive 504
Plastix Armour 380
Plastix Pistol 448
Plastix Rifle 448
Plastix, Armour 298
Plastix, Artillery 399
Plate armour, Armour 298
Plate, Armour 298
Pockets 670
Poison Aerosol 429
Poison Box 474
Poison Detector 474
Poison detector 496
Poison, pharmaceuticals 537
Polar Bomb 404
Polar Disruption 631
Policing, Civil, Robot 49
Policing, Riot, Robot 49
Policing, Robot 49
Policing, Special Ops, Robot 51
Political beliefs 161
Political beliefs 162
Poor respiratory System 670
Power Drain 631
Power Source, Robot 58
Powered Armour (PA) 380
Powered Armour and Attribute 382
Powered Armour, Generating 382
Powered Armour, Helmet 382
Powered Armour, Lower Limb 386
Powered Armour, Special limbs 387
Powered Armour, Suit systems 387
Powered Armour, Suiting up 380
Powered Armour, Torso 384
Powered Armour, Upper limbs 383
Powered Armour, Value 389
Powersaw 495
Practice, experience 203
PRE-ROLLED TOYS 691
Precognition 632
Pressurized Body 670
Prey 738
Proficiencies, Combat Table 140
Proficiencies, Weapon 287
Projected Sense 632
Projectiflect Armour 377
Prone 331
Protection Shell 632
Protein Disrupter 448
Protex Armour 389
Psi-flip, spacevehicles 553

Psionic battery 587
Psionic Box 475
Psionic Defence 633
Psionic Headband 504
PTs, High Gravity 234
PTs, Low Gravity 237
Pure Strain Human 33
Purify 633
Pyro Pistol 521
Pyrokinesis 633
Pyrotechnic Grenade 423
QT1 (analog bot) 742
Qualities, Referee personas 156
Quick Fix, Vet 132
Quick Fixes 197
Quick Hit Location 337
Race Age 25
Race Determiner 475
Race Dimensions 25
Race Relations 23
Race Selection 22
Racial Abilities 25
Rad cannon, Artillery 399
Radar detector 496
Radiating Eyes 671
Radiation and Mutations 101
Radiation detector 496
Radiation Grenade 423
Radiation Gun 449
Radiation Sense, Canine 28
Ramming, Robot 65
Ramming, Robotic attacks 310
Ramming, Spacevehicle combat 350
Ramming, Vehicle combat 363
RANDOM JUNQUE 539
Random Junque, pre-rolled 703
Random, Robot 41
Range Effects 329
Range, Grenades 304
Range, Mutation 99
Ranges, Low Gravity 236
Ranges, No Gravity 239
Real Money 263
Reapair, robots 180
REC roll 177
REC roll 213
Recorders 505
Recovery Roll 20
Recovery Roll 177
Recovery time 178
Recovery, Constitution 14
Recreational, vehicles 577
REFEREE PERSONAS 145
Referee Persona Combat Table 155
Referee Persona type 147
Referee persona Appearance 156
Referee persona Equipment 155
Referee persona qualities 156
Referee Persona, Age 154
Referee persona, Beliefs 158
Referee persona, Class 152
Referee persona, dress 156
Referee persona, experience level 153
Referee persona, personality 156
Referee personas, Aliens 147
Referee personas, anthropomorphs 149
Referee personas, Robot 150
Referee personas, robot type 151
Referee personas, sidewalk civilians 149
Reflec Armour 377
Regeneration 671
Rejuv Chamber 475
Relations, Robot 45
Relics 571
Religious beliefs 162
Repair artifact 193
Repellant Aerosol 430
Reptilian 34
Reptilian, torpor 35
Repulsion Field Generation 634
Research Teams 212
Research Teams, performance tables 189
Respirator 476
Restoration 634
Restrict. Movement Pen., and AR 301
Restrictiveness, and PSTR 296
Restrictiveness, Armour Rating 295
Restrictiveness, armour rating 296
Restrictiveness, Movement 296
Restrictiveness, PTs 296
Restrictiveness, Toys, Armour 373
Revolver 449
Righting, Movement 173
Ring, Armour 298
Robot attacks, damage 311
Robot control 313
Robot Damage 73
Robot Damage 178
Robot damage 311
Robot damage, attributes 312
Robot damage, Decay table 313
Robot damage, hit points 312
Robot Decay Tables 74
Robot decay table 179
Robot detector 496
Robot Experience 72
Robot Hit Location 337
Robot Proficiencies 140
Robot Value 72
Robot, Adaptability 41
Robot, Adaptability 72
Robot, Analog monitor 43
Robot, Android 55
Robot, Armour Rating 56
Robot, Attacks 41
Robot, Attribute translation 40
Robot, Attributes 42
Robot, Base Race 56
Robot, Classes 104
Robot, Combat 47
Robot, combat ratio 166
Robot, Control Factor 70
Robot, Defences 41
Robot, Description 69
Robot, Determine Type 39
Robot, Emergency 53
Robot, Explorations 46
Robot, Hit points 71
Robot, Hobbot 43
Robot, Industrial 44
Robot, Janitorial 45
Robot, Locomotion 60
Robot, Maintenance 54
Robot, Medical 51
Robot, Movement Rate 57
Robot, Policing 49
Robot, Power Source 58
Robot, random 41
Robot, Relations 45
Robot, Sensors 60
Robot, Size 42
Robot, Size 70
Robot, Tech Level 71
Robot, Transportation 55
Robot, Types 41
Robot, Value 42
Robot, Wate 70
Robot, Wate Allowance 57
ROBOTIC COMBAT 309
Robotic armour rating 311
Robotic attacks 309
Robotic attacks, peripherals 310
Robotic attacks, ramming 310
Robotic combat table 310
Robotic Override 506
Robotic Repair 180
ROBOTS 39
Robots, Attacks 63
Robots, Defences 66
Robots, Experience 202

Robots, Peripherals 68
Robots, pre-rolled 742
Robots, referee personas 150
Robots, spacevehicles 564
Rocket Assisted Weapon 521
Rocket Launcher 521
Rocket Rollerskates 506
Rodentia 35
Role Playing, Performance Tables 190
Role playing, experience 206
Role-playing, Classes 103
Rolling 330
Rolling, Movement 173
Rubbery Skin 671
Rust 672
Safe Campsite 195
Safe Passage 195
Sand, Movement 174
Sandy Hed 730
Saving Throws 214
Sc
Scale, Armour 298
Scalpel 477
SCENARIO 757
Scopes 506
Scoring a Hit, Theatrical 278
Self Destruction 672
Self powered vehicles 575
Semi-automatic Lazer Pistol 449
Semi-automatic Lazer Rifle 449
Semi-automatic Pistol 449
Semi-automatic Rifle 450
Sensors, Robot 60
Sensory Deprivation 634
Shape change 672
Shawna Cassetey 721
Shield, Armour 390
Shielding, Armour 299
Shielding., and AR 301
Shields, Spacevehicle combat 354
Shrapnel, Ammunition 482
Shrubs, Movement 174
Side Effects, pharmaceuticals 530
Silenced, Ammunition 482
Sincerity Machine 508
Siren Aerosol 430
Size Manipulation 673
Size, Alien 79
Size, alien RP 148
Size, Robot 42
Size, Robot 70
Skills, Biologist 107
Skills, experience 202
Skills, Knite 110
Skills, Mechanic 114
Skills, Mercenary 116
Skills, Nomad 121
Skills, Nothing 125
Skills, Spie 127
Skills, Veterinarian 132
Skin structure change 673
Sky Breaker Bomb 407
Sky Lighter Grenade 423
Slotto cannon, Artillery 399
Slug Thrower 450
Smoke 246
Smoke Aerosol 430
Smoke Bomb 410
Smoke Screen 674
Smoke, scope 507
Smoke, Visual aids 511
Snake Elephant 740
Snap Reload, Merc 117
Snow, Movement 174
Sociability Field Generation 635
Social standing 143
Social Standing, Nothing 124
Society Alien 92
Software, support equipment 590
Solar battery 587
Solaris Polar 723
Solid battery 587
Sonar 636
Sonic Attack 636
Sonic Attack 674
Sonic Bomb 410
Sonic cannon, Artillery 400
Sonic cutter 495
Sonic joiner 500
Sonic Pistol 450
Sonic Reproduction 637
Sonic Rifle 450
Sotto cannon, Artillery 400
Space suit 391
Spaceship, rocket ammo 522
SPACEVEHICLE COMBAT 343
Spacevehicle combat damage 345
Spacevehicle combat, Armour 353
Spacevehicle combat, Artillery 352
Spacevehicle combat, Attacks 348
Spacevehicle combat, attacks 344
Spacevehicle combat, Boarding 348
Spacevehicle combat, Bombs 352
Spacevehicle combat, Defences 353
Spacevehicle combat, ECM 350
Spacevehicle combat, ECM 354
Spacevehicle combat, Gravity 353
Spacevehicle combat, Grenades 351
Spacevehicle combat, Guns 355
Spacevehicle combat, Mines 351
Spacevehicle combat, Missiles 351
Spacevehicle combat, Ramming 350
Spacevehicle combat, Shields 354
Spacevehicle computers 555
Spacevehicle crew 561
Spacevehicle fuel 554
SPACEVEHICLES 549
Spacevehicles, attacks 559
Spacevehicles, cargo 563
Spacevehicles, defences 558
Spacevehicles, drives 551
Spacevehicles, hull 549
Spacevehicles, pre-rolled 705
SPECIAL ROLLS 211
SPECIAL TERRAIN 231
Special drives, spacevehicles 552
Speed, vehicles 577
Speeding 220
Sphincter Dice 215
SPIE 127
Spie Performance Table 196
Spie Proficiencies 140
Spie Tricks 129
Spie, Armour Rating 127
Spie, Escape 130
Spie, Experience 131
Spie, Martial Arts 127
Spie, Skills 127
Spie, Stun 128
Spies, pre-rolled 730
Spinning Wheel of Death 523
Spit Poison 675
Splint, Armour 298
Sports equipment 544
Standing up, Righting, Movement 173
Stasis Bag 477
Static Quills 675
Stationary Supplies 545
Stealth clothing 489
Stigera Wrenchwilli 733

Storage, Ammunition 482
Strange new body parts 675
Stream Effect, Aerosols 306
Stream Effect, Aerosols 307
Stun Gauntlets 524
Stun Pistol 451
Stun Rifle 451
Stun Weapons 524
Stun, Spie 128
Subliminal Suggestion, Vet 132
Suggestion 637
Superconductor Suit 508
SUPPORT EQUIPMENT 585
Support Equipment 509
Suppositories, pharmaceuticals 528
Survival Equipment 270
Survival Pack 267
Swimming 244
Symbiotic attachment 677
TACTICAL COMBAT 283
Tactical combat, initiative 320
Talking Blob Thing 741
Tape 500
Target Durability., and AR 301
Target Size., and AR 301
Target Velocity., and AR 301
Targeting Computer 509
Tear Away Body Parts 678
TECH LEVEL 595
Tech level and Toys 368
Tech level determination 598
Tech Level, Robot 71
Tech level, artifact identification 251
TECHNOLOGY BASICS 365
Telekinesis 637
Telekinetic Arm 638
Telekinetic Flight 638
Telempathy 639
Teleport 639
Temporal Disruptor 524
Terms Glossary 685
Terrain Movement Tables 175
Terrain, Movement 173
Teseract Box 510
The Reflex: Essay 16
The Robot Driver 754
THEATRICAL COMBAT 277
Theatrical combat, Initiative 319
Theatrical vs Tactical Combat 274
Thought Imitation 640
TIME AND MOVEMENT 169
Time anomalies detector 496
Time Stop 641
Time Tell 642
Time-slip drive, spacevehicles 553
Timepieces 510
To Hit Bonuses, Theatrical 279
To Hit Roll and Climbing 330
To Hit Roll and Concealment 328
To Hit Roll and Cover 328
To Hit Roll and Crawling 330
To Hit Roll and Crouching 330
To Hit Roll and Dekes 331
To Hit Roll and Dodges 331
To Hit Roll and Firing Blind 328
To Hit Roll and Movement 330
To Hit Roll and Prone 331
To Hit Roll and Range Effects 329
To Hit Roll and Rolling 330
To Hit Roll and weather 327
To Hit rolls and location 335
To Hit Rolls, Aerosols 305
To Hit Rolls, Grenades 304
To hit adjustments 327
Tool Users, Alien 93
Torc Bomb 407
Torc Grenade 424
Torpor, Reptilian 35
Toss Garotte 524
Total Recuperation 642
Touch Gloves 477
Toxin Bomb 409
Toy Generation 370
Toy Records 369
TOYS 367
Toys and Classes 368
Toys and EXPS 369
Toys and tech level 368
Toys, Armour 373
Toys, Armour, % Body wate 373
Toys, Armour, AR 373
Toys, Armour, Restrictiveness 373
Toys, Armour, Value 373
Toys, persona start 142
Tracer Bomb 408
Tracer, Ammunition 482
Translinker 478
Transmat drive, spacevehicles 553
Transportation, Robot 55
TREASURE 567
Treasure Crystal 569
Treasure Substance 569
Trouble detector 496
Type A attack, Aliens 317
Type A Weapon, Combat Tables 135
Type A Weapons, Cost 268
Type A Weapons, Mundane 293
Type B & C Weapons, Cost 269
Type B attack, Aliens 317
Type B Weapon, Combat Tables 135
Type B Weapons, Mundane 294
Type C attack, Aliens 317
Type C Weapon, Combat Tables 135
Type C Weapons, Mundane 294
Types, Robot 41
Ultraviolet goggles 511
Ultrvision light 502
Undersized Body Parts 678
Underwater 243
Underwater combat 245
Underwater, Movement 244
Unencumbered 228
Unit 170
Ursidae 36
Vac suit, Armour 391
Vac Suit, Civilian 391
Vac Suit, Industrial 391
Vac Suit, Military 391
Vacuum Survival 242
Value, Robot 42
Value, Robot 72
Variable Lazer Pistol 452
Variable Lazer Rifle 452
VEHICLE COMBAT 359
Vehicle accessory 580
Vehicle AR 359
Vehicle combat, and Driving PT 362
Vehicle combat, attacking from 362
Vehicle combat, Extent of Damage 361
Vehicle combat, Hit location 360
Vehicle combat, Passengers 360
Vehicle combat, Ramming 363
Vehicle Damage 223
Vehicle vs Vehicle combat 361
Vehicle, maneuverability 580
Vehicle, rocket ammo 522
VEHICLES 573
Vehicles, acceleration 578
Vehicles, locomotion 578
Vehicles, pre-rolled 711
Vehicles, Primary format 573
Vehicles, Secondary use 576
Vehicles, speed 577
Ventriloquism 643
Vet Proficiencies 140
VETERINARIAN 131

Veterinarian Conduct 132
Veterinarian Performance Table 197
Veterinarian, Death Pinch 133
Veterinarian, Experience 133
Veterinarian, Paralyzing Pinch 132
Veterinarian, Quick Fix 132
Veterinarian, Skills 132
Veterinarian, Subliminal Suggestion 132
Veterinarians, pre-rolled 732
Vibrations 679
Vibro Weapons 525
Vibroflect Armour 377
Victory, spacevehicle combat 344
Viry Shortale 724
Vision defect 679
Visual Aids 511
Waited actions, initiative 320
Warp drive, spacevehicles 553
Waste Disposer 512
Watch detector 496
Wate Allowance, encumbrance 228
Wate Allowance, Robot 57
Wate Manipulation 680
Wate, Robot 70
Water cannon, Artillery 400
Water detector 496
Water, Movement 174
Watergun 453
Wealth, Nothing 124
Weapon Proficiencies 287
Weapon Type A, Explained 289
Weapon Type A, Tactical 284
Weapon Type B, Explained 290
Weapon Type B, Tactical 284
Weapon Type C, Explained 291
Weapon Type C, Tactical 285
Weapons 545
Weapons Discharging 643
WEAPONS, Mundane 289
Weather Tell 644
Web Aerosol 431
Web Bomb 410
Web Gun 525
Whale gun, Artillery 398
Whale stun, Artillery 400
Whammer 525
Why play EXP 3
Wings 680
X-ray, Visual aids 511
ZBGs, Visual aids 511

EXP ROBOT RECORD SHEET

ROBOT NAME: COMPANY:

AWE	CHA	CON (Level)	DEX (Level)	INT (Level)	MSTR	PSTR (Lev
Awareness	Charisma	Constitution	Dexterity	Intelligence	Mental Strength	Physical Strer
						WA:

BOT TYPE	AGE (years)	HITE (cms)/WATE (kgs)	DESCRIPTION	CLASS/LVL	EX

COMBAT TABLE

	BP	BNP	MR	DA
A				
B				
C				
	Bonus Proficient Add to "to hit" rolls.	**Bonus Non-Proficient** unskilled attacks.	**Maximum Roll** Highest to hit roll possible.	**Damage Adjuster** Add to damage rolls.

Thrusting and striking, claws

Throwing, spitting, bows

Powered weapons

HIT POINT MAXIMUM:

TOTAL

MOVE (H/U):	ARMOUR RATING	ATTACKS	DEFENCES	BASE RACE	POWER SOURCE	CONTROL FACTOR	ADAP

LOCO TYPE

DECAY TABLE

AWE	CHA	CON	DEX	INT	MSTR	PSTR	HPS	PART	TTL DMG

EXP ANTHROPOMORPH RECORD SHEET

NAME: PLAYER:

AWE	CHA	CON	DEX	INT	MSTR	PSTR
Awareness	Charisma	Constitution	Dexterity	Intelligence	Mental Strength	Physical Strer
						WA:

RACE	AGE (years)	HITE (cms)	WATE (kgs)	CLASS/LVL	EX

COMBAT TABLE

	BP	BNP	MR	DA
A				
B				
C				
	Bonus Proficient Add to "to hit" rolls.	**Bonus Non-Proficient** unskilled attacks.	**Maximum Roll** Highest to hit roll possible.	**Damage Adjuster** Add to damage rolls.

Thrusting and striking, fists

Throwing, bows

Powered weapons: guns

HIT POINT MAXIMUM:

TOTAL

MOVE (H/U):

ARMOUR RATING

PROFICIENCIES

DATA AND INFORMATION(mutations, weapons, etc.)

EXP

EXP, The Game of Technological Chaos is a science fantasy role-playing game where any technological device can exist at any technological level.

Robots, aliens, and anthoropomorphs can mutate, pursue professions , fall in love, and blow things up in a fully integrated rule system.

Technology is developed on the Technological Object Yield System (TOYS for short), and all the useful information is at your fingertips.

Everything is referenced to classic science fiction novels and movies

Complete and detailed index.

Art to the excess.

Some comments that people might have made about EXP:

"I played EXP for years and then started dating"

"EXP is a twisted and dryly humorous attack on a genre taken too seriously"

"I like blew up all these little furry thing. Talked to their leader about life and then blew them all up again. Neat."

"Something to do until virtual reality comes on-line."



MERV ENGINEERING CORP

EXO42

640891 6