Space Master™

#9050

The Science Fiction Role Playing Game



I.C.E.®

SPACE MASTER: THE ROLE PLAYING GAME™

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Second Edition Space Master, June, 1988 (1992 version) Stock # 9050 ISBN 1-55806-172-X

Space Master the Second Edition was compiled from dozens of DOS and CP/M floppy discs, rigorous playtesting and various corrections and supplemental rules scrawled on scraps of paper. It has been reconstituted using a battalion of Macintosh computers (at least one) using Word 3.0 and PageMaker 2.0-4.0, manned by an infinite number of Ferretts for an infinite period of time. There will be no errrors...

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Both *The Doctor Who Role Playing Game* and *Star Trek: The Role Playing Game* are designed and published by the FASA Corporation, which holds the copyrights for both game designs.

FOREWORD

READ THIS FIRST!

Welcome to ***Space Master!*** We're glad you're taking the time to explore our universe of the far future.

As you leaf through the pages of this book, we think you'll agree with us that there's quite a bit to it. But the future is big too! There's a lot out there, and the best way to explore it today is with your imagination. ***Space Master*** helps you get started.

Like the book cover says, ***Space Master*** is a role playing game. With it, you will be creating and taking on the roles of exotic personalities and adventurous aliens who travel among the stars and encounter all sorts of dangers and curiosities. You will, of course, need a gamemaster (the game's referee), and a number of players (two to four is good to start with). The gamemaster will be responsible for creating and running the adventures, while the players will be encountering and overcoming the problems that the gamemaster integrates into the grand plot of his campaign.

While his book contains a comprehensive set of rules and guidelines which allow you to role play through fantastic adventures in the far distant future, keep in mind that no rule is set in stone. At your option you might change rules or create totally new ones to handle situations that we haven't foreseen.

HOW TO START

If you are a player, or are just learning the ***Space Master*** system, we suggest that you turn immediately to page P•1 in the Player's section of this book. The Player's section gives you all the rules you need for generating characters. It also provides you with the guidelines that govern a character's actions.

After you've become familiar with how to create ***Space Master*** characters, you will probably want to turn to the Tech section of this book to equip your future adventurer. In that section, you will find all manner of equipment, machinery and weapons, to get your character into and (hopefully) out of trouble.

If you are a gamemaster (GM), the information in the first part of this book will help you create new worlds to adventure in. There are plenty of tips on different campaign and adventure styles too.

The future is a dangerous and fascinating place, so be prepared, and enjoy. Good Luck!

"We are all in the gutter; but some of us are looking at the stars"

Oscar Wilde, Old Earth, PreImp c. 9750

This version of ***Space Master:*** *The Role Playing Game* ***(SM)*** is the Second Edition of ***SM***, now reformatted into a single volume. The text still refers to the three "books" (the GM Book, the Player Book, and the Tech Book) that first appeared in the Second Edition boxed set. However, in this version of ***SM***, each of these books is a separate section delineated by tabs and page numbers preceded by a letter (G, P, or T).

The Second Edition of ***Space Master*** updates the original role playing rules which first appeared in 1985, and integrates material from the original *Space Master Companion* (1986). Essentially, the ***SM*** system remains the same, and since it is based on the concepts of ***Rolemaster***, it can easily be integrated with that fantasy system. Together they set the stage for coherent science-fantasy and multi-genre campaigns.

The ***Space Master*** System is designed to be useable in a variety of SF environments, from a bleak near future of post-holocaust Earth, to a culture of high-tech exploration, to a distant time where civilization has risen to incredible heights and fallen to superstitious ruin. All such futures are possible in ***Space Master***.

Space Master: *The Role Playing Game* is the first part of a Science Fiction Gaming Trilogy. ***Space Master: Star Strike***, a fast-paced game of interplanetary ship combat, is the system's second installment, while ***Space Master: Armored Assault*** moves military combat planetside and is the final part of the trilogy.

THE GM BOOK

A guide for the Gamemaster, this book (the first section of this volume) has rules for generating everything from a vendor's shop to an entire solar system. There are ideas for alternate SF milieus, adventure scenarios, and encounters.

There is also a section on the distant future of the sprawling, corrupt Terran Star Empire, with new Major Houses, Organizations, and details of the Imperial Structure. Substantial new information on day-to-day life in the far future will help the GM flesh out a realistic, complex society.

The included starting adventure plunges the players immediately into Imperial intrigue, with a sabotage mission which could topple a Royal House!

THE PLAYER BOOK

This book (the second section of this volume) contains the rules for creating a character, as well as generating a unique and interesting background for him, her, or it. Telepathy lists are compiled and organized, and there are expanded rules for personal combat. There are guidelines for every sort of maneuver, whether individual or vehicular.

A NOTE ON GENDER

For readability purposes, these rules use the standard masculine pronouns when referring to persons of uncertain gender. In such cases, these pronouns are intended to convey he/she/it, her/him/it, etc.

THE TECH BOOK

An equipment catalog for ***Space Master***, the Tech Book (the third section of this volume) includes prices and descriptions for personal equipment, weapons, vehicles and spacecraft — including ten pages of starship plans. There are rules for building your own Androids, weapons and equipment, and for repairing the equipment you've busted up. Also within are the actual attack and critical tables for every weapon in ***Space Master***, from clubs to blasters to powerswords to plasma repeator rifles (these tables are duplicated at the rear of the volume).

THE COMBAT TABLES & INDEXES

All of the attack, critical, and fumble tables included in the Tech Book have been duplicated in the back of this volume on perforated, heavy stock pages. This will enable a player to remove one set of combat tables for easy reference during play. The last three pages of this volume contain a Master Index to all three books and a Chart Index.

THE STAR MAP

Inserted into this product is a full-color map of the Imperial territories (spreading out over a hundred light-years from Sol in some directions) which allows the players to chart their course as they explore the reaches of space.

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THE GM BOOK



PART I: THE NATURAL LAWS

"My aim is to show that the celestial machine is to be likened not to a divine organism, insofar as nearly all the manifold movements are carried out by means of a single, quite simple magnetic force."

Johannes Kepler, "The Harmonies of the World"

1.0 STAR SYSTEM GENERATION

With Stellar Systems and Planetary Research programs, explorers of distant worlds can determine all manner of very pertinent information from up to (or possibly over) a light- year's distance. Such factors will greatly influence travel within any stellar system — possibly the entire course of events therein, and lend each system an individuality above and beyond planetside. The stellar system readout sheet is designed to back up the stellar system generation and maintenance rules. Blank copies may be distributed to players when sensing begins (or the proper reference program is accessed), and filled in as the data becomes known.

1.1 SYSTEM IDENTIFICATION

The information listed at the top of the readout is used to locate the system entry in the Reference program, and will usually be known by the players before a more detailed study begins.

1.11 COORDINATES

The location in space of any stellar system can be quantified by use of the Terran Coordinates Code; a series of three measurements denoting the stellar primary's position in all three dimensions, relative to the Sol System's location in the galaxy. The first is the star's distance (in light-years) from Sol along the X axis (running left to right on the ***Space Master*** Star Map). Positive X coordinates lie to the right [Galactic Rimward] of Sol, while negative numbers are on the left [Galactic Coreward], in the same manner: positive numbers toward the top of the Star Map [Galactic Spinward] and negative ones toward the bottom [Galactic Antispinward]. Finally, the third number measures along the Z axis. Stars with positive Z coordinates are located above the Star Map [Galactic North] (toward the viewer), and those with negative Z coordinates are below it [Galactic South]. Therefore the Star Map itself represents the plane defined by all points for which Z = 0).

1.12 PROVINCES

Within the borders of the Terran Empire, every system is part of a Province or Imperial territory. The Frontier is divided into twenty-four Frontier Zones (designated by the radial divisions around the edges of the Star Map), and these, like the Imperial Core, are subdivided into Sectors named by their most central star. (For example: "FZ:23/Matay Sector", etc.)

1.13 FORM

Designates the central structure of the system: Solitary, Binary, Cluster, Black Hole, etc. (Fill in after data is determined.)

1.2 STELLAR DATA

The information in this section of the readout brings the star(s) within the system into clearer perspective: some of these procedures supply data which is merely descriptive, while others are very important spectroscopic calculations, the values of which will definitely influence travel to, from, and within the stellar system, as well as the structure of the system itself.

1.21 NAME/NUMBER

Toward Sol and the Inner Provinces, stars by and large still retain the ancient names given them by the astronomers and sages of Prelmp. Terra, who divided the night sky into constellations and ranked the stars within each constellation, from the brightest to the dimmest, with letters from the Greek alphabet (i.e., Alpha Centauri, Delta Cassiopeiae, etc). Binary stars, discovered much later, took the names of their discoverers and/or reference numbers, and variable stars received capital letters and the name of the constellation they belonged to. These doctrines of nomenclature, due largely to convention, are still in use throughout the Empire, although the constellations have shifted somewhat and many new constellations can be seen from Terra (thanks to advances in astronomic technology). On the Frontier, stars often take the name of the first Province to claim them, followed by a reference number, or the first being who discovered and recorded their presence. Different cultures will, of course, have different names for (and methods of naming) stars. Five spaces are provided on the Stellar System Readout to accommodate a large cluster on one form, if such an arrangement occurs.

1.22 CLASS AND TYPE

The spectral class (color and temperature) and stellar type (sequence) of any star are determined as per the procedure below. Two distinctions must be made, however: first, although the temperature rating of a star is indeed denoted by a digit from zero to nine, a temperature rating of zero indicates the hottest stars within a class, and nine indicates the coolest. Secondly, due to the rather peculiar manner in which stars burn up hydrogen and slowly move from one sequence to the next, there are no stars of spectral class M or K which lie within the sub-giant sequence. Therefore, if seven is rolled for any type M or K star (indicating a stellar type IV), ignore it and roll again.

Stellar Body Frequency

Make one high open ended roll to determine the star's spectral class. Once that is determined, roll one percentile die to determine the star's relative temperature rating within the spectral class. In this case, 0 is low and 9 is high.

1.23 BRIGHTNESS, RADIUS AND MASS

Important stellar parameters used for description and astrogation, these numbers will immediately be noted in any stellar survey, and can be easily calculated even from light-years away. All are stated in terms of Sol.

The Hertzsprung-Russell Diagram

The columns each denote a spectral class, from temperature rating 0 to 9. The hottest stars are on the left, coolest on the right.

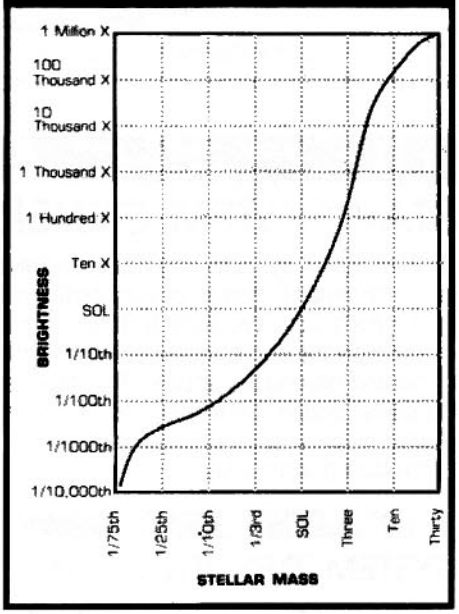
Each of the five curves denotes one of the five stellar types. To locate a star on the diagram, look down the appropriate column (the left side for temp 0, the center for 4 or 5, etc) until the curve designating the correct stellar type is reached.

Brightness is determined on the left side of the diagram, by the horizontal lines.

STELLAR BODY FREQUENCY CHART

Roll	Spectral Class Notes	
01-75	M (0-9)	
76-81	K (0-9)	
82-86	G (0-9)	
87-91	F (0-9)	
92-95	A (0-9)	
96-120	Cluster.	Roll for 1-5 random stars within significant gravitational influence of one another.
121-140	B (0-9)	
141-160	O (0-9)	
161-180	N (0-9)	
181-200	S (0-9)	
201+	Phenomenon.	Mostly brown dwarfs, but also includes black holes,neutron, dwarf, pulsar and variable stars, and nebulae.

MASS-LUMINOSITY DIAGRAM



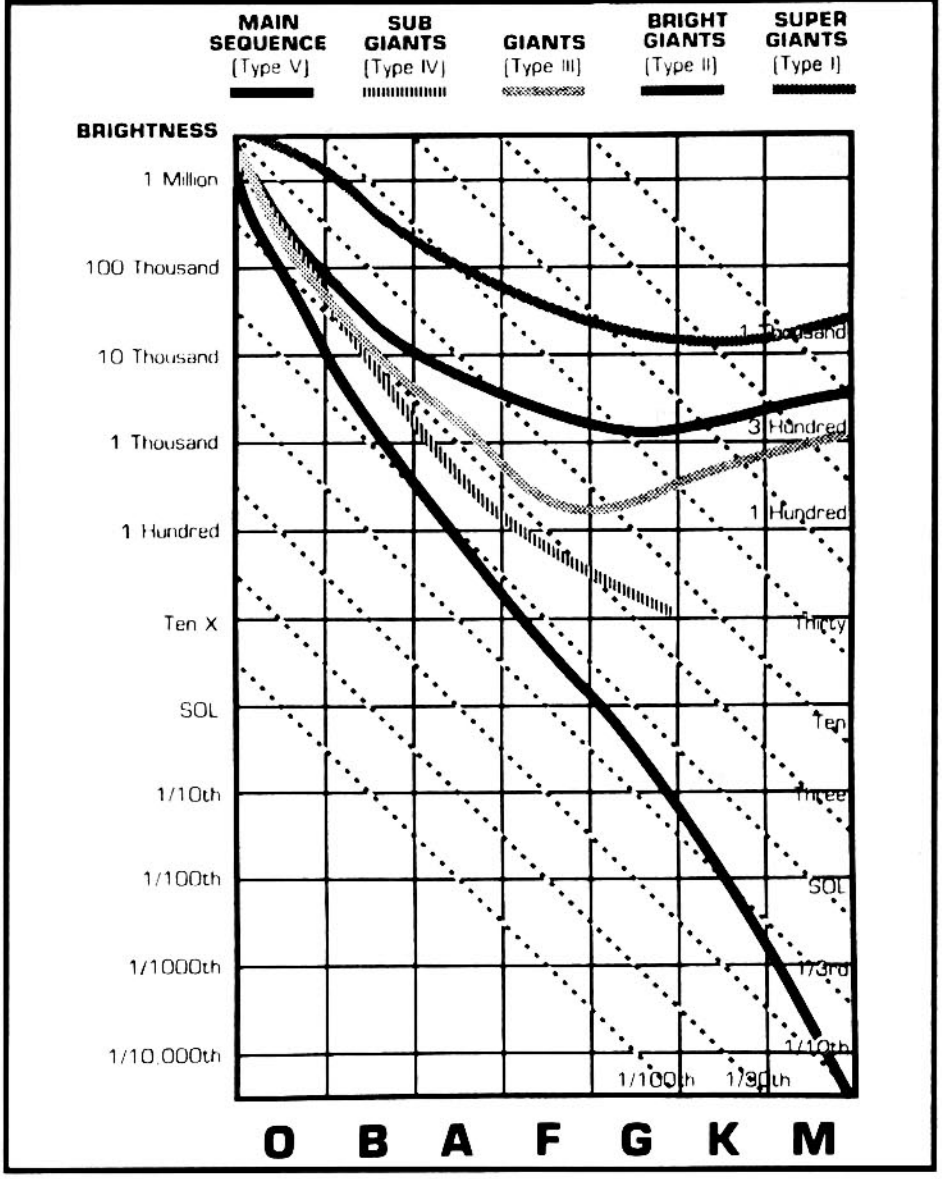
Radius is determined on the right side, by the dotted diagonal lines.

Once the star's brightness is known, its mass can be determined. This is done on the mass-luminosity diagram . The left side of the diagram is the same as its counterpart on the H-R diagram above. Locate the point where the star's brightness intersects the curve, and look down to determine the stellar mass (in terms of Sol).

1.24 GRAVITY WELL

It is important for pilots of hyperspace-capable vehicles to realize the dangers of entering (or exiting) hyperspace too near any object of such incredible mass as a star (for a better idea of these dangers, see 8.21). The gravitational effect of such a mass bends the fabric of space-time around it in what is called a well (the well-known illustration of how this works involves setting a heavy ball onto a stretched elastic gridwork; the very axii by which the grid is held together are stretched into a hollow which holds the ball.) The radius of any given gravity well is usually measured in Astronomic Units (1 AU = 150 million kilometers). The astrogator of any hyperspace course should determine the gravity well of the nearest star, as well as the star nearest the destination, before the journey begins. The formula is Routine (+30) for any character with Astrogation skill, and is based directly upon the stellar radius (as determined above): G Well Radius = R x 3.74AU (therefore Sol's gravity well has a radius of 3.74AU).

HERTZPRUNG-RUSSELL DIAGRAM



STELLAR SYSTEM READOUT

Coordinates: / / Province: Form:

STELLAR DATA

Name/Number	Class	Type	B	R	M	G-Well	Description

SYSTEM DATA

of Satellites:
Planets in Ecosphere
Eccentricities:
System Resources:
Singularities, Observations:

PLANETARY DATA

#	Name	OR	Type	Circ	D	G	E	Day	lYr	Atmos	Hydro	Clim	Bio

PLANETARY READOUT

Planet Name:

Primary:	Primary Class:	Primary Type:
Descriptive Notes/Overview:		
Circumference:	Province:	Port(s):
Satellites:	Status:	Density:
Orbital Radius:	Population:	Gravity:
STD Hrs Pr Day:	Productivity:	ESC Velocity:
STD Days/Year:	Production Emphasis:	
Local Days/Year:		

ENVIRONMENT

Atmosphere:		
Hydrosphere:		
Climate:		
Biosphere:		
Radiation:	Volcanism:	Meteor Infall:
Notes:		

HISTORY

Discovery:
Notes:

OPERATIONS

Security Level:	Acquisition:	Merchandising:
Notes:		

1.25 DESCRIPTION

This is a simple verbal clarification of factors already determined to aid the GM in describing what the star looks like (many players won't understand "F2 V"). The description is always in two parts. First, the star's color is determined by the spectral class, as shown on the chart.

Note: *spectral class and temperature ratings are listed here from hottest to coolest. The ages-old mnemonic for the order of class codes is "Oh Be A Fine Girl, Kiss Me Now Sweetheart.")*

The second half of the the stellar description is the star's sequence, which is indicated by its type code. The sequence tells us how large and how old the star is, for as stars get older (burning off more and more hydrogen and converting it to helium), they go through distinct physical stages which progress from the original ("main") sequence to the "supergiant" sequence. This process takes millions of years, and generally ends with the nearly burnt-out star becoming a "dwarf" (the brightness, radius and mass of a dwarf star will be from one to 100 times less than those of a type V star of the same class). For a listing of the stellar sequences in order of appearance and their relation to the stellar type codes, see **Determining Stellar Type** below.

Determining Stellar Type

Once the spectral class of the primary has been determined, find the stellar type by rolling one percentile die:

STELLAR TYPE CHART

Roll	Result
1-6	(V) Main sequence star
7	(IV) Sub-giant
8	(III) Giant
9	(II) Bright
10	(I) Super-giant

SPECTRAL CLASS CHART

Class	Color
O	Extremely bright blue-white
B	Very bright blue white
A	Blue-white
F	White; from bluish (temp 0) to yellowish (temp 9)
G	Yellow; from whitish (temp 0) to orangish (temp 9)
K	Orange; from yellowish (temp 0) to reddish (temp 9)
M	Bright red; toward orange at the hot end (temp 0)
N	Deep (temp 0) to dull (temp 9) red
S	Dim red

1.3 SYSTEM DATA

This section of the stellar system readout deals with the physical structure of the system as a whole. Stellar systems in general follow few rules of structure; it is recommended that the GM play with the various possibilities in each of these subsections as desired.

1.31 NATURAL SATELLITE DETERMINATION

Performed utilizing the charts **Natural Satellite Determination** and **Satellite Type** below.

Natural Satellite Determination

Find the spectral class along the top of the chart and then roll to find the natural satellite grouping and number:

If a Companion Star is indicated, use the **Companion Star Class Modifier** and **Companion Star Type Modifier** Charts to determine modifiers to the companion's class and type rolls. Primary stars (around which the Companions orbit) of Class O through G may possess planetary satellites in addition to Companion Stars. For such systems, note the presence of the companion, and reroll on the Natural Satellite Grouping table for the possibility of planets (dividing the roll by two). If planets are indicated in such a system, the orbit of the Companion Star is likely to be very near the primary (well within the orbital radius of the first planet). To determine whether this is the case, roll 1D10. If the result is equal to or lower than the primary's type code, the Companion is near (i.e., for a primary of class IV [subgiant], a roll of four or lower indicates a near Companion).

COMPANION STAR CLASS MODIFIER CHART

Primary's Class	Modifier To Class Roll	Hottest Companion Class Allowable
O	-10	F
B	-15	G
A	-15	G
F	-50	M
G	-30	M
K	-25	M
M	-20	M
N	-50	N
S	-100	S

Notes: *An adjusted total of -25 to 0 indicates a companion of class N. Below -25 = class S.*

NATURAL SATELLITE DETERMINATION

Satellite Grouping	Spectral Class								
	S	N	M	K	G	F	A	B	O
None	01-95	01-95	01-75	01-50	01-20	01-20	01-25	01-35	01-45
1-10 satellites	—	96-100	76-95	51-70	21-75	21-80	26-70	36-64	46-54
1-10 satelllites (all uninhabitable)	96-100	—	—	—	—	—	71-95	65-95	55-95
3-12 satellites	—	—	—	71-95	76-95	81-95	—	—	—
Companion Star (roll for type)	—	—	96-00	96-00	96-00	96-00	96-00	96-00	96-00

As usual, this roll is open-ended, but if the total indicates a star of a hotter class than the stated maximum, the roll is ignored and the maximum class is used instead.

COMPANION STAR TYPE MODIFIERS CHART

Primary's Type	Modifier to Type Roll
V	-4
IV	-3
III	-2
II	-1
I	+0

Notes: *An adjusted total of zero or less indicates a dwarf or subdwarf type (see above for stellar data on dwarfs). If the primary star is a dwarf, the Companion will also be.*

Additional Planetary Data is determined in the **Planet Generation Section.**

1.32 SYSTEM RESOURCES

To be filled in after planetary data is known. A general rating (i.e., "poor," "average,", "extremely high," etc.) may be used to indicate the system's raw value and desirability. Systems with dense planets, wide ecospheres, or flourishing biospheres will generally have more in the way of resources than most.

1.33 SINGULARITIES/ OBSERVATIONS

Here may be recorded any peculiarities of the system which are not covered elsewhere on the readout. Players may wish to use this space to write down any notes or quandries their characters may have, or to record their own theories based upon the data they manage to accumulate. Note that a "singularity" could be anything from an ancient alien vessel to a previously unknown type of celestial body. Used with care, such "mysteries" can generate entire adventures, and lend individuality to the overall campaign.

2.0 PLANET GENERATION

Certain calculations in this section require information on the stellar primary of the planet in question, which should be determined beforehand (Section 1.0, stellar systems generation). The planetary data section of the *stellar system readout* should be filled in with information like that determined here. The *planetary readout* form also includes spaces for this data, as well as any more specific notes. The GM may wish to allow player characters attempts to access this information by use of scientific skills or computer reference programs. If so, the PCs must succeed in a static maneuver modified by the specific skill(s) used and a Difficulty Level set by the GM.

Note: *The GM may see fit to apply additional modifiers, or conceal or misrepresent some information, depending upon the amount known about the planet, the origin of the computer reference program, and the Mk. of the computer. (of course, some planets may have been purposely removed or misrepresented.) These options are left up to the GM as befits the adventure.*

The descriptive notes/overview section of the planetary readout may be used as the GM sees fit, to summarize the general impression he or she wishes the planet to exude. Any alternate names for the planet might also be placed here.

2.1 ORBITAL RADIUS

The mean orbital radius (OR) of a given satellite is measured in Astronomic Units (AU). One AU (the OR of Terra) equals 150 million kilometers, or 93,225,000 miles. The base OR of the first (innermost) orbit is determined by rolling 4d10 and dividing by 100, then applying the multiplier found on the **First Orbit Multipliers** Table.

Cross-index the stellar primary's class and type codes to determine the multiplier.

The OR of each satellite helps determine the OR of the next satellite out, as each orbit is approximately twice as large as the last one (for ease's sake, you may wish to simply multiply each by two and round down).

For more varied and system-specific determination of OR's, roll 2D10, averaged, and divide this number by ten (giving you a resultant range of 0.1 to 1.0), then add this number to 1.4. The total derived (from 1.5 to 2.4) is multiplied by the previous OR.

Either process is repeated until the OR of each satellite has been noted.

2.2 SATELLITE TYPE

Once the number of satellites has been determined, we can determine the planet type. Because of the way stellar systems form, heavier elements condense closer to the star, while lighter elements such as ice and gases condense further out. Thus, there is a tendency towards rock planets in the inner orbits and gas giants in the other ones. While asteroid belts can occur anywhere, they are often in the inner and middle areas because of the increased tidal disturbances from the star. Check for the satellite type by rolling percentile dice. Across the top of the chart is the planet in question's approximate percentage of the way out from the stellar primary (always round towards extremes).

Example: *If there is one planet in the system, it is in the 41-60% range. If there are two planets, one is in the 01-20% range, one is in the 81-100% range.*

FIRST ORBIT MULTIPLIERS TABLE

TYPE	V	IV	III	II	I	DWARF
O	20	30	45	50	100	1.5
B	15	25	30	30	70	1
A	1	1.5	2	4	30	1
F	1	1	2	3	20	1
G	1	1	2	4	30	1
K	1	1	2	5	35	1
M	1	1	10	20	60	1
N	1	1	12	25	60	1
S	1	1	15	30	60	1

SATELLITE TYPE CHART					
Roll	Result				
	01-20	21-40	41-60	61-80	81-100
01-15	asteroid belt	rock planet	rock planet	rock planet	rock planet
16-30	rock planet	asteroid belt	rock planet	rock planet	gas giant
31-70	rock planet	rock planet	asteroid belt	gas giant	gas giant
71-85	rock planet	rock planet	gas giant	asteroid belt	gas giant
86-95	rock planet	gas giant	gas giant	gas giant	rock planet
96-100	empty orbit	empty orbit	empty orbit	empty orbit	empty orbit

2.3 ECCENTRICITIES

The standard orbit is a slightly ellipsoid shape, or a slightly off-center egg shape. Few orbits are actually circular, but most are close enough to enable us to use their mean orbital radius as a standard. Some orbits, however, are of so peculiar a nature as to be worth noting. Some, most often those of "captured" planets (planets which wandered into a stellar system and were caught by the gravitational pull of the primary), lie on a plane of their own, tilted askew from those of their neighbors. Some are more, or less, rounded than the others.

To determine whether any of the satellites rolled were originally "strays" or "captured planets," roll 1d100 and add the primary star's mass +30. A total of 101 or better indicates a captured planet (determine which by rolling randomly amongst the satellites determined). If so, another roll is allowed at +20 (instead of +30). If this roll indicates a second captured planet, a final roll is allowed, this time at +10. Captured planets are inclined to have eccentric orbits, peculiar climatic patterns, and other bizarre features.

The distribution and placement of any eccentric orbits is left to the GM's discretion. However, the planets of massive stars are much less likely to have eccentric orbits than planets of weaker stars, unless said planets were captured. Note any of the above eccentricities by orbit number on the readout.

2.4 CIRCUMFERENCE

Recorded in terms of a base circumference times an exponential power of ten ($2.3 \times 10^3 = 2300$). For Rock planets this exponent will usually be 4, but may be 3 or 5, depending on planet size. for Gas Giants the exponent will usually be 5, but may be 4 for small examples. The procedures differ for each type, and are detailed thus:

For rock planets, roll 1D100 high open-ended, twice and average the results.

— If the total is less than 20, the planet is very small. Divide the total by 2 to determine the base circumference; the exponent is 3.

— If the total is greater than 19 and less than 200, divide it by 20 for the base circumference; the exponent is 4.

— If the total is 200 or greater, the planet is extremely large. Divide the total by 200 to obtain the base circumference; the exponent is 5.

For gas giants, roll 1D10 twice and average the results, then add 1/4 of the stellar primary's mass.

— If the total is less than 2, the Gas Giant is a very small one. Multiply the total by 5 to determine the base circumference; the exponent is 4.

— Otherwise, divide the total by 2 for the base circumference; the exponent is 5.

Since the circumference of asteroids in a belt will differ greatly from one to the next (anywhere from under 1 to over 1000 kilometers), the total number of asteroids in a belt is more important than the size of any single one. To determine this number roll a D10, add the total number of non-empty orbits in the system, and multiply by 1000.

2.5 DENSITY

Used to determine the gravity, escape velocity, and resource value of a planet (planets with greater densities will generally have a higher distribution of platinum, titanium, and other valuable heavy metals). The density of Rock planets and Gas Giants differ greatly (the density of Jupiter is only about 1 1/3 that of water!), and are determined in slightly different ways, as shown below:

For rock planets and asteroid belts, roll 2D10.

— If the (unmodified) total is less than 20, divide it by 10 to obtain the density.

— If the (unmodified) total equals 20, roll again adding 10 to the result (This process may be cumulative if "20" is rolled more than once, in which case the modifier would be +20 the second time, +30 the third, etc.). When a roll of less than 20 is achieved, add the current modifier and divide that total by 10 to obtain the density.

For gas giants, the process is much the same, but the end total is divided by 50 instead of 10.

BASE GRAVITY TABLE					
Circum	BG	Circum	BG	Circum	BG
$1x10^3$	Negl	$1x10^4$	.25	$1x10^5$	2.5
$2x10^3$	Negl	$2x10^4$	.5	$2x10^5$	4.25
$3x10^3$	Negl	$3x10^4$	.75	$3x10^5$	6.5
$4x10^3$	.1	$4x10^4$	1	$4x10^5$	8.5
$5x10^3$	.12	$5x10^4$	1.25	$5x10^5$	10
$6x10^3$	.15	$6x10^4$	1.5	$6x10^5$	13
$7x10^3$	.18	$6x10^4$	1.75	$7x10^5$	15
$8x10^3$	.2	$8x10^4$	2	$8x10^5$	17
$9x10^3$	.22	$9x10^4$	2.25	$9x10^5$	19

2.6 GRAVITY AND ESCAPE VELOCITY

The gravity of any planet is dependent upon the size and density of that planet. To determine the base gravity, consult the **Base Gravity Table** (round the planet's circumference to the nearest whole number), and then multiply the number shown by the planet's density to determine the mean (surface) gravity.

Consult the column on the **Base Gravity Table** which corresponds to the circumference exponent of the planet in question. The (rounded) base circumference denotes the base gravity (BG).

Note: *For accuracy's sake you may wish to prorate the values given rather than rounding the circumference.*

Once the planet's gravity is known, the escape velocity (the speed in kilometers/second which must be equalled or exceeded in order to leave the planet) may be determined. Simply multiply the planet's gravity by eleven (escape velocity for Terra is approximately 11 KPS). Any vessel which is unable to meet ESC velocity will be forced to remain within the planet's own gravitational field or hypershunt from within the gravity well (a dangerous proposition at best!)

2.7 PLANETS WITH AN ATMOSPHERE IN STELLAR ECOSPHERE

Determined as per the chart below. Remember that the ecosphere determined need not apply to human life, or life as we know it. Generally, the only stars which are capable of supporting a naturally human-comfortable ecosphere (in terms of temperature and background radiation, etc.) are spectral class F through M.

A primary's stellar ecosphere is defined as an imaginary orbital belt around a sun within which a planet would receive an amount of stellar radiation favorable for the existence of a given lifeform. Each different species would have its own favored stellar ecosphere dependent on its racial tolerances and atmospheric shielding.

To determine the number of planets within the stellar ecosphere which are surrounded by an atmosphere (and therefore might be able to support life), make a D100 roll and check the results below. The chart assumes that only Rock Planets may sustain an appropriate atmosphere; also, planetary satellites said to be uninhabitable by the **Natural Satellite Determination Table** are exempt.

PLANETS IN STELLAR ECOSPHERE CHART

Roll	F	G	K	M
01-15	0	0	1	0
16-30	0	1	1	0
31-70	1	1	2	1
71-85	1	2	2	1
86-95	1	2	3	1
96-100	2	3	4	2

2.8 ENVIRONMENTAL PARAMETERS

If the result from 2.7 indicates that there is at least one hospitable planet in the stellar ecosphere, use the chart below to generate its environmental parameters. Begin at the left with Atmosphere, and proceed to the right hand column only if an asterisk (*) result is obtained. The roll on this chart is open-ended on both the high and low ends. Keep in mind that a separate roll is made for each column.

ENVIRONMENTAL PARAMETERS CHART

Roll	Atmosphere	Hydrosphere	Climate	Biosphere
less than 01	Atmosphere is presently escaping the planet.	No standing water.	This place is an Iceball	Biotoxins in atmosphere They are so exotic as to be normally undetectable.
01-20	Plethora of toxic trace metals and gases in atmosphere.	World is predominantly desert.*	Arctic climate prevails.*	Biotoxins in atmosphere.
21-40	Exceedingly thin atmosphere.	Arid.*	A cool temperate mix.*	No life.
41-60	Predominantly chlorine.	Semi-arid.*	Temperate mix.*	No life.
61-80	Mainly ammonia and methane.	Balanced.*	A warm temperate mix.*	No life.
81-100	Predominantly carbon dioxide.	Ocean World.*	Hot.*	Proto-organisms.
101-150	Oxygen/Nitrogen/ Carbon dioxide and contaminants.*	Water vapor is major component of atmosphere.*	Greenhouse Inferno.	Proto-organisms and plant-like life.
151-239	Oxygen/Nitrogen with few contaminants.*	Water vapor is major component of atmosphere.*	Variable due to an eccentric orbit.	Non-sentient lower life forms.
240-249	Oxygen/Nitrogen with significant ozone component in stratosphere.*#	Water vapor is major component of atmosphere.*	Variable due to an unusual rotation period.*	Sentient beings present. Developmental stage should be chosen/generated.
250+	A thick atmosphere which is predominantly oxygen and nitrogen.*#	Water vapor is major component of atmosphere.*	Hellish.	Highly evolved or unusual life form

* - Roll on the next column to the right only if asterisk present.
\# - If a biosphere roll is required, add 100 to the roll.

If a GM or the players decide that a world should be explored, the GM can assign the planet unique characteristics to suit his vision of it. Some factors worth considering are: gravitational pull, atmospheric pressure, local climatic anomalies, orbit eccentricity, axial tilt, orbital period, rotational period, radiative permeability of atmosphere, weather patterns, currents, tides, and moons. The **Star System Generation** guidelines will be enough for the GM to quickly "roll-up" a system on the spur of the moment, but the more time that the GM puts into developing his game locations, the more detailed his descriptions can become.

2.81 TEMPERATURE TABLE

The following chart gives temperature ranges for a variety of locales. The GM should (a) note the size of the range, (b) roll the dice, and (c) apply the results with high rolls corresponding to high temperatures. Each planet's year has been broken into 10 relatively equal portions known as months. Please note that the count of the month is dependent upon the hemisphere occupied for the purposes of determining temperature ranges. The beginning of month 1, for the given hemisphere, corresponds to the equatorial equinox which leads to that hemisphere's summer solstice. The beginning of month 6 then corresponds to the equatorial equinox which leads to that hemisphere's winter solstice. It should then be clear that the beginning of month 1 for the arbitrarily designated "northern" hemisphere, would be the beginning of month 6 for the "southern" hemisphere. Planets with no axial tilt will not experience the seasonal temperature range changes represented on this chart (they will constantly have a month 1 or month 6 temperature distribution). Planets with extreme axial tilts will experience temperature ranges far in excess of the ones given here (the GM may want to almost double the extreme temperature possibilities). Planets with extremes in rotational periods will undergo unusual temperature conditions. Fast spinning planets will have more constant day and night temperatures, while slow spinning planets will experience plummeting night temperatures and skyrocketing day temperatures. The GM will have to adjudicate these unusual conditions.

Temperatures are given in degrees centigrade.



2.82 WIND AND WEATHER

The wind and weather chart illustrates the effects of wind on land and water surfaces. The dice rolls are open-ended.

Subtract 10 from rolls made for all-sea areas, and subtract 5 from rolls made for coastal regions. An (*) result is never modified due to locale.

2.83 PRECIPITATION TABLE

The following chart gives the precipitation means and probabilities for a variety of locales. GMs should note that the numbered months represent trends and no more. See the discussion in the **Standard Temperature Chart** for a definition of the month structure used in ***Space Master***.

The first figure represents the mean precipitation in centimeters for an arbitrary standard 36.5 day month; the parenthetical value is the probability percentage. Rolling equal to or less than the probability number indicates that there will be precipitation that day. The lower the number rolled, the heavier the quantity the precipitation over the given time period.

Note that the precipitation type will be dependant on the chemical make-up of the geosphere and the climate. On some planets it may snow methane crystals, or even rain liquid nitrogen, but this is up to the GM to decide. For the purposes of water planets (hopefully the ones that the players will be hanging around most often), precipitation will be in the form of rain if the temperature is above 0, sleet at 0, and snow if the temperature is below 0 degrees centigrade. When it snows there is a 1% chance of hail, and a 4% chance of an ice storm. An asterisk (*) indicates that the precipitation is in the form of a mist, dew or fog 50% of the time.

TEMPERATURE TABLE

MONTH	HOT	WARM	TEMPERATE	COOL	ARCTIC
1	35-40	20-35	5-15	(-10)-0	-(30-10)
2	35-45	20-35	10-20	(-5)-5	-(25-5)
3	40-55	25-40	15-30	0-15	(-15)-0
4	55-60	35-45	20-35	5-15	(-5)-10
5	50-55	30-40	20-30	5-10	(-5)-0
6	40-50	25-30	10-20	0-10	-(10-5)
7	35-40	20-30	5-15	(-5)-0	-(20-10)
8	25-35	15-25	(-10)-5	-(20-5)	-(40-20)
9	20-25	15-20	(-30)-5	-(40-20)	-(50-30)
10	25-35	15-25	(-5)-10	-(40-5)	-(45-25)

WIND AND WEATHER TABLE

Roll	Wind Speed	Type	Wave Form/ Height	Effects at Sea	Effects on Land
100+	under 1	Still	None	None	None
99-100*	under 2	Calm	None	Sea like mirror.	Calm; smoke rises vertically.
86-98	2-6	Light air	Calm, glassy 0	Ripples with appearance of scales; no foam crests.	Smoke drift indicates wind direction; vanes do not move.
66-85	8-12	Light breeze	Rippled, under 1	Small wavelets; crests of glassy appearance; not breaking.	Wind felt on face; leaves rustle; vanes begin to move.
46-65	13-18	Gentle breeze	Smooth, under 1	Large wavelets; crests begin to break; scattered whitecaps	Leaves, small twigs in constant motion; light flags extended.
31-45	19-30	Moderate breeze	Slight, 1	Small waves, becoming longer; numerous whitecaps.	Dust, leaves, and loose paper raised up; small branches move.
21-30	31-40	Fresh breeze	Moderate, 1-2	Moderate waves, taking longer form; many whitecaps, some spray.	Small trees in leaf begin to sway.
16-20	41-52	Strong breeze	Rough, 3-4	Larger waves forming; white-caps everywhere; more spray.	Larger branches of trees in motion; whistling heard in wires.
11-15	53-65	Moderate gale	Quite Rough, 4-5	Sea heaps up; white foam from breaking waves begins to be blown in streaks.	Whole trees in motion; resistance felt in walking against wind.
06-10	66-80	Fresh gale	Very rough, 5-6	Moderately high waves of greater length; edges of crests begin to break into spindrift; foam is blown in well-marked streaks.	Twigs and small branches broken off trees; pro-gress generally impeded.
(-49)-05	81-94	Strong gale	Extremely Rough, 6-7	High waves; sea now rolls; dense streaks of foam; spray may reduce visibility.	Slight structural damage occurs; slate blown from roofs.
-(75-50)	95-110	Whole gale	High, 7-10	Very high waves with overhang-ing crests; sea takes white appearance as foam is blown in very dense streaks; rolling is heavy and visibility reduced.	Seldom experienced on land; trees broken or uprooted; considerable structural damage occurs.
-(100-76)	111-125	Storm	Very high, 11-15	Exceptionally high waves; sea covered with white foam patches; visibility still more reduced.	
-(150-101) -(175-151) -(200-176) -(250-201) -(300-251) ≤(-301)	126-140 141-160 161-180 181-220 201-220 221+	Hurricane	Phenomenal, over 15	Air filled with foam; sea com-pletely white with driving spray, visibility greatly reduced.	Very rarely experienced on land; usually accom-panied by widespread damage.

2.84 STANDARD HOURS PER DAY

Since the rotational period of any given planet is a large variable affected by not only the size and density of the planet, but also the number and sizes of its moons and the other planets in the system. For ease's sake only the first two factors may be taken into account. Since size (circumference) and density are the factors which determined gravity (see above), it is expedient to use the gravity as a multiplier here (GMs who wish to be painstaking may apply any modifiers they see fit). Simply roll 1D100 open-ended, and multiply the result by the planet's gravity (if gravity is "negligible," multiply the result by 0.1) to determine the number of hours in one planetary rotation. If the number thus derived is zero or less, the planet has an unusual rotation scheme (it may keep the same face toward the stellar primary at all times, spin more or less "on its side," or rotate in a retrograde fashion, etc). The length of the rotation period will have a major effect on the planet's temperature and weather patterns, not to mention any lifeforms on planetside.

2.85 STANDARD DAYS PER YEAR

The primary factors which determine the orbital period of any given planet are its orbit's radius and the mass of the stellar primary (or the combined masses of both central stars in a binary system). Although the gravitational effects of neighboring planets, moons, comets, etc., (not to mention in-system collisions) may influence the orbital period to a great degree, these factors are too random to be easily quantified and are therefore left to the GM to apply as modifiers if desired.

Accurately determining the length of a planetary year is not a simple process, but it is a straightforward one. To begin with, take the cube of the planet's orbital radius (OR x OR x OR), and divide it by the mass of the primary. Then find the square root of this number. The total thus derived is the planet's orbital period in actual earth years. To translate this figure into standard Imperial days, multiply it by 350.



To determine the number of local (planetary) days in a local year, multiply the number just derived (DPY) by twenty-five (the number of standard hours in an Imperial day), and divide the total by the HPD (standard hours per day - see above).

2.86 SATELLITES

Generally speaking, the number of moons or rings found orbiting around any planet increases the farther that planet is from its stellar primary (this is because the radioactive and gravitational forces of the stars tend to destroy such small objects as moons rather quickly). Therefore, the planet's orbit number (counting outwards from the stellar primary) is the most important factor in determine the number of satellites any given planet possesses. The methods of doing so differ, depending upon the type and size of the planet concerned, and are detailed on the following pages.

PRECIPITATION TABLE

MONTH	RAINY	HUMID	TEMPERATE	WET/DRY	DRY	ARID
1	27 cm (90)	10 cm (75)	4 cm (15)	2 cm (08)	1 cm (02)	- (01)*
2	18 cm (80)	12 cm (85)*	5 cm (20)	6 cm (20)	1 cm (02)	- (01)*
3	10 cm (40)	14 cm (80)	8 cm (30)	8 cm (30)	3 cm (07)	- (01)*
4	5 cm (20)	10 cm (75)	8 cm (30)	12 cm (45)	4 cm (15)	- (01)*
5	4 cm (15)	16 cm (95)*	6 cm (25)*	13 cm (50)	4 cm (15)	- (01)*
6	8 cm (20)	15 cm (90)	9 cm (35)	28 cm (95)	2 cm (10)	- (01)*
7	13 cm (50)	8 cm (40)	6 cm (25)	30 cm (99)	2 cm (10)	- (01)*
8	28 cm (90)	6 cm (25)	6 cm (25)	18 cm (70)	1 cm (02)	- (01)*
9	30 cm (90)	5 cm (20)	5 cm (20)	2 cm (10)	- (01)	- (01)*
10	28 cm (90)	6 cm (25)	4 cm (15)	1 cm (02)	- (01)	- (01)*

Rainy - Hot or warm; one dry month; wet the rest of the year; frequent heavy rains.

Humid and **Temperate** - Precipitation in all seasons; light to moderate precipitation spread over many days, although heavy downpours occur on occasion; heavy fogs in highlands or along coast lines.

Wet and Dry - Distinct and extreme wet and dry seasons; little or no precipitation during the dry period.

Dry - Areas with cold or hot climates; modest precipitation concentrated during warm moderate temperature periods; dry the rest of the year.

Arid - Extremely cold or hot areas; light to negligible precipitation; rapid evaporation or ground absorption in the hot regions.

For rock planets and small gas giants (those with a circumference exponent of 4), multiply the orbit number by ten. This is the percentage chance that the planet possesses a moon (roll this number or lower on 1D100). If the moon is indicated, another may be present. Divide the original percentage chance by two, and roll again. This may continue indefinitely (with the percentage chance being halved each successive roll), as long as the rolls are "successful," but ceases as soon as the roll exceeds the number needed.

For all other gas giants, multiply the planet's Base Circumference (disregarding its exponential factor of ten) by 5 and round to the nearest. This is the maximum number of moons which that planet may possess. Roll 1D10 open-ended (note: this may result in a negative number), and add the result to the planet's orbit number.

— If the total is zero or less, the planet possesses no moons. If the total is between 1 and the maximum, that total is the number of moons present.

— If the total exceeds the maximum, the maximum number of moons are present.

In addition to moons (or lack of them), any planet may also possess rings. The planet's orbit number times the number of moons present (or 1, whichever is greater) equals the percentage chance of rings being present. The nature and complexity of the rings is left up to the GM to decide, but in general, the greater the gravity of the planet, the larger and more complex the rings will be. Proximity to an asteriod belt also increases the chances of a ring system.

The number of moons and existence of rings should be recorded on the planetary readout under "satellites."

3.0 ENCOUNTER GENERATION

3.1 RANDOM RACIAL/ CULTURAL GENERATION

The task of populating so vast an area as the Empire may seem a daunting one, and justly so — there are several hundred stars on the Star Maps, and these constitute only the most significant stellar systems (either for astrographic and/or political reasons). Many of these systems will possess native or immigrant lifeforms, some of them sentient. Each of the Royal Houses (there were twenty-seven of these as of the Empire's consecration) is considered to possess a culture of its own unique type, often descended from one or more old Earth cultures. On the Frontier, over a hundred lesser Clans and dozens of independent groups can be found, each (again) possessing its own culture, and possibly constituting a race unto itself. Add to this any truly alien races you wish to include in the Campaign (depending on your personal taste) and the immensity of the chore becomes almost staggering — how can you possibly do it all?

The answer, common to all forms of adventure fiction, is that you *don't* do it all — you create in detail the races and cultures which your players will be dealing with most often (Any of the ***Space Master*** Campaign Modules contain races which were specially designed for this purpose), and you toss in additional races as the Campaign progresses and the Players move further from the Campaign's "starting point". New races can be added (or implied) at any point along the way.



Such areas as Deepspace Outstations, Cantinas, Spacefaring Ports, etc provide ideal backgrounds for the introduction of colorful and exotic beings, many of which might be played "by ear" — totally improvised (of course, it is unwise to deal so arbitrarily when the race in question plays a major part in the Adventure at hand). As the Campaign goes on, take some time to flesh these ideas out — these originally scant or "two-dimensional" personae may just provide the core ideas behind a new culture. You should try to stay a bit ahead of your Players (obviously), but this does not mean that you must populate the entire Empire before you let them run around in it — just try to keep a few new races/cultures/environments "on reserve" at any given time. Take ideas from your favorite SF books and films, develop your own fantastic concepts — the ***Space Master*** system is designed for just this sort of flexibility and creativity.

The following system was designed to serve as a "springboard" for such new races and cultures. Each column details a significant cultural aspect, and the columns are rolled on in order from left to right. (1 D100 is used in all cases. The roll is usually modified, and is **always** Closed-Ended unless otherwise stated.) By following the procedures denoted below and applying a bit of imagination, all manner of diverse (and not-so-diverse) societies may be created.

***Note**: Results obtained form the **Random Racial Generation Chart** were never intended to serve as anything but prompts for the imagination — if a roll doesn't make sense, or you come up with a better idea, then by all means ignore the chart! This is especially true when the race in question will probably play an important role in the Campaign — such "keystones" should never be created by completely arbitrary means.*

RANDOM RACIAL GENERATION CHART

Roll	Basic Type	Racial Origin	Kinship Structure	Values	Polit. Structure
Up to 0	Known humanoid race (-15)	Imperial colonists/ secessionists/ subjugates (-8)	Mates only; young are born viable or raised in unusual style	Warfare/physical domination/geno-cide (-20)	None; anarchy and chaos/collapsed government/total opportunism
01-30	Known transhuman or replicant race (-10)	Provincial colon-ists/secessionists/ subjugates (-5)	Nuclear family: 1-5=paternal 6-9=maternal 0=both/other	Possession of land/ planets/territory (-10)	Theocracy
31-60	Known alien race (+80)	Criminals/exiles/ renegades (-2)	Extended family: 1-4=paternal 5-8=maternal 9-0=both/other	Trade/profit/ possession of valu-able merchandise (-5)	Dictatorship/ monarchy/ police state
61-70	Unknown humanoid race (-10)	Secessionists from the T.F.D. (-1)	Large commune: 1-5=indust/economic 6-8=religious 9-0=other	Specific tech field/industry (production) (+5)	Representative democracy
71-75	Unknown trans-human or replicant race (-8)	Cryo-sleep colonists (pre-recession) (-2)	Clubs/societies/ guilds (special interest groups)	Specific scientific field (research and development) (+10)	Republic/ commonwealth
76-80	Unknown mutation: add 16 special abilities to known race (-10)	Human/xeno-human interbreeding (-5)	Small commune/band: 1-5=indust/economic 6-8=religious 6-0=varies/other	Artistic expression/ impression (+20)	Feodality
81-90	Unknown hominoid variant/"humanimal" race (+60)	Known alien race (OE)	Mixed; at least 2 levels of approx. equal significance	Eclectic/erratic/ diverse (+0)	Oligarchy: 1-7=land/labor 8-9=theocrats 0=other
91-100	Unknown alien race (+80)	Lesser lifeform on homeworld (OE)	2 "Hemicultures" (male/female; good/evil; etc)	Religion/ philosophy (varies*)	Bureaucracy (multiple oligarchies)
101-110	Unknown non-hydrocarbon-based race (+80)	Race of ancients (OE)	Entire society (absolute socialism or hivemind); don't roll polit.	Distribution of information/ resources/services (+30)	Actual/Platonic democracy
111 up	Unknown/advanced beyond needing physical bodies (+80)	Unknown alien race (OE)	Varies; absolute flexibility and/or independence	Beyond human understanding (OE +0)	Nil; anarchy and peace
Mods:	Inner prov.: -50 Frontier: -5 Backnet: OE	Automatic -50 +LY from Sol (type column)	(Origin column)	OE	OE (Values column)

RANDOM RACIAL GENERATION CHART

Tech/Sci Level	Language	Worship	Xeno Acceptance	Problems	Roll
Diff.level = +0 rank = 5 pts misc.mod = +30	Anglaman (terran standard) or derivative	None; no real religious concept	Sheer folly; total xenophobia (possibly due to past experiences)	Military/diplomatic clashes with neighboring race/province	Up to 0
Diff.level = +0 rank = 5 pts misc.mod = +0	Dialect/derivative of old earth language (most provincial tongues)	Animism; most/all objects considered alive to some degree	Extremely hard; may have had bad experiences with outsiders before	Need resource(s): 1-3= food/water 4-7= fuel 8-0= other	01-30
Diff. level = +0 rank = 5 pts misc.mod = -20	Fusion of 2 or more old earth derivatives	Animism; all living beings considered to posses souls	Very hard; cultural doctrine may include warnings against outsiders	Pollution of homeworld territorial possessions	31-36
Diff.level = +0 rank = 5 pts misc.mod = -30	"Designed" language	Pantheon; group of deities, each the "patron" of some aspect/act/sphere	Hard; cultural leanings toward isolationism	Pestilence/plague/disease/lack of immunity/tolerance to microbe(s)	61-70
Diff.level = +1 rank = 4 pts misc.mod = +0	Highly specific on some topics; very ineffective on others	Bitheism; two diametrically opposed deities	Medium; curiosity is balanced by caution or mild distrust	Resist change, clinging to old ways/rituals/lifestyles	71-75
Diff.level = +1 rank = 5 pts misc.mod = +0	Extremely hard for most hominoids to speak (physically)	Monotheism; all nature regarded as work of one god or creative force	Light; very curious but somewhat wary of outsiders	Have lost systems/planets/territory to neighboring race/province	76-80
Diff.level = +1 rank = 5 pts misc.mod = -50	Sentence/concept structures are extremely hard for most hominoids	Certain person(s): 1-7=past 8-9=present 0=future	Easy; some dealings with aliens/xenohumans have occured before	Internal moral/ethical/religious differences cause friction	81-90
Diff.level = +2 rank = 5 pts misc.mod = -10	"Silent" language using double meanings and/or body movements	Specific attainable states of being or consciousness	Routine; aliens and xenohumans dealt with on a regular basis	Idealistic view prevents true objectivity	91-100
Diff.level = +3 rank = 4 pts misc.mod = +0	Constant or near constant communication via extraordinary means	Each individual considered godhead	Easy if studying newly discovered race; otherwise very hard	Taken advantage of/oppressed/enslaved by other race/culture	101-110
Advanced beyond imperial standard; exact capabilities determined by GM	Utilizes means of communication beyond normal human capabilities	Beyond human understanding	Total; alien/xenohuman contact is actively sought	Misunderstood/misrepresented by other races	111 up
Alien/unknown: OE Royal family: -5 Minor clan: +10 Renegades: +15 "Rich" world: -10	Automatic -50 +LY from sol (Origin column)	(Origin column)	Frontier: +5 Backnet: +10 (Values column)	(Values column)	Mods

Each column of the chart is dealt with, in order, below:

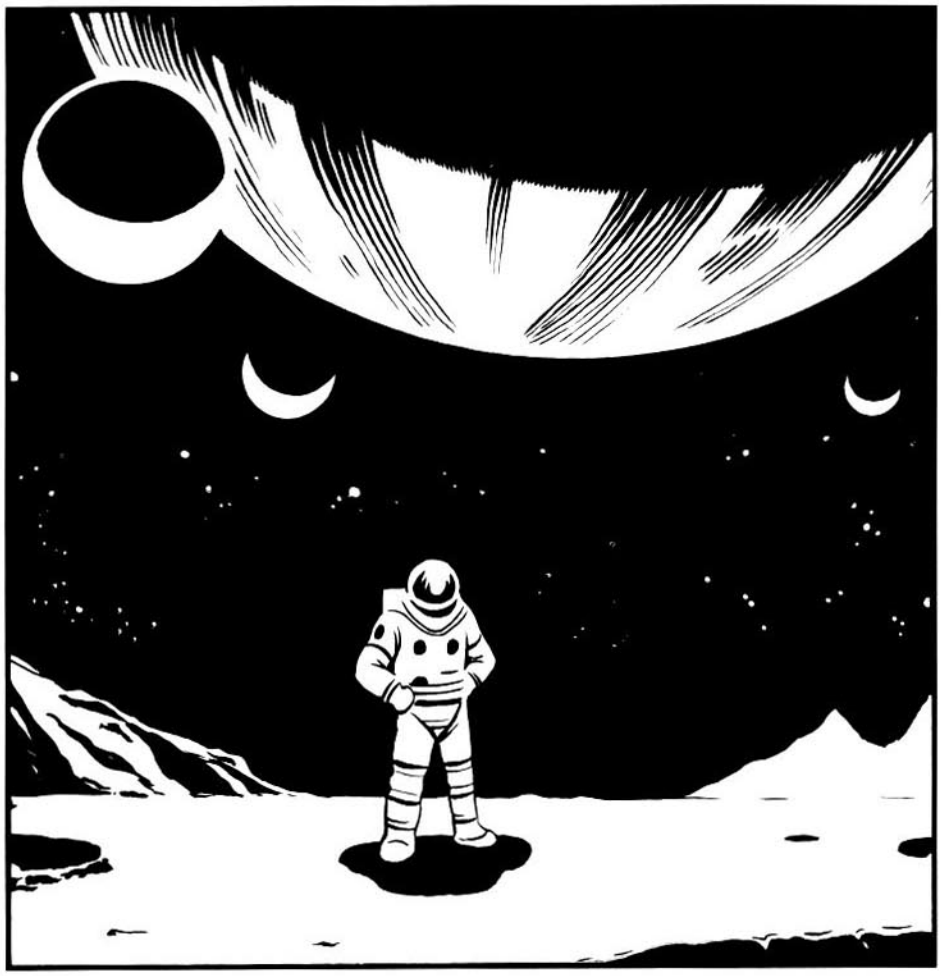
Basic Type: This broad classification gives a rough idea as to the race's biological/physical "group", and tells wether or not the racial group is "known" (that is, known to the Empire). "Known" races use the Stat Mods and other data which appears on the **Racial Statistics Chart** and the **Healing Rates Chart** (or will require such information to be created by the GM). Unknown races (if desired) must be created by the GM — if no ideas are forthcoming, try progressing through the columns — perhaps something will gel. Modifiers to the **basic type** roll depend upon the general location of the race's HomeWorld, and the roll is Open-ended if the HomeWorld is in the Backnet of unexplored space. Note the "TYPE Result Mod" in the corner — it will be used later.

Racial Origin: Throughout the history of Humankind, there have been various waves of colonization and expansion interspersed with periods of regression and relative barbarism. Many groups, human and otherwise, have forged their own way; countless others have been sent hopelessly skittering down a rocky road of evolution. The *Racial Origin* of a group will help determine that group's outlook. The roll is modified by an automatic -50, and the distance (in LY) form the HomeWorld to Sol (roughly — no need for intense calculations here) is added. The roll is also modified by the "TYPE Result Mod" (lower-right corner, in parentheses) obtained from the BASIC TYPE roll.

Kinship Structure: This classification serves to indicate the level of society at which the most important interpersonal bonds/struggles/relationships are formed. The roll is modified by the ORIGIN Result Mod (lower-right corner of the *Racial Origin* roll). If this Mod was an "OE", the KINSHIP roll is made Open-ended.

Values/Motives: Although it is difficult to imagine a society with only one motive, usually a race will exhibit such an apparent preoccupation with a given activity that (at least in the eyes of other races) they fall rather easily into a sort of a stereotypical definition. Needless to say, there is still quite a degree of variety left within any one of these categories — interpret them fluidly. The VALUES roll is not modified, but it is Open-ended.

Note: *If "Religion/Philosophy" is obtained, the Values Result Mod will have to be set by the GM. In general, this number is higher if the race exhibits "lofty", "humane", or "progressive" traits, and lower for "brutal" or "base" traits. The racial Empathy Mod may be used here, if desired.*



Political Structure: This indicates what type of governmental body has been developed by the race, and/or now holds power. The roll is Open-ended, and is modified by the *Values* Result Mod.

Tech/Sci Level: The technological developments and capabilities of the Empire differ somewhat from Province to Province, and even more from Core to Frontier. And although certain developments must obviously precede others, it would be unrealistically "Terracentric" to attempt to codify all possible technological and scientific advances into a serial scale of progress. The system presented herein is therefore deliberately inexacting, and may be used in several ways. The column is used as the others are (i.e., roll 1 D100, modified as indicated, Open-ended if the race in question Alien/Unknown), but the NUMBER of rolls differs depending on the GM's needs for detail. If the race is of only passing importance, one roll may be used to generate a set of parameters which will apply to ALL tech/sci activities. If the GM feels a somewhat more diversified and realistic picture is warranted, a roll might be made for each of the five Engineering skills. (This could be done for each Technics and/or Scientific skill as well, but generally speaking, the five Engineering fields determine what tools are available for Technicians to make use of.) The result obtained consists of three parts:

1) The **Difficulty Level** used for tech/sci/engineering projects (each +1 raises the Difficulty Level of such maneuvers by one category).
2) The number of "Rank Mod" points gained by a member of the race for locking in one Study Pick (This number is halved every ten ranks, as usual).
3) A **Miscellaneous Modifier** applied to all maneuvers within the field in question, reflecting the effectiveness of such secondary concerns as data storage and retrieval techniques, average individual work speed, physical limitations, attention spans and other variables.

If the Result is "Advanced beyond Imperial standard", it is left to the GM to determine exactly how far.

Language: There are hundreds of distinct languages and doubtless thousands of dialects spoken throughout Imperial space, and although many of these are descended form old Earth tongues, the passage of roughly ten-thousand years makes it unlikely that any of these languages very closely resemble their mother tongues (there are some exceptions — in Kashmere Province, for example, a revitalized version of Greek is spoken which differs little from the original, etc). Amongst alien races, the methods of communication may indeed resemble other forms of communication more than they do languages, and the physical means of message-sending are left to the GM to determine. The *Language* roll receives an automatic modifier of -50, and the distance from the HomeWorld to Sol (in LY) is added. The *Origin* Result Mod is also applied (if "OE", then this roll is Open-ended).

Worship: Another difficult-to-categorize aspect of nearly every known hominoid culture, which is treated here in a very general fashion: the roll is modified only by the *Origin* Result Mod (OE = Open-ended). The result obtained from the chart indicates the "focus" or "object" of (whatever passes for) the race's religious activities. The exact nature of the activities (i.e., prayer, sacrifice, vows, oblations, praise, etc) is left for the GM to create — in most human societies, religion serves to maintain/strengthen the group bond (i.e., kinship), and emphasizes the primary values/motives of the race.

***Note**: The GM may choose to create "cults" within a society — these groups often arise in situations where the race has undergone some kind of stress/ threat/disaster which the"established" religion proved incapable of abating. For an excellent guide to the creation of meaningful and individualized mythos, see ICE's **Campaign Law**.*

Xeno-Acceptance: The desire or ability to engage in interaction with other (off-worlder) races is reflected by this roll, which assigns a standard"Difficulty Level" to initial interaction/influence attempts. Of course, the actual difficulty incurred will differ depending on the exact circumstances, and will probably lessen once the presence of the new race becomes more accepted/necessary — this modifier is just a general guideline, and should be used as such. The roll is modified depending on the general location of the HomeWorld, and by the *Values* Result Mod.

Problems: As much as by any other trait, a culture is defined by its problems — and by the way in which they are borne. A Campaign (or any other type of story-telling) is also defined by these problems — for they are often the very causes of the Adventures which heroes (or antiheroes) are led to undertake. The *Problems* roll is modified only by the *Values* Result Mod.



In detailing a culture, try to regard all of these "parameters" as parts of a dynamic, inter-related system. Consider, for example, the race's values and motives against its problems. Given their technological level and social structure, what kinds of solutions would they design? What would the relationship between "church" and "state" be like? Could they convey their culture to outsiders — indeed, would they want to? Try to locate "weak spots" in your rationale for alter explanation (it's not hard to create the impression that you're deliberately creating a mystery when in fact you don't know the answer yourself — but *do* explain these mysteries eventually, or your Campaign will seem arbitrary and discontinuous). Lastly, you should design an NPC representative or two, to serve as your means of introducing the race to your Players, and perhaps an Adventure which deals with the race's primary problem.

3.2 BUSINESS GENERATION

Well detailed cities are a major source of identity for any role-playing campaign. There, player characters will meet NPC contacts, find employment, hear rumors, spend monits, and in general become enculturated. In the ***Space Master*** universe, the most important cities will generally include (or grow up around) Spacefaring Ports, where (coincidentally) a lot of PC's spend a lot of their time. By presenting players with a thoroughly detailed city, the GM is able to communicate an incredible amount of information on the overall feel of his or her campaign. Obviously, so detailed a piece of work as designing every city in the campaign is not necessary, and only the key cities (a key city is richly indicative of its culture, and will be frequently visited by PC types) need be predetermined. This system is to be used in conjunction with any city map which indicates individual buildings, and will easily provide the GM with a solid cornerstone for improvising city campaigns with continuity.

To generate businesses for any city:

1) Design or obtain a city map upon which individual buildings may be numbered (if the map is extensive, divide it into districts or blocks, and use color or letter codes to signify specific areas.
2) Determine the city's (or area's) general type, as indicated on the Master Business Table,page 18.
3) For each building, cross-index the area type with a D20 roll to determine whether the building is a residence, empty, or a business or other facility. If a roll on a subtable is indicated (roman numerals), go to the table shown and roll 1D100 to determine the actual nature of the business.

MASTER BUSINESS TABLE

AREA TYPE	R	E	I	II	III	IV	V	VI	VII
WEALTHY	1-6	7	8-15	16-19	-	-	-	20	-
STANDARD	1-5	6-7	8-12	13-17	18	-	19	20	-
TOURIST	1-3	4	5-6	7-16	17	-	18-19	20	-
POOR	1-7	8-10	11	12-17	-	18-19	20	-	
ISOLATED	1-7	8-10	-	-	-	11-17	18-19	20	-
MERCENARY/ILICIT	1-3	6-8	-	-	9	10	11-18	19	20
MAJOR TRADEPOINT	1-3	4	5-7	8-10	11-13	14	15	16-19	20
BUSINESS/INDUSTRIAL	1	2-3	-	-	4-5	-	6-7	8-20	-
PRIMITIVE/WARFARING	1-10	11	-	-	12-14	-	15-16	-	17-20

Notes: E= Empty. R = Residence. Roman numerals indicate subtable used.

SUBTABLE I:

01-05	Bar/Club
06-15	NPC
16-20	Elmonit Booth
21-30	Mall*
31-45	Restaurant/Cafe
46-70	Apartments/Estate
71-75	Medical Aid
76-85	Tridee/Theatre, etc.
86-95	Park/Gymnasium/Museum
96-00	Religious/Administration

SUBTABLE II

01-07	Warehouse
08-12	Bar/Cantina
13-17	Vice Hall
18-21	NPC
22-27	Fuel/Transport
28-30	Bank/Elmonit Booth
31-36	Pawnshop/Trader
37-38	Outfitter
39-43	Plaza/Mall*
44-49	Restaurant
50-52	Media
53-54	Computery/Android Equip.
55-59	Admin/Civil/Military/Penal
60-64	Offices
65-68	Vehicle parking
69-78	Apartments/Townhouses/Hotel
79	Vehicle Sales
80-82	Pharmacy/Medical Aid
83-97	Entertainment/Recreation
98	Religious
99-00	Industrial/Manufacturing/ Distribution*

SUBTABLE III

01-07	Warehouse*
08-14	Bar/Cantina
15-20	Vice Hall
21-23	NPC
24-28	Fuel/Transport
29-30	Bank/Elmonit Booth
31-37	Pawnshop/Trader*
38	Outfitter
39-40	Department Store/Mall*
41-45	Food/Restaurant
46-47	Media
48	Computery
49-51	Admin/Civil/Military/Penal
52-53	Hostel/Microtel
54-58	Offices
59-61	Vehicle parking
62-76	Apartments/Tenements
77	Vehicle Sales
78-79	Pharmacy/Medical Aid
80-89	Entertainment
90	Park/Recreation
91-92	Religious
93-00	Industrial/Manufacturing/ Distribution*

SUBTABLE IV

01-04	Warehouse*
05-17	Bar/Cantina/Vice Hall
18-24	NPC
25-27	Fuel/Transport
28	Bank/Elmonit Booth
29-33	Pawnshop/Trader*
34-36	Outfitter
37-41	Marketplace*
42-45	Food
46-50	Media
51	Computery
52-55	Admin/Civil/Military/Penal
56-58	Boardinghouse
59	Offices
60-67	Apartments/Homes
68-71	Pharmacy/Medical Aid
72-81	Entertainment
82-86	Park/Recreation
87-90	Religious
91-00	Industrial/Manufacturing/ Distribution*

SUBTABLE V

01-10	Warehouse*
11-15	Bar/Cantina
16-21	Boardinghouse
22-31	Vice Hall
32-36	NPC
37-38	Fuel/Transport
39	Bank/Elmonit Booth
40-49	Pawnshop/Trader*
50-54	Outfitter
55-61	Food
62-68	Media/Entertainment
69-73	Admin/Military/Penal
74-83	Apartments/Tenements
84-88	Pharmacy/Medical Aid
89-90	Religious
91-00	Industrial/Manufacturing/ Distribution (typically illegal activities)*

SUBTABLE VI

01-10	Warehouse*
11-20	Bar/Cantina/Vice Hall
21-25	Boardinghouse
26-30	NPC
31-35	Fuel/Transport
36-40	Elmonit Booth
41-45	Trader*
46-50	Food
51-55	Media
56-60	Offices
61-65	Admin/Military/Penal
66-70	Tenements
71-00	Industrial/Manufacturing/ Distribution*

SUBTABLE VII

01-05	Storage/Warehouse*
06-10	Bar/Cantina
11-15	Boardinghouse/Hostel/ Foreigners' Quarters
16-20	Vice Hall
21-25	NPC
26-30	Pawnshop/Trader*
31-35	Weaponry/Armor
36-40	Outfitter
41-45	Marketplace/Plaza*
46-50	Food
51-60	Admin/Military/Penal
61-80	Communal Residence
81-85	Pharmacy/medical Aid
86-90	Park/Gymnasium/Monument
91-95	Religious
96-00	Manufacturing*

* = see goods manufactured/distributed/ stored/traded table

GOODS MANUFACTURED/DISTRIBUTED/STORED/TRADED TABLE

AREA TYPE	GOODS		SERVICES			MEDIA		ILLEGAL
	COMMON	RARE	SUPER.	PERS.	TECH.	ENTERT.	INFO.	ITEMS
WEALTHY	01-27	28-48	49-57	58-72	73-78	79-88	89-97	98-00
STANDARD	01-24	25-42	43-48	49-60	61-72	73-81	82-90	91-00
TOURIST	01-27	28-48	49-54	55-76	77-82	83-91	92-97	98-00
POOR	01-30	31-50	51-55	56-65	66-75	76-80	81-85	86-00
ISOLATED	01-20	21-35	36-45	46-50	51-65	66-75	76-90	91-00
MERCENARY/ILLICIT	01-15	16-30	31-39	40-45	46-54	55-57	58-70	71-00
MAJOR TRADEPOINT	01-30	31-51	52-60	61-63	64-69	70-75	76-85	86-00
BUSINESS/INDUSTRIAL	01-25	26-45	46-60	61-65	66-70	71-75	76-85	86-00
PRIMITIVE/WARFARING	01-40	41-60	61-64	65-72	73-76	77-80	81-88	89-00

Suggested Items:

Common goods: Clothing, Liquor, Food, Tools, Cosmetics, Textiles, Home Computer Software.

Rare goods: Drugtabs, Metals, Vehicles, Machinery, Electronics, Weaponry, Computer Hardware, Animals, Plants, Plastics, Jewelry, Furniture, Building Supplies, Art, Perfumes, Spices, Reactors.

Superior goods: Crystals, Radioactives, Gems, Ships, AFV's, Cybernetics, Alien Creatures, Andrium, Robots, Androids, Replicants, Ardinium, Ordium II, "Bonus" Items, FTL Drive Equipment.

Personal services: Health, Recreation, Loans, Council/Advice, Communications, Entertainment, Cleaning/Laundry, Psionics, Cosmetology, Psychology, Prosthetics, Games, Gambling.

Tech services: Systems Tech, Electronics Tech, Arms Tech, Guide/navigation, Engineering, Training, Legal Council, Mercenary, Genetics/Eugenics, Gravitics, Mechanical Services.

Entertainment media: Memory Discs, Holopics, Books, Aural Discs, Games.

Media: Memory Discs, Computer Software, Travel, Trade, Politics, Science, Law, Xenobiology, History, Current Events.

Illegal items: Drugs, Slaves, False Identification, Weaponry, Stolen Goods, Stolen Information, Vital Organs, Criminal Tech Services, Gambling, Labor Racketeering, Counterfeiting.

3.3 MISSION GENERATION

Often within the course of a campaign, the GM will wish to determine the motivations and objectives of a given NPC or partisan group which was created on the spur of the moment, in order to maintain an aura of complexity and realism. Occassionally, such a decision can turn into an entire adventure as the player characters are drawn deeper into the investigation of these arbitrarily determined activities. Indeed, it is quite possible for an originally unimportant NPC to become a major source of information and/or employment, and many pre-written or self-styled adventures may be led into by the use of such an approach. The Table on page 20 was designed to aid the GM in such situations, to serve as a "boost" for the imagination and as a timesaving device. Once the general type of NPC or group is known, percentile dice are rolled, and the appropriate column consulted to determine his or her motivation, or the nature of the mission offered. The Gamesmaster is, of course, not obligated to use any mission simply because it was rolled - common sense should be applied in choosing and in fleshing out all of these missions.

Key to Table of Missions:

Rebel: Any partisan group which is sworn to oppose either the Imperium or the local ruling government, be it a Province, Minor Clan, Planetary Government, or Sub-Planetary government.

Criminal: Any criminal organization or faction thereof.

Milit: Any bona fide military service.

Personal: Any private person or group of people who do not fit into one of the other groups as defined.

Corp: Any corporate concern of great enough size to employ espionage and/or market manipulation techniques. note: (*) Any corporate interest has a 10 to 100% chance (10 x Corporation's security rating or 2D10 x 5) of issuing a covert mission. If not, roll on corp column.

Scout: Any professional division, service, business, or guild which specializes in exploration and/or environmental science.

Covrt: Any secret organization or division which employs paramilitary and/or espionage techniques.



MISSIONS AND MOTIVATIONS

REBEL	CRMNL	MILIT	PRSNL	CORP	SCOUT	COVRT	MISSIONS/MOTIVATIONS
01-02	01	-	01	-	-	01	Hijacking
-	02-03	-	02	-	-	-	Racket/Profiteering
03	04-06	01	03	-	01	02-03	Smuggling
04	07	02-03	04-06	01-05	02-06	04	Research/Speculation
05	08	04	07	-	-	05-07	Infiltration
06-07	09-11	05	08-10	-	07	08-09	Rob/Burlgary/Recovery
08-09	12	06	11-12	06	08	10-11	Kidnapping/Capture
10-12	13	-	13-14	-	-	12	Larceny
13-14	14	07	15	-	-	13-15	Assassination/Execution
15	15-16	08	16-17	-	-	16-17	Threaten/Silencing
-	17-18	-	-	-	-	-	Protection Racket
16	19-21	-	18	-	-	-	Blackmail
17	22-24	-	19	-	-	18	Extortion
18-20	25	09	20	-	-	19-21	Arson/Bombing/Destruction
21	26	10	21	-	-	22-23	Prison/Fortress Break-in
22-23	27	11-12	22-25	07-08	09	24-26	Find/Free/Resuce Person
24-26	28-29	13	26-27	09-10	10	27-28	Piracy/Recover Vehicle
27-28	30-32	14	28	-	-	29-30	Desensitize Security
29	33	-	29-31	-	11	31	Tailing
30	34	15	32-33	-	12-13	32-33	Surveillance/Monitoring
31-33	35	16-17	34-36	-	14-16	34-35	Deliver/Transport Message
34-35	36-37	18	37-40	-	17-18	36-39	Investigation/Spying
36-38	-	19	-	-	-	40	Terrorism/Hostage Taking
39-40	38-40	20-23	41-45	17-23	19-20	-	Guard/Security/Thug
41	41	24-26	46-49	24-28	21-23	41-43	Transport/Escort Person
42	42-43	27-28	-	29	24	-	Overseeing/Discipline
43	44-46	-	50	-	25	44	Bribery/Corrupt/Seduction
44	47	29-31	-	30-32	26-27	-	Representative/Diplomatic
45-47	48	32-36	51	-	-	45-49	Raid/Attack/Claim Place
48	49-50	37	52-53	-	-	50-51	Destruction of Evidence
49-50	51-53	38	54-55	-	-	52	Frame/Discredit/Slander
51	-	39-42	56	33-38	28-56	53-55	Map/Explore/Recon/Scout
52-54	54	43-46	57	39-41	-	56-58	Defend vs Enemy Attack
55-56	55	47-48	-	42-44	57-61	59-61	Set up Base/Camp/Hideout
-	-	49	58-60	45-50	62-66	62	Colonization/Pilgrimage
57	56	50	61	51	67	63	Test of Ability/Loyalty
58-60	-	-	62-63	52	-	-	Crusade/Jihad/Revolt
61-62	57-58	51	64	53	-	64-65	Diversion/Blackout
63-65	59-60	52	65-66	-	-	66-70	Sabotage/Subversion
66	61	-	67-69	54-55	68-70	71-72	Locate/Salvage
-	62-63	-	70-72	-	-	73-74	Switch/Swindle/Scam
-	64	53	73-74	56-57	71-72	-	Bet/Dare/Contest/Game
-	-	-	75	58-59	73-75	75	Trailblazing
-	-	-	76-78	60-61	-	76-77	Bounty-hunting
67-68	65-67	54	79-81	62-68	76-78	78-80	Transport Goods/Media
69-71	68	55	-	-	-	81-83	Usury/Coup d'etat
72	69-70	56	82-85	69	79	-	Duel/Challenge
73-75	71-73	57	86-88	70-72	-	84	Rivalry/Feud
-	-	58	89	73-74	80-83	85	Kill/Capture Creature
76-77	74	59-60	-	75	84	86	Recruitment/Shanghai
78	75	61-62	90-91	76-77	85-87	87	Attache/Liason/Advisor
79-80	76-77	63-67	-	78-79	88-89	-	Patrol Border/Hot Zone
81	78-79	68	-	-	-	88-89	Counter-Espionage
82-83	80	69	-	-	-	90	Double Agent
84-85	81-83	70-72	-	-	-	91-92	Intelligence Gathering
86	-	73-74	92-95	80-86	90-92	93-95	Research/Design/Construct
87-88	-	75-76	96-98	87-89	93-94	96-97	Repair/Rebuild/Modify
-	-	77-78	-	90-92	95-96	-	Disaster Support/Aid
-	-	79-80	-	93-94	97	98	Test/Evaluate Development
-	-	81-85	-	95-99	-	-	Support Staff
-	-	86-87	99	00	98	99-00	Arrest/Detain/Contain
89-00	84-00	88-00	00	*	99-00	-	Roll on COVERT Column

3.4 RANDOM EVENTS GENERATION

This chart is designed to be used no more than once per month in any given sector or province. Typically, if one passes over the border of a well defined political territory, the GM is well within his rights to make a new random events roll regardless of the time lapse since the previous one. The GM is welcome to expand upon this chart so that it more accurately reflects his game environment. Note that in some cases, a second roll will be required.

ROLL	EVENT
01 - 50	Everyone's life continues in uneventful tedium.
51 - 65	Massive crop failure on a nearby world. If it is a major agricultural contributor to the local economy, food prices rise by 50%. The local Monit drops 1 - 10% in value.
66 - 75	The reserves of a perishable good (food, drug, etc.) in the local sector are ruined due to: (1 - 6) pestilence, (7 -8) sabotage, or (9 - 10) accident. This particular product's value doubles. Inconvenience and discontent may prompt a rise of anarchist attitudes in the local populace. There is a 5% chance of a major plague accompanying a pestilence.
76 - 82	Local populace plots against regional leaders. Dissention arises out of allegations of leaders accepting graft, hoarding production benefits, and/or conspiring against the citizen's best interests. Sporadic rioting encountered.
83 - 90	New religious/political movement in area. Cultural, racial, and/or species outsiders are persecuted to varying extents. The Empire's already restrictive interprovincial trade barriers become stifling in this area. Travel in newly declared security zone can prove to be fatal.
91 - 97	Interprovincial war strikes. Worlds immediately threatened are: (1 - 5) peripheral worlds, (6 - 8) resource planets, (9) the homeworld,(10) an all-out offensive. The number of political/territorial entities involved in the conflict is 2 - 6. All non-military travel is restricted or banned. All outsiders are persecuted, and their property is impounded or lost. The danger of hostile encounters increases dramatically. Add 75 to encounter rolls.
98	Civil rebellion is: (1 - 8) local, (9) regional, (10) provincial. The area is in the process of being purged of active rebels and operatives, by state forces. All civilian travel passes are cancelled, and elmonitary facilities are shut down. The Monit suffers drastic devaluation (value down 21 - 30%). Violence is rampant, so add 75 to all encounter rolls.
99	Freak planetary weather or geological phenomenon affects players adversely. Such phenomenon includesevere storms, volcanism, seismic activity, meteor infall, or something completely new and devious.
100	Freak interplanetary or interstellar phenomenon encountered by the players. Such phenomenon could include: alien encounters, undiscovered celestial bodies, a run-in with top secret military activities, space-time warping phenomena, or something "completely different".



4.0
SPACE MASTER MILIEUS

Although the social environment of ***Space Master*** detailed in this book is of an Empire some 10,000 years in the future, a GM should not feel constrained to run his campaign in only that milieu. Because it includes a collection of weapons, equipment and vehicles from differing levels of technology, ***Space Master*** is a flexible system and can serve as the basis for a Science Fiction game in any number of scenarios. Below are mentioned a few ideas for alternate settings.

4.1 THE PRESENT

One can run a Science Fiction Roleplaying game in the present, though of course there has to be a SF element somewhere. This can be achieved in a number of ways; there are countless examples in the genre to "borrow" from.

ICE plans a series of *Master SF Sourcebooks*, each based on a different SF environment and useable with the ***Space Master*** System, in the near future.

4.11 SECRET ORGANIZATIONS

For SF in the present, the GM is either going to need to develop some secret high-tech organizations on the Earth, or perhaps an alien organization which is watching and helping (or hindering) earthling development.

One possible scenario is a present when there are secret organizations who possess technologies hidden from the general public. A classic example of this was the British series ***U.F.O.***, where *SHADO* (Supreme Headquarters of the Alien Defense Organization) defended humans from evil aliens who were constantly sneaking to Earth for replacement bodily organs (ick). At their disposal was a breathtaking array of equipment, from flying submarines, to a moonbase and space interceptors, from an intelligent orbiting satellite, to girls with skintight spacesuits and purple hair (it *was* a *British* series) Another example (the classic) is ***War of the Worlds***, in which aliens attacked the technically inferior earthlings. And of course, remember ***"V"***? OK, let's forget it. Everyone else has.

4.12 DISPLACED GROUPS/ PEOPLE

Jules Verne was a master of this genre. ***20,000 Leagues under the Sea*** and ***Master of the World*** were both scenarios in which 'normal' people found themselves in a fantastic environment created by a genius of high-tech. ***Flash Gordon*** got transported (sort of kidnapped) into the universe of Ming and its wonders. This is also a sort of space-fantasy or "Space Opera" kind of scenario, where dirty little technical details are cast aside in favor of adventure and excitement.

Buck Rogers isn't really in the present, but he's from the present, which is sort of the same; well, maybe not really, but it's a related concept.

In addition, the 'displaced' idea can be used in the other settings listed below, with the players' and the background tech-level shifted.

System Suggestions For Secret Present

The sky is the limit with alien technologies and the displaced groups, but the secret organization isn't likely to have anything too far advanced; check suggestions in Near Future for ideas.



4.2 THE NEAR FUTURE

Dirty, near-future SF is hot these days, with a slew of movies and novelizations on this topic. The possibilities are endless; just a few general concepts are listed here.

4.21 POST-HOLOCAUST

A favorite. Did anyone see the Gene Roddenberry TV movie pilot called ***Genesis II?*** No? It was about a guy from our time cryogenically frozen and reawakened some time after the nuclear holocaust. He then led a group of people who were trying to pull the world back together. It was rather 'clean' for post-war, as earth was already recovering from radiation. The most interesting part of the scenario was the transportation system, called the 'subshuttle'. Apparently technology had advanced to the point where digging tunnels was a breeze, so the major governments built this incredibly fast and sophisticated train that linked the world. Too bad they had a fight after they built the thing, huh?

There are other, myriad possibilities for the many possible levels of destruction after the "war". Use your imagination.

4.22 DEGENERATIVE SOCIETY

It is a few dozen or a few hundred years in the future and the feared nuclear holocaust never happened. However, something more insidious and debilitating did occur. Overpopulation, a fuel shortage, and just the inertia of the excesses of the late 20th Century overloaded the planet's ability to cope. High-tech (fusion, gravitics) is juxtaposed with ruin, decay, and 19th-century technology.

The film ***Bladerunner*** vividly portrayed this idea, with Los Angeles under a constant drizzle, dotted with massive, pyramidal super-buildings, and packed with every racial type imaginable. While some have snazzy hovering cars, others use pushcarts. There had been limited colonization of space, with the help of artificially replicated human slaves.

The Network TV Series ***Max Headroom***, while short-lived and unappreciated, painted a fascinating picture of a future earth where media ruled the world. Everyone got free TVs, and there were dozens of worldwide networks, all vying for control through the best ratings. Governing officials were elected by 'telelections': ratings of their sponsoring network at a given time. While there apparently had been no war and no real fuel shortage, society had degenerated into a dim, grey twilight where television provided the only relief from drudgery.

Max undoubtedly drew on the inspiration of the black comedy ***Brazil***, a film set in a similar, though even more unsympathetic and depressing world.

4.23 UNITED WORLD

In this scenario, it is far more likely that the Earth would be able to support large-scale explorations of the Solar system. Such exploration would lead to a large lunar base, orbiting stations, and later bases on the moons of the gas giants. Plenty of exploration possibilities exist in Earth's own solar system, with the many moons of various age and composition. Arthur C. Clarke's ***Imperial Earth, Rendezvous with Rama, 2001, 2010,*** etc., are excellent examples of this time and technology .

4.24 DIVIDED PLANETS

At about the same level as the United World scenario (or maybe a bit ahead), this setting poses the interesting idea if the colonized planets decided that they no longer want to live under the "yoke of the oppressors from Earth." There are of course a number of variant concepts for this, depending on who the hostile, rebellious colonists might be.

4.25 EARLY STELLAR COLONIES

The next step in the expansion to the stars would be the first colonies in other star systems — presumably having arrived via their generation ship or while in suspended animation. This is more of a frontier concept, high and low tech mixing as the colonists adapt to a new situation.

4.26 DIVIDED SYSTEMS

The early years of hyperspace travel as man explodes out into the nearby systems could be a very exciting milieu. Encountering earlier colonies who were established via cryosleep ships, the first meetings with alien races, and perhaps competition between governmental or corporate entities on Earth, who are launching private exploration and acquisition programs — all of these elements make for an action-packed campaign

The milieu of ***Alien*** and ***Aliens*** is about the same setting, with space travel perhaps being FTL, but still requiring weeks or months. Many systems are unexplored, but man is expanding rapidly. Corporations are in the forefront of expansion, and their desire to acquire leads to conflict and even war.

System Suggestions For Near Future

Consult the Space Master Technology list and Timeline (Section 7.0, 8.12) for ideas on the extrapolated progression of technology. Some ignorable suggestions for no-no's in the Near Future:

No Gravitic Field Control. (Ships can spin for gravity).

No Faster-than-Light drives (unless of course you're doing **Divided Systems**).

No Personal Shields. (or at best they might be bulky, cumbersome affairs where you had to wear a whole suit or heavy pack).

No Androids, and Robots might be more crude and less intelligent. Computers would not be as helpful.

Other Suggestions

Personal Energy weapons more bulky and less powerful. They might require a bulky belt or backpack power unit. Suggest reducing all Mk power levels by one or two. Stunners and other subtle tools might be unavailable.

Communication very limited. No FTL communication will add a considerable feeling of independence to your PCs, all alone in the void of space. If playing Divided Systems, Perhaps messages are only sent via unmanned hyper-probes. Otherwise, lightspeed is as fast as it would get.

Careful with Psionics. Even in the full-blown ***Space Master*** technology, uncontrolled Psionics can get out of hand. Keep a lid on Psionic powers in these early milieus, granting only limited powers to a very few. Consider banning them from PCs altogether.

4.3 SCIENCE-FANTASY

This could also be called "Non-traditional SF". *Dune, Masters of the Universe,* and *Flash Gordon* are all examples of this blend of sword-and-blaster environment. ***Space Master's*** complete compatibility with **ICE**'s ***Rolemaster*** system allows for easy blending of SF and fantasy environments.

System Suggestions For Science-Fantasy

When running a true fusion campaign, the high-camp flavor is best maintained if there is a clear contrast between the SF and the Fantasy elements — especially if the PCs are from the Fantasy end. Dump anything that isn't neat and slick and well-packaged. For instance, skip the projectile weapons (not 'futuristic' enough, and they need messy ammo), make everything powered by very standardized power packs, so when items run out of juice, they have a hope of finding a replacement cell... eventually. Snazzy vehicles would run on silent gravitics powered by a fusion reactor. Bring on the flying power sleds, mysterious handheld fusion guns, and the weird, malevolent, alien races.

One thing the GM *must* work out early in the campaign is the system interfaces. How do Psionics compare with the Realms of Magic? Are they somehow contradictory? Will one affect the other? Balance between the powers of Fantasy items and people and those of the Technocrats is important to maintain tension in the game. A bunch of SF guys with Barrier shields and limitless power packs are going to be unstoppable except by a super warrior or a powerful spell-user, so the Technology has to be controlled closely.

4.4 COLONY SHIP

Another popular SF theme is the Travelling World concept, where the environment is either a gigantic spaceship or even a small asteroid (***Star Trek***: "Yanada"), equipped with artificial gravity and often a limitless array of microcosmic environments. In most of these scenarios, however, something has gone wrong with the ship, and it is doomed at some future point (or at least the controlling society has broken down, fragmenting the inhabitants) Some popular examples are: ***The Starlost***, a TV series by Harlan Ellison in which the "Ark" was a ship of dozens of miles-wide domes, off course, with the control center unlocatable or destroyed (if Kier Dullea couldn't find it, nobody could). ***Space 1999*** was a warped (in more ways than one) version of this, where the Moon (which had a large base called Alpha) was ripped from the earth and visited a different solar system every week (fancy that). One episode of note was one in which the Moon happens upon a true colony ship with a fragmented society. The head of the high-tech rulers was Joan Collins, who lured the Alphans to the ship in hopes of stealing their needed vital organs for replacement (ick again).

Arthur C. Clarke's ***Rendezvous with Rama*** (mentioned earlier) is also an intriguing description of an alien colony ship with some very thought-provoking ideas about how it could be designed — right down to the mysterious, reactionless 'star drive'. There is also (on a grand scale) a ***Ringworld***-type setting, which has added potential as a Science-fantasy and super high-tech milieu.

System Suggestions For Colony Ship

Unless you're one of those stick-in-the-mud pragmatists (Like Mr. Clarke) who think that faster-than-light drive is impossible, it is pretty safe to assume that a culture utilizing colony ships as a means rather than an end are not at the level of ***Space Master*** technology. Again, Near Future is a good starting point, though it is a good possibility that the technology is somewhat higher.

4.5 TIME TRAVEL

A favorite since H.G. Wells' Time Traveller first threw the lever on his immortal machine. (The George Pal movie version really does justice to the story as well, Rod Taylor and Yvette Mimieux notwithstanding). ***Dr. Who*** (all of him) is also a staple, especially with the low-budget/high-camp TV enthusiasts.

An entire campaign based on time travel is a dangerous idea (not to mention exhausting for even a young and energetic GM). It might be best employed as a controllable facet of a campaign; something the players get to do once or twice. ***Star Trek*** again comes to mind; especially the haunting, well-played episode where the *Enterprise* finds the Guardian of Forever ("Many such Journeys are possible. Let me be your gateway"). Joan Collins found her way into that show, too.

System Suggestions For Time Travel

This is such an open-ended concept that specific limitations aren't applicable. It really depends completely on what period the travellers land in. Should the players encounter a Time Travelling NPC, it is fairly safe to assume that they have a sophisticated technology.

4.6 BEYOND *SPACE MASTER*

The level of technology chosen for ***Space Master*** was, of necessity, arbitrary. In this section are mentioned a few concepts which are beyond the capability of currently-known science in the milieu of ***Space Master***. The GM should feel free to play with these ideas, whether s/he wishes to run a campaign in an even more distant future, an alternate reality, or to use these elements as a sidelight to the campaign (they can be used as facets of the technology of the Sianetic Harbingers as well!).

System Suggestions

Matter/energy transmitters: you know, like in ***Star Trek***, where they can scramble their molecules across the galaxy and (usually) unscramble them back into their original pattern. The limitations of these devices is also an important variable: Do they need a 'receiving station'? (a factor which would severely restrict their use). Do they only work from orbit-to-planet? Do they work through a dense atmosphere at all? Can they 'beam' you across a solar system? (Linked to a large spaceport outside the system, it would expedite travel since ships could shunt out while rather close to the station.) Could such a device even send you across interstellar space? If so, is it at the speed of light? It would be an awfully slow way to go. If not, it really falls more in the mystical realm of *Teleporting* (See section 4.72).

Matter/energy Converters: The next step — as revealed in the Old ***Star Trek*** episode, *"Shore Leave"* (where the planet's computer made Alice in Wonderland, Black Knights, old girlfriends, etc.); and New ***Star Trek*** — is rearranging the matter to make realistic simulations (the all-powerful and somewhat quirky Holodeck). A powerful enough machine could make just about anything it had a stored 'pattern' of, as long as it had raw matter to work with.

Time Travel: See section 4.5 above.

Instantaneous Space-warp: The next step beyond standard Hyperspace, a true space warp would allow a ship to *instantly* traverse interstellar distances. There might remain the delays of in-system maneuvering and multiple jumps, but this would still revolutionize commerce and probably government.

Gates: Another form of instant travel, gates would be fixed portals allowing instant travel from one specific point to another; similar to Matter-energy transmitters but more locked-in. ***Tunnel in the Sky*** is an example of a culture expanding and constructing a network of two-way gates as it goes. See Section 4.71 for more ideas on this concept.

Instantaneous Communication: Although TBD is theoretically 'instantaneous', there are numerous delays during links, and one usually has to go to a specific TBD relay location. A more sophisticated system would be possible, in which anyone with a terminal could contact anyone else instantly (like worldwide telephone service is today). This would probably still require a sophisticated network to transmit/receive the signals. (Calls from your star-yacht phone might be fuzzy, have static, or you might even have other voices on the line! Call *Sprint*.)

4.7 UNUSUAL TRANSPORT

While several transportation modes have been mentioned, there remain numerous less conventional modes of travel which — used with care — can add excitement to a campaign. A few are covered below.

4.71 GATES

Mentioned briefly above, Gates can take a limitless number of forms and capacities. Some might be specifically linked to one other gate, while others could be intelligent and able to transport the user to any desired location (such would be *quite* powerful; way beyond the technological dreams of Terran Technic development in Imp. 470). One or more of the Sianetic Harbinger races may have built Gates strewn across the galaxy.

4.72 TELEPORTATION

This is related to the Gate idea, since Gates use some form of Teleportation to get you from one to the other. There is also (drum synthesizer roll) Psionic Teleportation. An important issue here is whether such travel is truly instantaneous or is it speed of light. (The GM running high-powered Telepaths should also give thought as to whether Telepathy is instant).

4.73 SPACE WARPS

A space warp is whatever you want it to be but it might be one of the following:

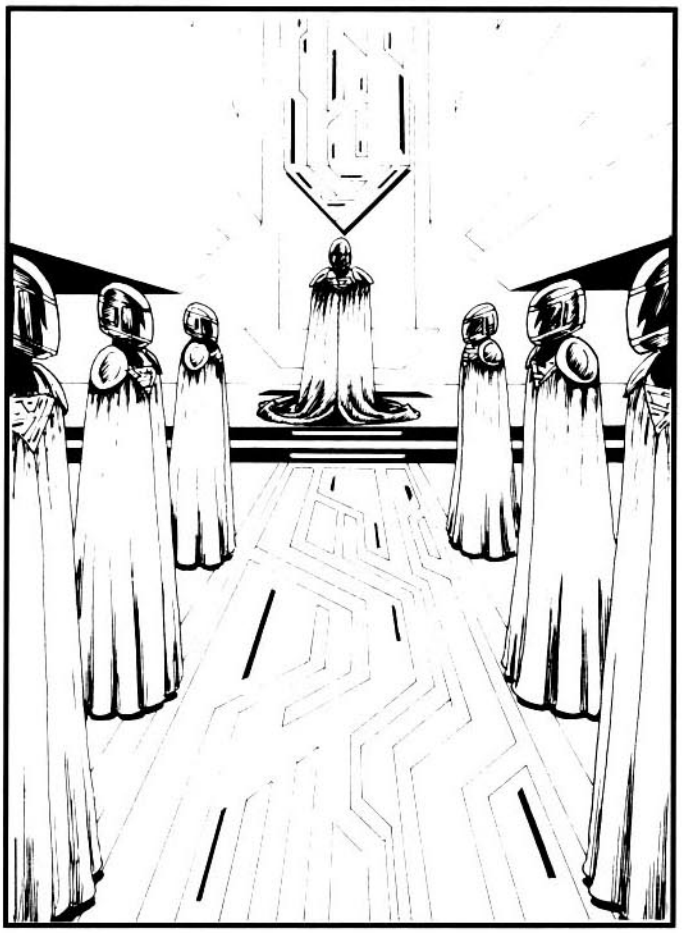
A Black Hole: One (not very popular, but let's ignore that for now) theory about black holes is that they are dimensional gateways to other points in space. If that is true, once they are explored (assuming ships are built with gravitic generators capable of resisting the ridiculous gravitational forces associated with the Event Horizon), they could serve as natural jump-points to far reaches of the galaxy and beyond.

A Less Obvious Space Portal: also called an Interface, these portals in space could be 'tunnels' of instant transfer from one point to another. Once located and mapped, these could be used as safe travel lanes as mentioned in Black Holes above. These are scientifically less likely but considerably safer.

A Mobile Anomaly: Some sort of hole/cloud/blob which floats around, whether it be on a planet or in space, and is in effect a door to another place (or time). Lots of interstellar travel fun here!

NON-PLAYER CHARACTER CHART

PROFESSIONS	Lvl	Maneuvering in Armor	Primary Attack	Secondary Attack	Tertiary Attack	Hits	Climbing	Ride/Swim	Treas/Locks	Stalk/Hide	Percep	Drive/Pilot	Forge/Counterf.	Survival	First Aid	Scanner Anal.	# of Combat skills	bonus	# of Astro skills	bonus	# of Tech skills	bonus	# of Science skills	bonus	#of Engin. skills	bonus	# of Psion lists/ 100th lvl	# of Psion lists/ 20th lvl
Armsman	1	AE	35	25	15	20	10	10	-25	10	10	10	-25	5	5	5	2	15	0	-25	0	-25	1	5	0	-25	—	—
	3	AE	60	50	20	35	15	15	-25	20	20	20	-25	5	5	5	3	20	1	10	0	-25	1	10	0	-25	—	—
	5	ANY	85	75	25	50	20	20	5	30	30	30	-25	10	10	10	3	30	1	15	1	10	1	15	0	-25	—	—
	10	ANY	120	110	45	90	35	40	20	50	50	50	5	15	15	20	4	55	2	25	1	25	1	25	0	-25	—	—
	15	ANY	165	125	55	125	45	50	25	60	60	55	10	20	20	25	4	65	2	35	1	35	2	25	1	10	—	—
	20	ANY	190	140	65	130	55	60	25	70	70	65	15	30	30	35	5	75	2	40	1	45	2	25	1	20	—	—
Pilot	1	LB	25	15	-25	20	5	5	-25	5	15	15	-25	5	5	5	2	15	2	20	0	-25	1	5	0	-25	—	—
	3	LB	40	30	10	35	10	10	-25	10	20	25	-25	5	5	5	2	20	3	25	1	10	1	10	0	-25	—	—
	5	AS	55	40	15	50	15	15	5	15	35	40	-25	5	10	10	2	30	3	35	1	15	1	15	0	-25	—	—
	10	AE	75	60	30	80	30	30	15	30	55	70	5	10	15	20	3	50	4	55	2	25	2	20	0	-25	—	—
	15	AE	100	70	40	115	40	40	20	40	65	85	10	20	20	25	3	60	5	65	2	30	2	30	1	10	—	—
	20	AE	110	80	50	120	50	50	20	50	75	105	15	30	30	35	4	65	6	75	3	35	2	40	1	20	—	—
Explorer	1	AS	25	20	10	20	10	110	5	15	15	10	-25	15	5	10	1	10	2	10	0	-25	1	10	0	-25	—	—
	3	AS	45	30	15	35	15	15	10	30	30	20	-25	20	10	20	2	15	2	20	1	10	2	10	0	-25	—	—
	5	AS	60	45	20	50	20	25	15	40	40	30	-25	25	15	25	2	20	3	30	2	10	2	15	0	-25	—	—
	10	AE	95	65	35	80	35	45	25	60	60	50	5	45	25	35	3	40	4	45	2	30	3	20	0	-25	—	—
	15	AE	110	75	50	115	45	55	30	70	70	55	10	55	30	40	3	50	4	55	3	35	3	30	1	10	—	—
	20	AE	125	90	60	120	55	65	35	80	80	70	15	65	35	50	3	60	5	60	3	45	3	40	1	20	—	—
Criminologist	1	NONE	20	15	-25	15	10	10	10	15	20	10	10	5	5	10	0	-25	0	-25	1	20	1	10	0	-25	—	—
	3	LB	40	30	10	30	15	15	20	30	40	20	20	5	5	15	0	-25	0	-25	1	30	1	15	0	-25	—	—
	5	LB	60	50	20	40	20	20	30	45	50	25	30	5	10	20	0	-25	1	5	2	35	1	20	0	-25	—	—
	10	AS	105	70	40	60	35	40	50	65	70	45	40	15	20	30	1	15	1	15	2	55	2	25	0	-25	—	—
	15	AS	120	80	50	80	45	50	60	75	80	55	50	20	25	35	2	20	1	20	3	60	2	30	1	10	—	—
	20	AS	135	90	60	100	55	60	75	85	85	65	60	25	30	40	2	25	2	25	3	70	2	35	1	20	—	—
Medic	1	NONE	20	-25	-25	15	10	10	-25	-25	10	10	-25	5	10	10	0	-25	0	-25	1	20	1	10	0	-15	—	—
	3	AS	30	20	10	30	15	15	-25	-25	20	20	-25	5	20	20	0	-25	0	-25	1	30	1	20	0	-25	—	—
	5	AS	40	25	10	40	20	20	-25	-25	30	25	-25	5	30	25	0	-25	2	40	2	40	2	25	0	-25	—	—
	10	AS	60	40	30	60	35	40	10	10	50	45	-25	15	50	35	1	10	0	-25	3	50	3	30	0	-25	—	—
	15	AS	75	55	30	75	45	50	15	15	60	55	-25	20	70	40	2	15	0	-25	3	60	3	35	0	-25	—	—
	20	AE	85	65	40	95	55	60	25	25	70	65	5	25	90	45	2	20	1	10	3	70	3	40	1	20	—	—
Planetologist	1	NONE	25	15	-25	15	10	10	5	5	15	10	-25	5	5	10	1	15	1	15	0	-25	1	20	0	-25	—	—
	3	NONE	40	30	10	30	15	15	5	10	30	20	-25	5	5	20	1	25	1	25	0	-25	2	25	0	-25	—	—
	5	AS	55	40	15	40	20	20	10	10	40	30	-25	10	10	25	1	35	1	35	1	10	2	30	0	-25	—	—
	10	AS	75	60	30	60	35	40	30	25	60	50	5	20	20	35	2	50	2	50	1	30	3	45	0	-25	—	—
	15	AS	100	70	40	80	45	50	40	40	70	55	10	25	25	40	2	55	2	55	1	35	2	55	0	-25	—	—
	20	AS	110	80	45	100	55	60	50	55	80	70	15	35	30	50	2	60	2	60	2	40	3	65	1	20	—	—
Tech	1	NONE	20	-25	-25	15	10	10	5	5	10	10	-25	-25	5	5	0	-25	0	-25	1	30	1	10	1	10	—	—
	3	LBA	30	20	10	30	15	15	5	10	20	20	-25	5	5	10	1	10	0	-25	2	35	1	15	1	15	—	—
	5	LBA	40	25	10	40	20	20	5	10	30	25	5	10	15	20	2	20	1	20	3	50	2	25	1	30	—	—
	10	AS	60	40	30	60	35	35	20	25	50	45	15	15	20	30	2	25	1	30	3	60	2	30	1	35	—	—
	15	AS	70	50	30	75	45	45	25	40	60	55	20	20	25	40	2	35	2	30	3	70	2	40	2	40	—	—
	20	AS	80	60	40	95	55	55	30	55	70	65	25	25	30	50	2	45	2	40	4	80	3	45	2	45	—	—
Scientist	1	NONE	10	-25	-25	10	-25	5	-25	-25	5	10	-25	-25	5	5	0	-25	0	-25	1	10	3	25	2	25	—	—
	3	NONE	25	10	-25	20	5	5	-25	-25	5	20	-25	5	5	10	0	-25	0	-25	2	15	3	35	2	35	—	—
	5	NONE	30	10	-25	25	5	5	-25	5	10	25	-25	5	10	20	0	-25	0	-25	2	20	3	45	2	45	—	—
	10	NONE	50	20	10	40	10	20	5	10	20	45	5	15	25	40	1	10	1	15	2	30	4	60	3	55	—	—
	15	AS	65	30	20	50	15	30	10	10	25	55	10	20	35	50	1	20	1	20	2	40	4	80	3	75	—	—
	20	AS	75	40	20	55	20	35	10	25	35	65	15	25	40	55	1	30	1	25	3	45	5	85	3	80	—	—
Administrator	1	NONE	10	10	-25	15	-25	-25	-25	-25	20	10	10	-25	10	10	0	-25	0	-25	0	-25	1	15	0	-25	—	—
	3	LBA	15	10	-25	20	-25	-25	5	10	25	20	15	5	15	15	0	-25	1	5	1	5	2	15	0	-25	—	—
	5	LBA	25	15	-25	30	-25	-25	10	20	35	30	20	10	20	20	0	-25	1	5	1	5	2	20	0	-25	—	—
	10	AS	40	30	-25	45	-25	-25	20	35	55	45	40	10	20	30	0	-25	2	5	1	15	3	25	0	-25	—	—
	15	AS	50	40	-25	60	-25	-25	30	50	60	50	50	10	20	40	0	-25	2	10	2	20	3	25	0	-25	—	—
	20	AS	60	50	-25	75	-25	-25	40	60	70	55	60	10	20	50	0	-25	2	20	2	25	3	25	0	-25	—	—
Entertainer	1	LBA	10	-25	-25	20	5	5	-25	5	10	10	-25	-25	10	-25	0	-25	0	-25	0	-25	1	10	0	-25	—	—
	3	LBA	20	10	-25	30	5	5	-25	5	20	20	-25	5	15	-25	0	-25	0	-25	0	-25	3	10	0	-25	—	—
	5	LBA	25	20	-25	40	10	10	-25	15	30	30	-25	10	25	5	0	-25	0	-25	0	-25	3	15	0	-25	—	—
	10	LBA	35	25	5	55	25	25	-25	35	50	45	-25	20	35	5	0	-25	0	-25	1	5	4	15	0	-25	—	—
	15	LBA	45	35	15	80	30	30	-25	45	60	50	5	30	45	5	0	-25	0	-25	1	10	4	20	0	-25	—	—
	20	LBA	55	40	20	95	40	40	-25	50	65	55	5	35	50	5	0	-25	0	-25	1	15	4	25	0	-25	—	—
Theologist	(too variable for general bonuses)																											
Telepath	1	NONE	20	-25	-25	10	5	5	-25	5	5	10	-25	-25	5	-25	0	-25	0	-25	0	-25	1	10	0	-25	3	—
	3	LBA	30	20	-25	20	10	10	-25	10	10	15	-25	5	5	5	0	-25	0	-25	0	-25	1	10	0	-25	5	—
	5	AS	40	25	10	25	15	10	5	15	15	20	-25	5	10	10	0	-25	0	-25	0	-25	2	20	0	-25	8	—
	10	AS	60	40	30	35	30	20	10	30	25	25	-25	15	20	15	0	-25	0	-25	1	10	2	30	0	-25	12	—
	15	AS	70	50	30	45	40	35	15	40	35	30	5	20	25	20	1	10	1	10	1	20	2	35	0	-25	6	6
	20	AE	80	60	40	50	50	40	20	50	45	35	10	25	30	25	1	20	1	20	2	25	3	40	1	10	3	11









PART II IMPERIAL LAWS

At the heart of the Imperial Consolidation was a handful of megacorporations and of course the Core Worlds. Those few systems clustered around Old Earth had held on to the technology of the Terran Federation and possessed the resources to mount an interstellar fleet capable of enforcing a consolidation. Although Terra herself had long ago been drained of her easily-accessible resources, the other planets of the Sol system were brimming with valuable materials. With the help of the Dia Khovaria the Core amassed stolen data: and with the sum of the technology of all the megacorps, they began the building of a starmada. From Terra came the Emperor, a man of ancient lineage — claimed to include the Caesars of Rome, the Priests of the Yúcatan and the Pharaohs of Egypt. Fine blood to be sure, but what mattered were the millions of tons of alloy which hovered behind the word of this Terran Emperor.

Even with such a mighty fleet, His Imperial Majesty knew that negotiation might win more than brute strength, and his agents approached the Chairmen of the most powerful corporations, each an island light-years distant from Sol. Similarly, most of these corporate officials realized that greater profit and power was to be had by cooperating with this Terran Emperor than by denying his claim as Lord of the Galaxy. Jered Foor, President of Carlisle ComTech, Neris Kui'ch of the Colos Company, Chairman Vera Meer of the Devon Corporation, and Thompson Forrest Lloyd of Kubischev Kaarten Metals were among the leaders who endorsed the Emperor. and each played a major role in the governmental structure which evolved. Each corporation was granted land rights to a number of systems which they could exploit as their own while His Imperial Majesty retained ownership of every world in known space. It was this sort of practical application of completely farcical claims which has kept human egos reasonably sated throughout their long expansionist history.

Mafreng of Churg
Introduction to
"The Origin of the Terran Empire"

6.0 BACKGROUND

Following is a commentary on the motivations and activities which led up to the formation of the Terran Star Empire.

6.1 COLLAPSE OF GOVERNMENT

However barbaric and warlike Old Earth (Terran) society was before deep-space exploration, humanity was able to put its house in some semblance of order, and — thankfully — armed conflict between states rarely escalated above conventional levels. Despite accords struck between the old superpowers, no single political force was able to emerge out of earth's cultural melting-pot to unite all Terrans under one government.

Just before the advent of semi-practical (non-hypershunt) interstellar travel, Old Earth was crushed by the weight of domestic problems. Exorbitant population levels were sustained by technological breakthroughs in food production and waste recycling, but governments were hard pressed to concern themselves with little more than social welfare. In fact, the majority (after defense) of governmental funds were directed towards this end. Many countries collapsed under this economic strain, ironically setting the stage for interstellar development far beyond the projected path for this time period. As it turned out, the only institutions with the resources to elevate the "human condition" were non-governmental, international corporate conglomerates so highly diversified that they themselves resembled governments. These groups developed the technologies to reach for the stars, with the prospect of profit to motivate them.

6.2 CORPORATE EXPANSION

Beginning with N-Space vessels, and again much later with FTL (Faster Than Light) starships, there was a land-grab on a planetary scale; entire star systems were claimed by the first companies to get there. Like any other successful business venture, the new resources at a company's disposal were utilized to obtain a maximum profit. Raw materials were used to construct more starships, which in turn gained more territory, and the cycle perpetuated itself. Within each newly discovered system, the colonists of Old Earth became the new employees of the administering corporations while those very corporations set up their own autonomous governing bodies to avoid the call for external regulation.

Several attempts were made to obtain a centralized governing body for all of humanity — which was in the process of rapidly diffusing throughout The Worlds — but each was doomed to failure, due to the lack of a quick and efficient way to communicate between the newly developing governmental bodies. Transmissions were limited by the speed-of-light radiation or by the speed of message-carrying starships (which were expensive to operate and subject to deliberate or accidental destruction). Without a direct communications link, information and technology transfer was retarded, the intent of laws and interpretations crippled due to the less than universal application, and the normal processes of diplomatic relations were impossible.

However, there was another more significant block against a centralized administration: the mega-corporations desired and enjoyed autonomous control over all of their resources. From their point of view, what was the use of forming a centralized government? Unless forced upon them, the administrating corporation of each system was not about to accept an outside controlling entity. (It is of interest to note that it was often the case that these mega-corporations would evolve into exotic and varying forms of state, commonly a function of the cultural background or ethical sophistication of the corporation's executive core.)

After many millennia of chaos, a limited form of instantaneous interstellar communication was developed: the Tachyon Beam Dictor (TBD). The device slowly spread to The Worlds which were still accepting outside contact, and eventually a resolution to reunite all of humanity was sworn by several core worlds (Old Earth included). Several of these core world mega-corporations, governing bodies within their given territories, pooled their resources and built great fleets of military starships to sortie out and re-unify (read *conquer*) the scattered shards of Terran humanity. Most historians argue that this long process of attempting to form a Terran government was nothing more than an endless string of brutal wars of colonization.

In the end was formed a centralized political body declared to be democratic in nature. However, it was a political body only insomuch as it could exercise a minimal influence on its "member planets". The problem was that there were now just too many worlds with too many diverse interests and too many gripes brought about by the enforcement of an alien governmental form regulated by the quasi-democratic state (imposed on these re-unified worlds). The system was not working, but the leaders of this centralized democratic state were beginning to realize something: the unimaginable immensity of wealth to be found on The Worlds. The first seed of the Imperial drive had been sown.

The problem with an Imperial form of government was that there could be only one Emperor. Needless to say, everyone who could stake a claim on the title did. Hence the conflict continued — and intensified.

After the interstellar dust had settled, the Empire was a reality. It initially consisted of the Imperium, a great volume of space encompassing many worlds, and twenty-seven Provinces. The Provinces were areas which could not be handily controlled by the Imperial court exclusively, and as a rule, encompassed upwards of ten star systems in relatively close proximity. The Emperor's court was founded on Old Earth, roughly at the astrogeographic center of the Imperium. The Provinces were granted to "responsible" mega-corporations or other governing bodies which had also evolved over the past few thousand years and were represented in the parliament of the recently-deceased democracy.

The Imperium controls the Empire for one reason only: it has enough military clout to crush any group opposing its will.

6.3 IMPERIUM

It was realized during the drive for the Empire that the now great expanse of occupied space could not be administered from within one centralized location, as had been attempted during the time of the Terran Democracy. Enter the feudal component of the soon-to-be Empire. In those last few PreImp years the gelling Imperial Court claimed outright ownership of all colonized territories and explored systems, and threatened to use their vast naval forces against any party who disputed their jurisdictional authority. The court then introduced the Empire's Liege Lord agreement to several favored PreImp quasi-governments in the outer reaches of explored space. Through this agreement, a defined area of space encompassing several star systems (a Province) would come under the administrative authority of a sub-power directly answerable to the Imperial Court. In return for this grant of power, the Provincial administration was expected to forfeit an initially colossal tithe to the Emperor to be followed by regular Elmonitary installments — lest the province be handed over to a group of more competent governors capable of meeting their Imperial payments.

The first twenty-seven Provinces were inaugurated along with the Imperium on Imp.0. The provincial leaders were, at the time, a few of the Chairmen, Dictators, and Presidents of the mega-corporations and other governmental bodies which were once represented in the now defunct Democracy. Although the newly appointed provincial leaders kept their old working titles for many years after the Empire came into being, there has recently been an emulation of the Imperial form of figurehead taxonomy resulting in most Provincial leaders declaring themselves nobility. This has led to the founding of the Provincial Royal Families whose courts actually rule their designated territories.

The Provinces to be found within or bordering on Imperial space are called Inner Provinces, each of which is ruled by a Royal Family whose roots harken back to the first leaders of the Province in question. The remaining "outer" territories are called Frontier Provinces, the rulers of which are often Minor Clans who wield much less power than the Royal Families. Under the terms of the Empire's Liege Lord agreement, each Royal Family is entitled to field its own Provincial Defense Fleet, train and keep its own soldiery, and mint its own hard currency. But because the Emperor charges regular tithes in proportion to the economic and military strength of a given Province, there is little incentive for a province to become very powerful and a great incentive to hide one's true wealth — which is of course a capital crime. On the other hand, the Minor Clans are outlawed from maintaining private armies and must use the Imperial Monit for intraprovincial commerce when need be. Each Minor Clan territory is granted a garrison force of Imperial troops for defense purposes and the Clan is allowed to maintain their own exploration vessels. These expeditionary fleets seldom lack Imperial "observers" or "advisors" to keep an eye on the resource wealth of star systems newly discovered in the Frontier. Although the advent of the Province, Family and Clan has created a vehicle for somewhat autonomous states, it is quite apparent that this feudal structure has efficiently extended the realm of the Imperium without the corresponding expenses.

Touted by some as the "heartland of Terran humanity", enlightened Empire subjects know the Imperium for what it truly is: a privileged clique of hawkish self-proclaimed nobles bent on leaching the wealth of Imperial and Provincial territory alike. Remember that it was greed for riches and lust for control which fueled the three hundred year drive for the Empire. As expected (and hoped for on the part of the Emperor and his court), the nobles of the Empire live in the lap of luxury, and many others have profited from the formation of the Empire, including Provincial leaders, smugglers, and other criminals. From this scant overview, the Imperium superficially appears to be oppressive, Draconian, and rotten to the core — but upon closer inspection, the view just gets worse.

So why has the Imperium lasted for nearly five centuries? In the event that any disillusioned Empire subjects should incite others to rebel for an anti-Empire cause, the Imperium could field no fewer than twenty-five combat ready Starmadas, forty gunship task forces, and two hundred elite gunship squadrons to invoke a *Piat Fiela* (scorching death) against the insurgents. Few have been foolish enough to test the Imperial Fleet at their own game, as the result has invariably been the thorough destruction of upstart revolutionaries. The Emperor truly rules with an armored gauntlet.

If nothing else strikes fear into a rebel Province, an Imperial Dreadnought will. These brutes are no less than mobile cities of armor and armaments. They carry their own compliment of 200 SMAC fighters and the equivalent firepower of half a Starmada. There are only three Dreadnoughts in existence and they are the pride and joy of the Emperor.

To increase security, the Empire's First leader — Emperor Macedon I — in his first official act decreed that the production of thermonuclear enhanced radiation and biotoxic attack delivery systems was to cease immediately, and that any further production was outlawed. This lead to an immediate, frantic stockpiling of existent weapons known commonly as "the Great Hoarding".

After all these millennia it is perhaps fitting that the seat of power in the Terran Empire finds itself on Old Earth. Almost all industry has been moved off-world. Only parks, agriculture and administrative centers remain along with the Imperial Palaces. However, the fabricated pastoral façade that has been set up there is hard pressed to coverup the most wily, clever and treacherous band that the Terran man has ever been subjected to.

7.0
HISTORY OF CIVILIZATION

"Human history becomes more and more a race between education and catastrophe."

H. G. Wells
Terra, PreImp c. 9710

What follows is an outline of significant events (mainly technological) in the slow progression of Humankind from the discovery of fire to the present day.

PreImperial Time

(all dates are negative to year 0: the Consecration of the Imperium).

c. 15,000 — The dawn of civilized man.

c. 11,650 — The first rise of the *Dia Khovaria:* the Holy Tabernacle of the Word.

c. 10,000 — First use of steam power brings about the dawn of technology.

9769 — First discovery of Access Technology.

9700 — The first utilization of a holocaustic attack delivery system (in this case nuclear) on a civilian population.

9670 - 9668 — First Fossil Fuel Crisis.

9663 — The Technic Tabernacle is broken up by a jealous Terran regional government.

9660 - 9608 — Feasible fusion power generators are in development.

9645 - 9643 — Second Fossil Fuel Crisis. Energy needs cause international tensions to mount.

9643 — Limited thermonuclear exchange causes population shifts on Terra, and mild Nuclear Winter effects depopulate some regions. Most major cities are intact, though some areas suffer minor Technological Recessions.

9600 — The first successful sentient cloning of a human being. It is created by a western European research group.

c. 9600 — Cryogenic sleep units come into widespread use. The next five hundred years are marked by a number of 'colony' ship launches from Earth and her near colonies to the stars.

9540 — The first practical microfusion power generator is produced.

9525 — Terraforming of Venus is complete: the planet is converted to an earthlike world.



8450 - 5698 — The period required by researchers to gain a mastery of the gravitic field. The newly discovered power requirement-to-mass ratio insures that such gravitic field control will never pass beyond the subplanetoid level unless unimaginably great power sources could be tapped (even more than the Andrium reaction will produce in times to come).

8104 - 8068 — Research period of molecular data storage for informational processing systems. The potential of Optical Electronics ("Optronics") is fully realized.

8068 - 5655 — The study of molecular electronics leads to the advent of living circuitry.

7900 — The first known successful human alterant replicant is produced on a near-earth colony.

7887 - 7610 — The *Universal Technological Recession* of mankind. As if motivated by a single will, almost every colony is cast into a technological dark age as the human masses revolt against the ever increasing control of automation over their lives. The duration of the revolt varies for each colony, so the dates given are rather artificial. The first date marks the initial instance of a violent revolt, although there had been notable unrest over the preceding three decades. The end date marks the general desire for renewed technological progress incarnated in the form of a scientific symposium held on the Solar Mars colony. Despite the tremendous suffering that was experienced just before the recession (and throughout this dark age), the lack of a strong centralized regulatory body prevents the enforcement of policies which would prevent these unfortunate events from occurring again. It is interesting to note that one of the very few organizations to survive the Recession (and even flourish in it) was the Dia Khovaria.

c. 7700 — Experimentation in *Alterant Replication* leads to the limited production of laborer and recreation models.

c. 7600 — Tachyon physics becomes the main focus of study in the scientific community.

c. 7500 - 6000 — Secondary relapses of the Universal Recession of Technology intermittently strike down promising settlements; progress is painstakingly slow in most areas.

5705 — Humanity is firmly entrenched on ten core worlds but communication problems lead to cultural drift. This is more acute in the frontier areas.

5655 — The development of true Molecutronics sparks an android construction boom. *Virtual Humanatronics*, the pre-eminent producer of molecular circuits, is soon recognized as the top-quality producer of android brains.

5603 — The Relative Inertial Field Suspension Effect is discovered.

4002 - 3621 — There is a booming interest in temporal physics: hypotheses of alternative universes and practical applications abound.

c. 3500 - 3000 — A general antipathy towards technological trappings leads to a scientific recession in many colonies. This anti-tech drive is sporadic and does not lead to a collective psychosis. Claims that the Dia Khovaria ("The Church of the Word") is responsible remain unproven.

c. 3000 - 2000 — This millennium sees the bits and pieces of humanity drifting further from each other and their common heritage. Many far-flung settlements cut themselves off from their parent societies by ceasing their already sporadic speed-of-light communications.

1921 — Andrium, the elemental source of powerful matter/antimatter reactions, is created on a near-earth colony.

1921-1480 — The secret of the production of Andrium is shared between allied near-earth scientific groups. It is kept from the political leaders of the day in an effort to prevent its hypothetical use in a military weapon of unparalleled destructive capability. The Andrium for Science League (AFSL) is born.

1192 — The AFSL performs an unsuccessful hypershunt test.

1190 — In a secret test, witnessed only by representatives of the Andrium for Science League, a spacefaring vessel successfully hypershunts with an Andrium power source. The second test in that same year results in the destruction of the test vessel.

c. 1100 — The Andrium for Science League develops an interstellar translight merchant service, the revenues from which are channeled into research and development. The monopoly held by the League makes them very powerful, and they eventually become a strong political force throughout the core worlds.

1076 — The Tachyon Beam Dictor is invented. This device allows instantaneous communication over great interstellar distances. The first units to appear have an effective transmission range of about 10 LY. Because the TBD system is developed by a research group sponsored, and closely supervised, by a leading political force of the time (a coalition of near-earth colonies), no production monopoly is held, and the system spreads quickly to several scattered colonies. The Dia Khovaria sees this as a chance to link their famous databases and make a new place for themselves.

1076 - 457 — The period of time generally referred to as the Wars of Integration. As a quickly installed TBD network begins to dominate the data transferral markets, the merchants of the Andrium for Science League lose the revenues which they were making in this field. To counter the subsequent decline in their importance, several members of the organization sell blueprints and manuals for the construction and maintenance of Andrium-fueled hypershunting drives to powerful political institutions. FTL fleets are slowly built up, and the Andrium for Science league is coerced into supplying precious antimatter fuel. The League, which still holds the secret of Andrium production, degenerates into a mere production cartel. With ships, fuel, and command communications provided by the Dia Khovaria's TBD system, the united core worlds embark on their self-proclaimed mission to reunite all of humanity. During this time a limited number of Andrium bombs appear.

c. 1000 - 500 — With data as a valuable commodity, and a far-flung TBD network, the D.K. experiences a return of their former prominence — at the expense of the last vestiges of their religious beliefs. By PreImp. 500 they have become a purely secular organization.

457 — The culmination of the Wars of Integration is the creation of the Terran Federated Democracy (a.k.a. "United Federation," and more recently, as the "Old Democracy"). The Democracy's parliament is located on Old Earth.

324 — The Terran Federated Democracy holds sway over Terran humanity and the homeworlds of affiliated xenoraces. This was the first (and nearly successful) attempt at a unified political structure to administer all of the colonized worlds.

323 — Several sectors and homeworlds declare their independence from the Terran Federated Democracy as their specialized needs are not fulfilled by this institution. They begin to fortify their systems against anticipated reprisals from the Federation.

291 — Man-portable blaster weapons are mass-produced as a construction method is discovered which prevents deadly radiation from being emitted at the point of attack delivery.

320 - 275 — The pre-imperial core worlds initiate a massive arms race as they construct the awesome Imperial Navy.

270 — The fledgling political unit which will, in time, gel as the Imperial Court unleashes brute force to deal with the old Democratic leaders and systems which have refused to come into the fold. At the same time, the D.K., having abandoned its ties to the Federation, employs some of its more sensitive data to 'convince' key leaders to cooperate with the Court.

256 — The Imperium-to-be issues a declaration to all inhabited worlds stating that it claims ownership rights of all systems colonized/conquered by man to date.

255 - 50 — Various uprisings, revolutions, and back-room politicking thwart attempts to quickly solidify the pre-imperial power base.

39 — The GCH opens its doors to hear interstate grievances of political, military, and economic natures. It is hampered by widespread accusations of perjury and corruption.

27 — The first of the Order of Truthsibyls are used at the GCH. Perjury is virtually eliminated; the seeds of a long and bitter rivalry between the Truthsibyls and the Dia Khovaria are sown.

25 — Macedon Gaius Triptolemus of Terra emerges as the leading candidate to ascend the Imperial Throne. Several Megacorporations rally to his name.

14 — This date marks the last known utilization of a holocaustic attack delivery system on a mass civilian target; the population in question is the society occupying the Xi Sinva Star system. Their leaders are implicated in a plot to stop the Imperial Drive, the scheme uncovered by the Truthsibyls of the GCH.

12 VegaPol (An independent policing force), which supports the Galactic Court of Humanity and MERLOGH (MERchantile League Of Great Houses), is granted operational status.

3 — MERLOGH begins operating as the financial monitor of Terran space.

2 — The Emperor-to-be guarantees that the Andrium for Science League will maintain their production monopoly.

1 — The Emperor-to-be makes clear his intention to outlaw the production of holocaustic attack delivery systems.

Imperial Time

0 — Macedon I receives the Imperial Scepter and consecrates the First Terran Star Empire (consisting of a myriad of systems organized into Regions, Quadrants, and Sectors), and 27 Provincial Territories. The Andrium for Science League changes its name to Andrium Producers of the Imperium (API) in order to more properly reflect its latest primary function. This cartel retains its power through to the present.

1 — The Great Hoarding.

2 — The long prophesied and awaited Messiah of Izar seems to have incarcerated herself on a desolate and backward frontier settlement. Within a few years, hundreds of billions of humans embrace the spin-off religions catalyzed by her coming - despite vehement condemnation by the Dia Khovaria. Unable to keep a rein on his subjects, the new Emperor watches helplessly as expansion slows, research stagnates, and technology lapses yet again, as the Messiah is interpreted as preaching Asceticism. At least an entire generation of advancement opportunities is lost to the Empire.

4 — ICoM, a subdivision of MERLOGH, begins operations on Old Earth.

63 — The Messiah of Izar disappears under mysterious circumstances and the Emperor's court is implicated. Two decades of interstellar unrest follow, pressing the Imperial Deep Space Navy into action on several occasions. Not surprisingly, there are suppressed reports of numerous Starmada mutinies. The Imperial Fleet, suffering from a number of mutinies and clashes with powerful rebels, loses its effectiveness for a time.

72 — In an attempt to get a better grip on his crumbling Imperium, Emperor Protesilus I instigates sweeping reforms and new scientific project research incentives which he hopes will bring prosperity again. His plans get a lukewarm reception.

113 — Personal Velocity Shields appear commercially.

127 — The advent of improved sensor fields allow safe hypershunts out to a range of 50 LY. This instigates an age of unprecedented expansion. Frontier Provinces proliferate, bringing greater wealth to the Imperium.

301 — As a result of the War of Tarquinis (a.k.a. "The Rebellion of the Provinces"), Emperor Itzamná II allows Major Families to acquire additional systems directly from the Imperium and Frontier holdings. Restrictive Quotas remain in effect through the present, however.

412 — Matter/Antimatter torpedoes are first fitted on Imperial vessels. The Inner Provinces protest this as a violation of the Emperor's own holocaustic production ban, then furiously begin developing such weaponry for their own use.

462 — Personal Absorption Shields first appear commercially.

470 - 480 — The present.

8.0
LIFE IN THE TERRAN STAR EMPIRE

"This ain't no party,
This ain't no disco,
This ain't no foolin' around..."

Unknown Philosopher
Terra PreImp c. 9660

8.1 AN OVERVIEW

Life in the Fifth Century of the Terran Star Empire is an environment of contrasts: from unimaginable luxury and freedom to unthinkable toil and enslavement; from the pure height of selfless asceticism to the unspeakably deepest depravity. Money can buy power and power can get you just about whatever (or whoever) you want. Enough power can even get you Royal Status. The mighty Elmonit is your key to pleasures beyond the imagination.

Beyond trying to acquire cash, however, what do people in the Empire do? How do they interact? In this section are discussed some aspects of the Imperial Milieu which impact upon daily life.

8.11 SOCIETY

There is a fairly rigid social structure in the Terran Empire, though the ability of an individual to move out of a given class varies from province to province. One's social status is encoded into his/her/its ident disc along with other pertinent information, enabling security officials to quickly thwart any illegal impersonations or unauthorized entries.

Aristocracy

The highest echelon of Imperial Society, the Aristocracy, is made up of the ruling families of the various provinces (See Section 10.3) including the Minor Clans. It also embraces all officials of the Province down through regional Governors (or their equivalent title) and their extended families. Nearly all major Provincial positions have become hereditary, thus adding to the sense of bloodlines dictating social class.

Aristocrats and their families are supported by the government, and though most have responsibilities to a varying degree, they seem to have large amounts of leisure time — and excesses of provincial tax money to spend. If this were not enough, most aristocratic families are extremely wealthy from inherited monits and holdings. Members of the aristocracy have a number of other privileges, both official and informal. Depending on one's rank, a member of a royal family may be exempt from varying levels of security and have more freedom (e.g., aristocrats in many provinces are permitted to carry deadly weapons while normal citizens are not). Royalty also seems to have a way of evading punishment for minor (and sometimes major) legal offenses. In most provinces a Citizen can marry into royalty and be considered such; a Slave is not permitted to marry royalty. Non-humanoids ('Humanoids' for this purpose include Neo-humans and Transhumans but not Androids or Replicants) cannot be considered Royalty under current law.

Those born into Royalty can never have it taken away. In rare circumstances, an Aristocrat has been sentenced to Slavery for a particularly heinous crime. Often this Slavery is for a fixed period of time, after which the convict is free again. He retains his Royal status, however. More often, however, a member of the Aristocracy convicted of a High Crime such as treason is sentenced to Exile (see below) for a period of time.

Citizenry

Citizens are usually required to work for their livelihood (unlike the Aristocracy), yet they are able to own property (unlike slaves). They are accorded full rights under Imperial and/or Provincial Law. The Citizenry constitutes the vast majority of the Empire's population.

Certified self-aware androids can become Citizens upon activation, while Replications cannot be Citizens under any circumstances. Most nonhumans who interface with the Empire on an official, friendly basis are considered Citizens.

Citizens may bear non-lethal weapons in certain situations, though almost all Provinces require licenses, and taking weapons from one Province to another can be an offense.

A Citizen may marry a Slave, but the practice is frowned upon and thus very rare. It also accomplishes little, as the Slave is not freed by the marriage process. On the other hand, keeping a Slave as a consort is very chic in some areas. Citizens may own as many Slaves as they can afford. Citizens may be sentenced to Slavery for various severe crimes — especially monetary offenses such as embezzling, forgery, Elmonit falsification, etc.; usually the Slavery conviction is for a fixed period of time, after which the convict is free again.

Slavery

Slavery in the Fifth Century of the Imperium is not necessarily as bad as it sounds; in some ways it is more secure than being a Citizen, since the government protects Slaves from mistreatment by their masters ("mistreatment" can mean failing to provide proper lodgings, diet and health care). A bankrupt Citizen has very little recourse but to renounce his possessions and become a Slave.

Slaves may not own any worldly possessions. Their clothing is their master's, as is their home and anything they may create as part of their job; in return the master must provide shelter and 'reasonably comfortable living conditions'. This can vary tremendously, however. Replicants especially tend to receive hellish assignments on mining colonies, on barely habitable worlds, or performing the most undesirable tasks. Officials frequently look the other way (especially if their gaze is diverted by Monits) when Replicant Slaves are being mistreated, since no one really cares for them. Human Slaves generally get better treatment, but there are still areas where they are subjected to inhuman treatment and the local government does nothing to protect them.

There are a number of markets for Slaves, including private purchase, public auctions, and black-market buying. The League of Merchants makes a considerable amount of money on the illicit slave trade, dealing in humanoids from uncharted planets, mind-wiped kidnap victims, and even more unscrupulous sources.

Slaves may be trained to perform even the most skilled duties, and can be certified in a number of technical fields. Wealthy Citizens often purchase skilled Slave pilots to fly their spacecraft.

However, Slaves usually are not permitted to leave a planetary Sphere of Influence without being accompanied by a Citizen or Aristocrat. Slaves may not carry weapons more deadly than a Stunner except by special license or in military situations. Although Slaves are often found in the Provincial or Imperial Soldiery (purchased by that government), they rarely become officers.

Slaves can only be freed by an Imperial or Provincial Board of Certification made up of members of the high Royalty. Slaves are very rarely freed, and at best they are granted Provisional Citizenship, which would allow them to marry Royalty, or for the children of a marriage to a Citizen to be considered True Citizens. Provisional Citizens have full legal rights and may possess money, but may not own land or have controlling interest in any business.

Exile

Exiles are Imperial criminals who are forbidden to enter any system controlled by the Empire or an Inner Province. They are only permitted minimal contact with Frontier Provinces and some are not allowed even that. Usually, Exiles are political criminals who are not sentenced to death or Slavery because the government would prefer not to martyr them. Exiles are the lepers of modern society, and to be caught dealing with one while within Imperial boundaries is to invite the unrelenting scrutiny and harassment of the Imperial Government (and nobody wants that).

8.12 TECHNOLOGY

Although technology in the universe of ***Space Master*** — some nine thousand years in our future — is far advanced, it is not beyond the imagination. Indeed, due to the numerous technological and social collapses which punctuated man's drive to the stars, many worlds subsist on a technic level not far above the barbaric 88th-90th PreImp centuries. While truly advanced equipment exists on Imperial Core planets and Provincial Homeworlds, the cost of bringing the more sophisticated luxury items to the Frontier has often proven prohibitive.

Below is a listing of the general technical limitations and achievements of man:

- Sentient cloning and alterant replications of all carbon based life forms whose genetic structure is encoded upon DNA strands.
- Controlled mutation of genetic material to create new extremely simple life forms. This is normally performed on the microbial level to produce biotoxins and antidotes.
- Cryogenic suspension of life forms.
- Gravitic field control to annul, enhance, or manipulate gravity on the sub-planetoid level.
- Artificial sentience brought about by growing synthetic molecular "brains".
- Controlled Matter/Antimatter reactions are the most powerful energy source available to man.
- Microfusion reactors provide the limit for efficient, productive, and portable energy sources.
- Present technologies allow faster-than-light travel at the maximum rate of about 0.4 light years displaced per hour.
- Controlled laser, particle beam, plasma, and electromagnetic pulse technologies form the basis for destructive weaponry on the large and small scales.
- Manipulation of atomic force fields and electromagnetic radiation allow the assimilation of defensive screens.

NOTE: *A much more detailed exploration of technology is made in the Technology Book. One may assume that the technological level of the Empire encompasses all technical possibilities postulated in the Technology Book; however, these rule limits apply ONLY to the Terran Empire, and the achievements of man. In no way should a GM feel that he should limit his alien races to Terran technologies. In general, the technological developments of different cultures and races should vary greatly, but the GM should always keep an eye on game balance.*

8.13 FINANCE

One of the most powerful and important uses of the Empire-spanning TBD network is maintenance of the financial network. Thanks to this net, a citizen of any Province is able to travel anywhere (theoretically at least) and purchase goods on the other side of the Empire without physically buying foreign currency, and without carrying around large amounts of hard currency to prove his financial worth. The grand coordinator of this incredible setup is MERLOGH.

MERLOGH (Mercantile League of Great Houses) is nothing less than the Terran Galactic stock market, but it is also much more. Every currency-generating political entity within the Empire has its Monit valued in comparison to its contemporary counterparts. All Monits, including the Imperial Monit, are also rated against the Terran standard Elmonit, the value of which is set by MERLOGH. Provincial and Imperial treasury bills, savings bonds, megacorp and subsidiary stocks, and various monits are but a few of the capital items which may be purchased and sold through MERLOGH.



On the personal level, each Imperial or Provincial citizen receives an Elmonit card at the age of maturity. From central Elmonit Adjustment Monitoring Facilities, a person's financial reserve records can be modified to reflect income and expenditures. Local terminals of these facilities are equipped to issue Elmonit statements upon personal request and dispense the appropriate Provincial or Imperial Monit for pocket cash. The computer monitors at a given central adjustment facility are quite capable of foiling fraudulent use of Elmonit cards along with preventing overdrafts. The adjustment facility is also capable of setting up automatic withdrawls on an Elmonit account in order to pay for big ticket purchases via installments.

Most minted monits (hard currency) appear as small, flat rectangles with smooth faces which hold a dull luster. Coming in a variety of denominations, the Monit is invariably formed from the most precious of metals: a platinum-titanium alloy. The Monit is a standard size and mass, and has a set base value of its own (the mineral worth of the platinum/titanium itself). Though this is significantly lower than the theoretical value of the Monit piece, it provides the minting House with some material backing, should their economy suffer a total collapse. This also allows for individual fluctuations within House Economies. The material value is usually enough to discourage counterfeiters, since a scanner analysis quickly reveals composition. To prevent fabrication of individual House mints, the Monits are imprinted with a laser-grain code on one side. This code is invisible normally, but when a Monit is held under a Coherent Decoder Lamp, the light strikes the intricately burned facets of the face to generate a holographic image in full color: the symbol of the House. Each House owns its own set of laser plates under the supervision of MERLOGH and its police. It is advisable to remember that although the material value of the Monit fluctuates rarely, the economic value fluctuates rapidly, as a function of the province's MERLOGH performance.

Houses gain their base wealth by either having access to planets with significant platinum and titanium wealth (both these minerals having substantial value in the Imperium for technological reasons) or because of some other material or technic monopoly which allow the purchase of such elements in volume. Naturally the latter houses are on less stable ground, not having a relatively open-ended supply of wealth. MERLOGH monitors how much money each House mints and occasionally imposes controls, but the relative influx of Monit wealth is part of the cause of the differential in the value of the individual Monit from House to House.

Most large exchanges of currency are performed using Elmonits (Electronic Monits), the Imperial standard unit of money. Although people are paid and purchase items in the Monits of their home province, their account with the MERLOGH bank is maintained in Imperial Elmonits; thus the balance can fluctuate hour-to-hour, depending on the strength of the House relative to the other members of MERLOGH. This has no effect on their purchasing power, of course, since the entire economy within a province gains or loses as a unit; their buying power remains the same. Citizens with no interest in interprovincial politics care very little what their Elmonit balance is, paying attention only to the Monit worth.

A Citizen's Elmonit Card is an entire banking portfolio, with not only access to the owner's cash reserves, but often a credit balance as well. This is more convenient than carrying a large number of Monits. One simply goes to the nearest MERLOGH transactor machine, inserts their Elmonit card, suffers the voice and retinal checks, and requests a withdrawal from the account. The machine checks the individual's balance while also monitoring the patron's vital signs; if tension is indicated, the patron may be withdrawing under duress (being robbed) and authorities are alerted. If the patron has the requested balance on record, the amount is transferred to the Elmonit Card (in Elmonit value) along with the date of transaction. Any previous balance encoded on the card is removed, revalued (since the Monit value will have probably changed since the last withdrawal), and added to the new card balance.

Retail merchants of any considerable size have MERLOGH Transactor machines right in the store, so that when a purchase is made the Transactor reads the encoded amount and date, revalues the Monits to the present, and deducts this from the Elmonit Card Balance. The store is immediately credited. Smaller vendors have 'personal transactors' which deduct the amount from the customer's card and hold the amount in memory. The shopkeeper then visits a Transactor machine at the end of the day, the machine reading the amounts and crediting the shop's account. The personal transactor is also updated to correctly calculate Monit-Elmonit differential for the next day's business.

With the use of Elmonit Cards, tourists and interprovincial businessmen may travel freely outside of their home province, and their Elmonit Card is welcome, currency easily obtained.

Elmonit cards are extremely difficult (though not impossible) to alter or falsify. They include Retinal data, as well as a very sophisticated laser coding system. One major deterrent to Elmonit Card Fraud is the MERLOGH Police (a branch of VegaPol). There are stiff penalties for convicted counterfeiters: death or mind-cleansing. It is also rumored that the Police often act without waiting for the technicality of a trial.

There is a general tendency throughout the Empire for provinces to be diversified almost to the point of self sufficiency, with a concentration of industry on unique specialties (which may have been the province's claim to fame in the first place.) Most large provinces are well balanced with respect to agricultural and industrial land use, with deficiencies made up through interprovincial trade. Every province guards its resources very jealously, and they are always on the lookout for usurpers and smugglers trying to muscle in on their business. Even minor drops in production can have dire economic consequences in the MERLOGH circles, so intraprovincial security is uniformly tight.

8.14 ARCHITECTURE

Humans still gather in cities; the instinctive need for physical proximity remains strong. This is also a result of the ownership of most land being in the hands of the Megacorporation and/or government; few individuals "own" real estate. Thus there is a very dramatic boundary from city to rural land. In fact, up to 90% of some planetary populations reside within city boundaries; the remaining 10% are either agricultural workers or Citizenry/Nobility wealthy enough to own a large estate (and the vast majority of them also own apartments in the city).

It is interesting to note the eclecticism which grows stronger as one nears the heart of the Imperium and the more settled worlds. There is a strong tendency to renovate rather than rebuild; a desire to preserve at least the façade of an earlier age. Many structures dating back to the early colonization period and the Universal Technological Recession are still inhabited. Ancient buildings of baroque design, refitted with the latest environmental and computer systems, create a strange fusion.

In the less prosperous areas of many planets the union is grating and harsh; no attempt at softening the junction is made. Where the original lighting or environmental systems have failed, less advanced equipment has been grafted on. Ducts and exposed wiring make for unpleasant decor. This is the darker side of the Imperium, planets where the environment has been abused. Sulfurous clouds rule the skies from which pour a continuous acidic drizzle. Everything seems old, barely functional, and filthy.

New settlements, especially the Homeworlds of the Inner Provinces, are another story. The latest technology is utilized to create slender spires and soaring arches: daring sculptures of architecture. All is glittering crysteel and glass. Support equipment and services are often underground, freeing surface area for parkland and resort facilities. These are spread across the globe, easily accessed through various high-speed transportation modes. Industrial centers are kept well away, often on remote islands or even polar regions (where thermal pollution is easily controlled). All forms of pollution are carefully monitored on inhabited worlds and violators can receive stiff fines from the Empire. There are exceptions, of course — where the ideal has broken down, laws ignored, and the planet is being stripped of resources without mercy. In these cases either the government is unaware, or is pointedly looking the other way. Every building or cluster of buildings in the city has at least one air traffic pad or port. Spaceports are located a few kilometers from larger cities: convenient but not intrusive, allowing the city to be a lone jewel on the landscape.

On many planets, however, there is the tendency to utilize the solid, grandiose architectural style of earlier eras (often stone or other ponderous material) and carefully infuse the advantages of high-tech refinements. The Empire, in an apparent attempt to emulate ancient Terra's Renaissance period, has encouraged such fashions and trappings in the Imperial Court. Many new buildings on Terra and Venus (home of the Imperial Senate) also reflect this style. All this, the Emperor hopes, will promote a feeling of enlightenment and forward momentum — that the Stellar Empire is entering a new age. Few are fooled by this ruse, however; under the precision-ground marble façades of the new Imperial Palace building remains a foundation of crysteel supporting one of the most corrupt, power-mongering governments ever to exist. And it continues to flourish.

8.2 TRAVEL AND COMMUNICATION

The Terran Empire operates in a manner strikingly similar to pre-technology feudal systems on Terra and similar worlds, mainly because of the limitations of communication and travel. The nearest star systems are days away, and even the shuttle from Terra to the Imperial Senate on Venus can take over five hours. Personal travel is an important part of Imperial politics, and interprovincial trade has never been so vigorous. Several private corporations provide the mainstay of inter-province passenger and cargo transport, while the Provincial subcorporations dominate intraprovincial travel.

The fastest method of sending an interstellar message is via the Dia Khovaria TBD (Tachyon Beam Dictor) Datanet, and that requires up to several hours (mainly because of the necessary relays). Because of the somewhat insecure and restrictive nature of TBD communication, many prefer to utilize couriers when the message is sensitive and/or complex in nature. Thus, news travels slowly and in fragments. A Duke could be assassinated and the other planets of the province might not learn the news for hours; days for those without TBD stations. Distant provincial leaders might not learn the news for months. It is largely because of this delay that the Empire exists as it does. A decentralized rule is necessary to maintain control over a far-flung populace where distant communication is less than instantaneous.

8.21 PERSONAL TRAVEL

Travel in the Terran Empire can be broken down into three basic divisions: Intraplanetary (destination being on the same planet as departure point), Interplanetary (within the same stellar system), and Interstellar (from one stellar system to another).

Intraplanetary Travel

Travel between any two points on a single geosphere is a relatively simple operation on any civilized world in the Empire. Such worlds often have a variety of transportation modes available, depending on the urgency and wealth of the traveller. A few options are listed below — though not all options would be available on any given world. Most such transportation is monitored and directed by a planetary computer system which flawlessly (in most cases) directs all traffic, and constantly monitors the travel lanes to be sure that vehicles are complying with directions. Such a system is always backed up by a ready police force of aircraft to ensure proper travel conduct (this is rarely a problem as most advanced vehicles are computer controlled as well). However, should an aircraft disobey flight instructions and prove to be a hazard, it could be disabled — or even destroyed — by interceptor patrols in the interest of air safety.

Suborbital Shuttle: Only practical for transcontinental trips, the Suborbital shuttle lifts from a port, climbs almost vertically to a high altitude to reduce atmospheric friction, and proceeds at high speed to its destination. The shuttle often spends more than half of the trip ascending and descending, and is the most expensive mode of commercial planetary transport.

Hypersound Transport: Simply an atmospheric vehicle which cruises at faster than the speed of sound (normally three or four times sound, actually) able to circumnavigate an average geosphere in less than twelve hours, this is the preferred mode of travel on most developed worlds. Such transports come in a wide variety of sizes and designs, from large commercial carriers to small, sleek private craft. Most are powered by clean fusion jets.

Conventional Aircraft: Much slower than hypersound, these aircraft are nevertheless practical for shorter journeys (up to 5000 kilometers). Efficient prop engines (electrically powered) are quiet and maneuverable, though some utilize fusion jets as well. Virtually all advanced air vehicles have vertical takeoff/landing capabilities, whether it be via rotating propellers or gravitic lift. This allows such vehicles to depart from the roofs of buildings and other restricted spaces rather than the large port facilities, greatly reducing delays.

Subterranean Shuttle: A more unusual form of transport, it has some advantages over air travel and is popular on worlds of medium technology levels. It is of necessity a commercial mode, requiring a network of underground tunnels, kept at near-vacuum to reduce air drag. Streamlined trains, often luxuriously appointed inside, travel these tubes monitored by a computer. Such trains are held suspended by superconductor webs and can thus accelerate to considerable speeds. The best of these are nearly as fast as the hypersound transports; even more safe, and less expensive.

Gravitic Car: Definitely a short-trip vehicle, the gravitic car is a catch-all phrase for a vast array of vehicles which utilize a gravitic nullification effect to make them essentially weightless. There are two basic varieties: fixed and variable altitude.

Fixed altitude cars hover at a fairly constant level above the ground (usually about 70cm) and keep to predetermined highways. Variable altitude cars are just that: they can rise to almost any height (a thousand meters is a standard legal limit, though this varies in metropolitan areas) and are much more maneuverable and often capable of greater speeds — up to 500 kph. Although their main power is gravitic, all have emergency braking thrusters and other safety features to prevent disaster, since gravitics are not effective for abrupt stops or tight maneuvers. Gravitic cars come in every imaginable size, shape and design. There are also a variety of open-air scooters which function similarly.

Interplanetary Travel

Nearly all commercial interplanetary travel involves a three-step process. The first is ground-to-orbit, where the traveller boards an orbital shuttle (either commercial at a port or a private craft) and is taken to an orbiting space station. For the second phase the traveller transfers to an interplanetary craft, which makes the journey from one orbital station to another at the destination. Finally, the passenger debarks at the station orbiting the destination planet, transfers again to an orbit shuttle and descends to the planet surface.

Interplanetary travellers are subjected to some security measures, usually at the Orbital Station of departure. Ident Discs are checked, and luggage is scanned to prevent transport of illegal or controlled materials.

Wealthier travellers in a hurry have the alternative of taking a multi-use craft, which is capable of making atmospheric takeoffs and landings, and can thus take them from their home port directly to the planetary port of destination. These vehicles are usually smaller (and more expensive) since there is a smaller clientele for any given trip from point X to point Y, whereas the transfer system allows a larger number of people to be transported more effectively. Those who select this mode of travel also suffer the security measures, but are checked at the planetary port. There are exceptions: corporate and/or government officials who have standing security clearances and private ports.

Interstellar Travel

Interstellar travel is actually not very different from interplanetary travel in some ways. It usually requires the same three-part process, and a rigorous security check. If one is travelling to a foreign Province, there is a very thorough check at the destination port of entry .

Commercial Interstellar vessels are almost invariably large affairs with variable accommodations depending on the length of the journey and — of course — the depth of your Elmonit reserves. Since long Hyperspace trips can take decadays, most ships have suitable 'cabin' lodgings, which include berths, sanitary facilities and media services. In addition, passenger liners are outfitted with any number of the following: swimming pool, bar, restaurant (usually several), athletic facilities, holorecreation lounge, gameroom, etc. These ships are mobile cities devoted to their passengers' comfort during the voyage.

Of course, for many the hyperspace journey can be a days-long nightmare. Everyone experiences a certain dizziness and vertigo when entering and leaving hyperspace, but many humanoids — for no reason yet determined by Imperial medicine — suffer hallucinations, inner-ear balance problems, and a general malaise which lasts as long as they remain in hyperspace. There are drugs which minimize this malady, but none yet to completely prevent the worst effects.

If one is wealthy enough to own a Hyperspace-capable ship, then interstellar travel is actually rather simple. Such privately-owned 'yachts' are atmospheric and interplanetary travel-capable, allowing one to go directly from home port to destination. There are still the usual security checks however, and travelling on one's own can be a dangerous business.

Following are a few pointers for the adventurous interstellar traveller to keep in mind, Excerpted from ***Muldaak's Handbook for the Independent Tourist*** *(The Unabridged Underground Edition):*

1. Never make a hyperspace jump too close to a major gravity source. A relatively safe distance to hypershunt out of or into a system is 500 celestial body diameters from an influential gravity well. Of course, denser bodies generate a much more substantial well then the more common, less dense bodies. Safety-minded ship captains get at least 1000 diameters away from a star.
2. Transmit the proper "Passage Code" when approaching an inhabited world or Space Station. These codes are standard for each province, including Imperial Territories. The code includes, among other things, the ship's registration, point of origin, and business. Bored and trigger-happy planetary garrisons or police forces get their kicks from blowing away unidentified ships entering their jurisdictions, rather than waiting around for the trespasser to think up some pitiful excuse for why he is in their space. (Extra hint: don't try "The passage code tape was accidentally erased!" They've all heard it.)
3. Always have a good reason for being in a foreign province. In the politically and economically aggressive society of the Empire, no one trusts anyone if they want to live to see the next eclipse. This is especially true at this time, considering all of the cloning, genetic manipulations, mind control , and cybernizations that are going on. Provincial Troopers would just as soon throw a foreigner into detention and impound his ship than let him go about his business with only a cursory examination.
4. Don't go anywhere without a legitimate Ident Disc. Every citizen of a Province (and the Imperium) carries an identification disc which tells the security personnel that the owner is a real person (or whatever). It follows that if a traveller lacks proper identification, he is not a citizen and is more likely an escaped slave or spy. Protesting this assumption is normally met with a less than sympathetic ear. Escaped slaves and foolish spies seldom receive a preliminary hearing before their summary execution. It is possible, however, with a lenient security officer, to be caught without an Ident Disc and merely be sold into Slavery or handed over to a biological research group for experimentation.
5. Never leave home without your Elmonit Card. Hardly less critical (and sometimes more important) than your Ident Disc is your Elmonit card. This lovely rectangle of composite semiconductors and other shiny materials is your key to the Capitalist Empire (assuming you have a positive balance or at least a credit line). With enough Elmonits you can buy your way out of almost any misunderstanding or misfortune. As they say in the Senate: "Everyone has his price."

8.22 COMMUNICATION

Silence is the virtue of fools.

Francis Bacon
De Dignitate et Augmentis
Scientiarum
Terra PreImp c. 10050

The Tachyon Beam Dictor, though the swiftest mode of interstellar communication known, has its drawbacks. Direct links over more than 50 light-years (and sometimes considerably less) can take several minutes and sometimes even hours due to message backlog. In addition, TBD communication requires a very large reception/transmission antenna array (roughly 1 kilometer in diameter is required for each 10 LY of clear transmission at a comparably sized receptor). The grid panel material is expensive and it requires considerable skill to align the grid correctly. Any given relay is usually 'down' (inoperative for one reason or another) as much as 10% of the time, though the D.K. net is sophisticated enough so that communication can be rerouted with very little delay.

TBD transmission limits are crude by modern standards: visual and even audio transmission is only possible via certain linkups (as well as quite expensive); normally TBDs are in the form of a prepared message sent in a quick burst, translated back and delivered as written communication. Far from perfect, it is still the best setup available.

The only single network which spans the entire Empire is the one operated by the Dia Khovaria, which has at least one uplink station on every civilized planet and Imperial Outstation. In addition, the D.K. maintains nearly all of the hundreds of relay stations positioned throughout Imperial Space which make long-distance communication possible. There are a few Provinces who maintain their own relay stations (mainly out of pride or a hatred of the D.K.) including Houses Colos and Hulugu, but for the most part the feudal governments have grudgingly signed the Chapterhouse leasing agreements and accepted the self-righteous presence of the Holy Church of the Word on their homeworlds. The most reliable TBD technology coupled with the largest archival database in human history is hard to turn down out of pride or prejudice.

In addition to the D.K. network, there are a handful of competing TBD corporations, usually covering no more than one or two Inner Provinces. They manage to squeeze out a small profit, but it is an open secret that the D.K. intends to squash them one at a time — at its own leisure. The relationship between the Emperor and the D.K. is an interesting one, each depending on the other to maintain an optimum powerbase. His Imperial Majesty is historically suspicious of the motives of this arcane group, however, and one of the earlier Emperors declared it High Treason to withhold from either his agents or the agents of Vega (MERLOGH, the GCH, and VegaPol) free access to the net on demand.

The TBD network has five major functions:

1. MERLOGH Elmonit adjustment and banking updates. This is the most important purpose of the TBD net on a day-to-day basis; it allows interprovincial finance to proceed smoothly.
2. News Service. This transmits important announcements in text form to the various downlink stations throughout the Empire.
3. Imperial Communication. The Imperial Government is the only TBD customer able to afford regular visual communication, and high officials — being bureaucrats — employ it more frequently than they should.
4. Personal communication. As described above, most Citizens cannot realistically afford TBD communication any more sophisticated than the transcribed document version.
5. The D.K. itself uses the network as much as any other group. Interdepartmental communication, archive updates, and other data transmissions are a daily part of D.K. utilization of the system.

8.23 LANGUAGE

Time that is intolerant
Of the brave and innocent,
And indifferent in a week
To a beautiful physique,
Worships language and forgives
Everyone by whom it lives.

W.H. Auden
Terra PreImp c. 9700

As can be expected, there are a huge number of languages spoken throughout the Terran Empire, and an interstellar traveller must be careful of not only what he says, but how he says it; dialect and inflection has evolved into a very major aspect of speech.

Commonly Known Tongues

The official language of all citizens of the Empire and Provinces is Imperial Standard, also known as Anglaman. It is a distant bastardization of Terran English with a vast supplemental vocabulary. The key to Anglaman's supremacy lies in the dim past of civilization. In the early 88th PreImp century the English-speaking peoples economically dominated Earth, forcing all other world market populations to learn the language in order to deal with them.

In addition to Standard, each Inner Province has an official tongue, normally related to the cultural roots of the Province. It is common practice for most educated people to know not only Imperial Standard and their home tongue, but also the languages of the neighboring provinces.

There are also of course the alien races and their 'tongues' (loosely speaking). Some are within man's ability to imitate, while others require sophisticated translation equipment.

Special Languages

Beyond the normal spoken languages, many groups have their own private methods of communication. A few of particular interest are noted here.

Dia Khovaria: The church teaches its members a complex language of hand and body signals which defies analysis by even Imperial analysts. Many of the motions are so subtle that they are not even noticed by the casual observer.

League of Merchants: Members of the League hierarchy know an abbreviated language — more like a communications code — which they use amongst themselves.

Truthsibyls of the GCH: These women also apparently have a sign language which they teach to no one but trusted members of their elite order.

Computer Languages

The following languages, applicable for computer interface purposes, can be learned in the same manner as normal languages (written only). Languages marked with an asterisk (*) are restricted and can only be learned by certain persons.

Tablet — General research.
ForA — Self-monitoring weapon systems.
ForA XI — Self-monitoring weapon systems (satellites).
Mechrun — Industrial robotics.
MedIC — Medical diagnostic and monitoring systems.
CMT scram — Communication interpretation systems (TBD).
C3 iv — Communications (specialized security adaptation). *
SEN 67 — Self-contained sensor buoys.
Mer Lanex Tau — Space vessel computers (Devon: Astro).
Z Weda — Space vessel computers (Devon: Sys. Maintenance).
Nav 4a — Low security military operations.
Nav 20 — Medium security operations. *
Imp Nav 10 (alpha - epsilon) — High security fleet systems. *
SPS — Black market computers (monitor systems).
SPSn — Black market computers (space vessel systems).
DoDEC — Black market computers (space vessel systems).
Edic — Education systems.
Visig — Holographic graphics generation.
VERAD — VegaPol Research and Database. *
MerC — Merlogh Elmonit adjustment Control. *

In addition, there are considered to be (for game purposes) five basic levels of computer security, with Level I being minimal security, and Level V being the most difficult to gain access to.

8.3 ENTERTAINMENT

Imperial Citizens — especially the upper classes — have a never-ending thirst for new diversions. Included in this section are a few examples of the sorts of activities which Imperial society indulges in regularly.

8.31 SPORTS

In the area of sports, the concentration is on tests of physical prowess. In addition, there has been a trend over the last few decades towards "low-tech" games spotlighting danger and violence. A variety of individual competitive activities exist, as well as myriad team spectator sports. Some of the more popular team sports have leagues which span the Empire, though most are only Province-wide, if that. Since instantaneous coverage of events beyond a single planet is not yet possible, truly Empire-wide fame for a sports team or personality does not exist. However, several sports have gained significant followings, and in some cases teams play tournament-like schedules culminating in championship games on Terra itself.

Meta-Ball Hockey

A favorite throughout the Empire, Meta-ball Hockey is distantly related to the ancient sports of lacrosse and hockey. Two teams of twelve men (including a goalie) face off in a three-dimensional n grav arena, armed with 2 meter long magneto-sticks and equipped with small thruster-packs for maneuvering. They attempt to control a metallic sphere about 10 cm in diameter with the magnetic fields produced by their sticks, guiding the ball into the opponents' goal. The sticks are able to produce a field up to 5 meters beyond the stick, manipulated by the handgrips — but naturally the field is weaker the longer it is extended. The sticks are also often used as clubs against opponents, who wear only minimal shock padding. Players also accelerate with their thruster-packs and body-slam opponents. Injuries are frequent, and though each team has six backup players, the end of the game will often find the teams short of men. Current medical technology and the financial backing of Meta-ball teams allows most injuries to be repaired by the next meet.

Meta-Ball game arenas are 50 meter transparent plasteel cubes with full surround grandstands (spectators seated on all sides, bottom and top, possible because of artificial gravity). Because of their popularity, they invariably have global vid coverage, high ratings and powerful sponsors.

Null-Grav Forcehoops

Though playable in the same null-gravity arenas as Meta-ball, Null-grav Forcehoops is a completely different sport with a different following and philosophy of play. Players wear gravitic belts with special wrist and ankle bands. These generate magnetic and gravitic repulsor fields which prevent one player from touching another. To attempt to grab or hit another player is like trying to grasp a frictionless surface: they easily slide away. Without the thruster packs used in Meta-ball, acceleration is severely limited. These factors make Null-grav Forcehoops a game of finesse and agility rather than one of brute strength. Ring-shaped goals, 30 cm in diameter, are placed at opposite ends of the arena, and play is conducted using an inflated ball with a flexible metallic coating about 25 centimeters in diameter. The ball is gently repelled at all times by the walls of the arena (so, if left to itself, it would eventually find itself in the center of the play area) but the field is not so strong that a firm throw cannot overcome the effect — thus the ball can be bounced off the walls. Unlike the ball, the players are gently drawn to the nearest surface, though it is easy, once contact is made, to jump away again, even to the far side of the arena.

The game is played by two teams of five men (or women) who try to get the ball through the opponent's goal. The team with the most goals at the end of the time period is the winner.

There is a lot of passing in the game, since once a player has grabbed the ball, s/he is probably going in a direction unsuitable for scoring a goal. There are also elaborate strategies and tactics involved, and several specialized rules assure a fair, active and exciting sport

Power Raking

A sport even more violent than Meta-ball, Power Raking (or simply "Raking" as it is sometimes called) is also less well known on a wide scale, and historians believe that it (like many of the current athletic competitions) is based on a much older sport from Terra's pre-spaceflight centuries involving contestants on 'roller skates' on an oval track. The sport involves two teams of four men, and is played in a concrete, bowl-shaped arena up to about 30 meters across. All players move about the area standing on small platforms about 50 cm long, equipped with a small motor and four wheels. This powerboard is controlled via a handheld throttle cable-connected to the motor (braking and steering is handled by dexterous weight-shifting and twisting the board). All movement in the arena must be on the boards — no walking or running. Each player wears a colored scarf at his waist, and the object of the game is to collect all the scarves of the opponents before the other team does the same, and reach the upper lip at the perimeter of the arena. It is a special coup to achieve this and manage to keep (or recover) all of a team's own scarves. A trend in this sport is towards younger players (who are quicker and more agile); in fact many planetary leagues require that all of the players be between the age of sixteen and twenty.



Where the gruesome aspect of this game comes in is the special gloves worn by the contestants: reinforced hand-sheathes with 15 cm long claws, used not only to snatch the scarf, but to 'rake' the opponent (usually across the exposed stomach or thigh), injuring him enough to take his scarf and also keep him from taking yours. Players go at each other in strafes from one edge of the the arena to the other (there is a narrow lip of level area around the bowl, just above which the spectators are stacked in tall grand-stands). Hurtling downward in a crouch to minimalize vulnerable areas, they attack and hopefully sweep past each other, snatching the opponent's scarf. Players are not permitted to stop for more than a few seconds on the lip during play, but must continue to sweep across the arena until one team has secured all of an opponent's scarves.

Contestants are allowed to wear armor, including elbow, knee and shoulder pads and a lightweight helmet, but protective clothing beyond that is considered cowardly. Therefore, players often wear shorts and no shirt, soft shoes with good traction, exaggerated shoulder pads and little else. Helmets are open-faced and provide only minimal head protection. Injuries are inevitable, and the abdominal wounds are sometimes serious. Play does not stop when a man goes down, though it is not permitted to hit a down man (this doesn't mean it doesn't happen). When a player appears to be badly hurt, the coach and medics enter and remove him. His scarf(s) are given to a teammate.

It is not considered honorable to take a down man's scarf; one is supposed to wait for him to get up or be removed. Nor is it in good taste to win by killing or completely incapacitating your entire opposing team; the honorable (and more exciting) win occurs when the losers are all still on their powerboards and able to maneuver — although the end of a match sometimes finds the losers bloody, bruised, and unable to walk for days. Since Power Raking is more of a low-budget gutter sport, teams rarely have the funds for more than basic medical attention. Owners replace an injured player rather than spend monits to heal a current one.

As noted, Raking has become immensely popular in some circles in the last five years, centered mostly on the lower-technology planets. It is one of the more exploitive sports, as the preference is for underage players — often orphans or black-market slave youths owned by wealthy promoters — and meets are frequently a center for gambling and other controlled activities. Poor youths on backwater industrial planets desperately compete to be on Raking teams, seeing it as a way to get out of their environment. In some areas Power Raking is illegal, though it flourishes nevertheless underground — sometimes promoted by League of Merchants operatives.

8.32 MEDIA

The history and nature of any society is often best understood not by studying the dry 'factual' accounts of its past, or the 'factual' news reports of its present, but by observing the literature and other arts created through that culture's growth and maturity. The arts of the Fifth Century Terran Star Empire say much about Imperial society.

The single most complete source of any kind of reference information, historical records, literature and the arts is a D.K. Chapterhouse database. The Dia Khovaria maintains at least one Archival Library on every completely settled planet in the Empire, and each library contains the "sum total of human knowledge" (so the D.K. claims). These archives can be accessed (for a fee) by any Planetary Computer network, including sophisticated computer or human aid. Those with a shipboard Mk (10 or higher) computer can even access the database from orbit.

Many other libraries exist, especially on the older Core worlds, and at corporate headquarters, and some are quite extensive. None, however, can compare in completeness with the D.K. collections.

Music

Music in the Fifth Century of the Empire is more varied and diverse than can be imagined. Although the Imperial and most Provincial Courts still enjoy authentic ancient music performed on genuine acoustic instruments, the rest of Imperial society has tastes ranging from semi-sonic flow resonances to resynthesized conceptual reharmonizations. Occasionally, a musical trend will become so pervasive as to sweep an entire province for a few decadays, but it will pass just as quickly.

LitGlasses

Available for purchase or rental at many locations, these are 'books' optically stored on small crystal squares about 5 x 5 x 1cm. The data cannot be altered once encoded (they can hold up to about 200 megabytes of data, though most have considerably less) and the 'glasses' are almost indestructible. They are readable with portable viewers or consoles.

HoloVids

Also stored in glass squares, these vids can either be reproductions of ancient 2-D videos or three dimensional holographic videos. Either can be viewed with a portable viewer, though a console model is suggested for the full effect of a holovid.

The more sophisticated ones are interactive setups in which the viewer is connected to a computer/interactor, and 'enters' the video, allowing him to interact with the characters and seem to move about a three-dimensional, very realistic setting without ever leaving his autocontour chair. The difference between interactive vids and the DREAMgame below is that someone viewing an interactive vid is always cognizant of his immediate surroundings (chair, vid controls, headset) and though the sounds and holographic display are very realistic, it isn't 'real', being externally created.

8.33 MIND ALTERANTS

A variety of mind-altering substances and devices are available, from the mild stimulants like Jirolene to the DREAMgame (Direct Response Environment Actuator Matrix), which is illegal but still widely used on the black market. A few are discussed here.

Electronics

In the year Imp. 461, an unnamed biotech corporation developed a device as unique to history as the role it was destined to play — the (Direct Response Environment Actuator Matrix) or DREAMgame. In layman's terms, the DREAMgame "places" the user in a hallucinatory reality (the parameters of which are programmed into the matrix) and creates sensory input (via electrodes connected to the temporal lobes and fingertips) which corresponds to the user's own responses. In addition, the matrix can dull or sharpen neural competence in specific areas of the brain, allowing alien "mind-sets" to be temporarily superimposed. The result is a total sensory hallucination in which the user may consciously interact. For two years DREAMgames were manufactured in abundance (carefully monitored by the Technology Ministry of course). Not only popular for recreation, the uses they presented for training put them in high demand. Eventually pirated version and then entirely new innovations, appeared. This boom period ended in Imp. 463, when Imperial researchers informed His Majesty of two recently discovered facts: one, that severe psychological dependence frequently occurs amongst DREAMgame users, occasionally accompanied by even more serious neuroses; and two, that an as yet small but slowly rising percentage of regular users were showing signs of increased psionic ability. This increase was first and most easily spotted in registered Telepaths, but psionic research soon showed that even non-Telepathic gamers developed an increased ability to defend themselves against psionic intrusion. As a result, production, maintenance, distribution and ownership of DREAMgame systems was declared illegal for all but authorized Imperial researchers. Needless to say, this legal action had little effect on the already established black market, now dominated by League of Merchants operatives.

There are numerous variations on the DREAMgame, and other electronic sense altering devices too numerous to mention here, most are unreliable, and many are very dangerous.

Drugs

A few of the more popular recreational drugs are mentioned here; a more complete drug list can be found in the Technology Book. All such drugs are produced in 'tabs', 1cm diameter discs which adhere to the skin and slowly infuse the drug into the blood stream at the correct rate. When infusion is complete, the tab drops off. Tabs are adhered by a Medtab applicator, available in a variety of designs.

Jirolene: A mild stimulant that aids in wakefulness and alertness.

Gorteline: (Sold by one company as *Hyperdrive*) Lasting about an hour, Gorteline produces a somewhat euphoric, energetic effect. It is psychologically addictive and restricted.

Rebillis: Reputedly allows a character to "see a few minutes into his future". The drug is not addictive, but is also very unreliable.

Mirandil: (Marketed by one company as *Musalof*) a depressant, it creates a mellow, reflective mood for about five hours.

Teledrine: A difficult drug to obtain and totally illegal in many provinces, Teledrine increases the effectiveness of psionic endeavors by Telepaths and Semi-Telepaths. It is sometimes used by Truthsibyls of the GCH.



9.0
THE IMPERIAL GOVERNMENT

"Liar!" spat Sibyl Olvana Giovanyn, her long-nailed finger stabbing through the air. The elderly target of her accusation, Cardinal Aurelis Nogia, showed no reaction but a tiny smile at the corner of his thin lips. Both stood bathed in the monochrome light of Terra's large moon, motionless for a frozen moment on the large palace balcony, though the Truthsibyl's diaphanous robes billowed hypnotically in the evening breeze. Inside through the huge tinted-glass doors murmured a reception of several hundred people.

Cardinal Nogia clasped wrinkled hands under his embroidered vestment surcoat. Grinning lines fanned around his blue eyes as he licked his lips. "My dear Olvana, perhaps your talent has escaped you! Or is it your sanity? You dare accuse a Supreme Cardinal of the Dia Khovaria of speaking falsely?" he smiled then, the way he always smiled: a humorless, calculated, taunting parody of geniality. Cardinal Nogia never did or said anything uncalculated to the last percent of probable reaction.

Sibyl Olvana Helene Giovanyn, High Truthsayer of the Galactic Court, curled her trembling finger to join the others in a tight fist. Although she appeared to be of early middle-age, she was in fact well over one hundred solar years old, owing her longevity to her Psionic body mastery (and more than one rejuvenation treatment). Her sable hair, pulled back from elegant features, remained mostly concealed beneath the white hood of her robes. The Psio-prismatic jewels in her earrings glittered with a life of their own, answering to the energy of her mind. "I accuse you indeed, Aurelis, you dotard! Don't you think that we in the Order can pierce your little schemes?" Her words were couched to prick at him like annoying insects — Psionically barbed.

Nogia stepped back and held out his Integrated Circuit amulet as if it would defend him. When he spoke, however, his tone was mocking and unafraid. "Sorcery! Don't try your Mentalist tricks on my mind, Truthsibyl! I have been conditioned against Vocal Control."

"I needn't use Psionics on you, old man." She retorted, sweeping around Nogia on the marble-tiled balcony. "I don't need Telepathy to perceive your pretty plan for House Moskava. You weave your schemes with as little skill as the nets of your damned Tachyon Relays! I understand the Aurigae Sector conduit is down again, by the way."

"Sabotage, as you well know, crone." Nogia snarled.

"Sabotage! Always the cry when your precious communication net fails! How convenient." She allowed herself a victorious smile.

"And well do you understand the convenient excuse, Olvana. Your witchly powers seem to evade you with predictable regularity: when your provincial cronies are on the stand!" The Cardinal's full sleeves furled as his hands punctuated the remark.

Then the balcony door swung open and the discussion was severed. A tall man in glittering robes stood framed in the entryway as light and music poured from the chamber within. His Imperial Majesty smiled. "Ah! My two favorite Ministers! I should have known by the shouting. Please try not to murder each other until after the reception." Then he was gone, and they were alone again.

"He is a fool." Nogia muttered.

"On that we agree." Olvana Giovanyn nodded.

D.K. Datafile 3487 Beta Zed4 Restricted Access
From a conversation in the Imperial Palace
Recorded secretly by Cardinal Nogia

Three branches make up the government of the Terran Star Empire, and though His Majesty wields considerable personal power, the other two groups serve to temper His Will, and assure some semblance of continuity in governing the hundreds of billions to whom He is responsible.

9.1
EXECUTIVE (IMPERIAL) BRANCH

Location: Sol III: Terra

While His Imperial Majesty is indeed the Absolute Ruler of the Galaxy, he requires a vast administration to execute his reign. The Imperial Cabinet of Ministers and a number of Directorates with far-flung offices ensure that His Imperial Will is made known and followed, even to the very Frontier.

9.11 IMPERIAL DYNASTY THRONE

The Absolute Lord of the Galaxy, Supreme Master of the Terran Star Empire, rules his vast realm from Old Earth. His Imperial palace is situated in an area once known as Constantinople, the complex and grounds covering nearly 1000 square kilometers. Twelve other palaces dot the globe, situated in various climates, and visited by His Majesty when He desires a change of scene. Terra's environment has been revitalized since the wanton destruction of the 19th-21st centuries, and much of the planet is parkland or natural wildlife habitat (one of Emperor Typhon IV's few really socially responsible moves).

The Emperor and his family are protected by the Imperial Police Force, each member of the family having a number of personal bodyguards as well as a military unit which accompanies them should they leave Terra or the Sol system.

9.12 IMPERIAL CABINET

All appointed by His Imperial Majesty, these advisory positions actually carry significant power and political clout. In a realm as vast and far-flung as the Empire, a high-ranking government official of necessity is granted considerable authority. To back up this fine theory, the Imperial ministers never travel far from Sol without a sizeable Imperial Starmada task force.

Information Ministry: The Minister of Information happens to be Cardinal Aurelis Nogia of the Dia Khovaria. A D.K. administrator is actually a logical choice considering their unequalled database and communication network.

Defense Ministry: This administrator is responsible for maintaining the Imperial Fleet, supervising new designs and, in general, keeping all threats to His Majesty at bay. The D.M. assigns Imperial observers to the Inner Houses and Minor Clans to monitor their military strength.

Provincial Relations Ministry: Always appeasing the hotheaded Provincial leaders, the P.R.M. must keep friction from igniting into Rebellion.

Justice Ministry: The Emperor's liaison with the GCH, the Justice Minister monitors Court activities. Interestingly, the current Justice Minister is Sibyl Olvana Helene Giovanyn, a high-ranking member of the Order of Truthsibyls. She rarely leaves His Majesty's side, and he has become almost compulsively dependent on her skills. She and Cardinal Nogia nurture a mutual dislike of legendary proportions.

Treasury Ministry: Keeps His Majesty abreast of the status of the Imperial Monit, as well as monitors Imperial investments, shares in MERLOGH, etc. He has a strong voice in the Merchantile League of Great Houses.

Technology Ministry: The Minister of technology is responsible for monitoring all technic advances within Terran Space. Since it is in the Emperor's best interest to control technology, it is widely expected that many developments (and their developers) have met with unfortunate accidents. The Technology Minister is also director of the ISI (see below).

Intelligence Ministry: Exactly what it sounds like, the Intelligence Ministry spies on virtually everyone else in the Empire, including the other Ministries. The I.M. is head of the Imperial Intelligence Directorate (The 'IID').

9.13 IMPERIAL AGENCIES

These agencies, all headquartered in the Sol System, are subject to His Majesty's directives, though administrated on a day-to-day basis by Imperial Ministers or Directors.

Imperial Science Institute: The ISI is not as harmless an organization as it might sound. Although there is an innocuous R&D division and extensive Survey fleet, the ISI is rumored to have a 'Police' arm which arranges 'accidents' for those unwilling to have their technic developments 'managed' by the ISI. A (primarily legitimate) division of the ISI is the Imperial Archaeological Institute, whose purpose is largely to investigate Sianetic Harbinger ruins.

Imperial Intelligence Directorate: Quite simply the most feared agency in the entire galaxy. The realization that the IID is after you is tantamount to an announcement of execution (or worse). At least with VegaPol, one has a slim hope of justice and due process. The IID does not bother with such trivialities.

Imperial Fleet of Starmadas: The largest fleet of starships in the known galaxy; it is the iron fist which holds the Provinces in line. Various task groups and Starmadas patrol the Inner Provinces at all times. Actual ship locations are kept secret, though at least two Starmadas are constantly maintained in orbit around Terra.

Imperial Police (known in some circles as the 'imps'): Not as large or complex an organization as VegaPol, the Imps are little more than an elaborate Praetorian Guard, acting to prevent treason and to maintain the Emperor's personal safety. His Majesty hand-picks and personally supervises this group to assure their unwavering loyalty. They are as a rule large of stature and not too smart, but would give their lives for the Emperor. Rumor has it that most of the Imperial Police corps is made up of Androids and Transhuman I,V, and VII's. (It's true).

9.2 JUDICIAL BRANCH

"It is the customary fate of new truths to begin as heresies and to end as superstitions."

T. X. Huxley
From *The Coming of Age of the Origin of Species*
Terra, Prelmp c. 9775

Location: Vega IV (Valhalla)

This division is technically independent from Imperial control except on the occasion when His Majesty personally intervenes to pardon an accused (this occurs very infrequently). The Vega system was chosen for these essential services because there are a plethora of natural obstacles within the system, namely asteroids, and a close and very dense Oort Cloud, which together make it easily defensible through military force. The hazard-rich system renders large scale naval invasions impractical, since hypershunts too close to the system itself are extremely dangerous to the incoming ship. VegaPol has also set up an unrivaled defensive network in the system utilizing the abundant natural firing platforms and sensor stations. Only Terra is better defended, and only because of an overwhelming military presence. Vega's protection is less ostentatious and yet completely unrelenting.

9.21 GALACTIC COURT OF HUMANITY

It is the Court's function to investigate and adjudicate matters of diplomatic, economic, and criminal dispute between the Empire's territories. Note that, when possible, most Provinces seek their own "out of court" settlements when interfamily disputes arise.

The Galactic Court of Humanity (GCH) and its policing component are located in the Vega system on Vega IV (Valhalla) — thus the name *Vega*Pol, get it? To facilitate fair decisions on the part of the court (which are often dependent on the adjudications of the not wholly trusted Truthsibyls), all evidence to be presented in a given case must be independently confirmed by VegaPol. This is why it is common to find VegaPol detective-monitors permanently attached to the security offices of many Empire territories.

The GCH hears all Imperial crimes (crimes against the Emperor) by individuals, corporations and governments. They will also arbitrate interprovincial disputes at the request of one factional power or the Emperor. Most of the GCH staff is made up of legal experts and clerical assistants who manage the huge volume of reference material which seems inevitable whenever the law is concerned. The GCH main computer is a Cognitive *Archiv IV* (Devon Electronics); memory systems by Wyrm Modus (Clan Yung).

9.22 VEGAPOL

The Vega Police is an 'independent' enforcement organization, linked to the Galactic Court of Humanity and MERLOGH. Vega Police Investigators work closely with the Truthsibyls, who are very helpful in the information gathering process. Just the presence of a Truthsibyl will usually scare truth from an interrogatee; rarely do the mysterious women even have to utter a word. Most of the time, however, Vega Agents are in the field, working undercover throughout the Empire and nearby territories, gathering information and maintaining vigilance. Supporting these agents is a bevy of support operatives on Valhalla providing research information from the infamous VegaPol files (said to be the most complete and potentially incriminating collection of personal dossiers since the D.K. assembled material to blackmail its way into power during the Imperial Consolidation). VegaPol is a little more discrete with its files, however, and rarely employs them except in the rarest of circumstances. Access to VegaPol databanks is jealously guarded.

They are known to be terrifyingly efficient and sometimes brutal — yet they are considered fair and impartial compared to the IID. Their areas of enforcement (and some penalties):

1) Elmonit falsification (actual illegal tampering with Elmonit balances): Selective memory wipe or even termination.

2) Smuggling drugs/munitions/general contraband across provincial territories: less severe, but stiff penalties.

3) Conspiracy to overthrow MERLOGH, the Galactic Court of Humanity, VegaPol, or any institution of the Imperium. Any of these crimes is considered High Treason, punishable by termination only.

9.23 MERLOGH

MERLOGH (MERchantile League Of Great Houses) includes the Central Board of Trade, and is the third arm of the Vega triumvirate. MERLOGH is the Galactic Stock Exchange and much more. As the Imperial Mint, MERLOGH also sets the value of the standard Elmonit — the electronic currency in use throughout the Empire. It also rates each Province's Monit (hard currency) against competing currencies. MERLOGH local offices technically own all Elmonit cards, and the MERLOGH Network adjusts balances and maintains the economy of the Imperium. Although technically independent from the GCH and the Judicial branch, MERLOGH shares the services of VegaPol with the Courts, and locating the Central Banking headquarters on the very secure planet of Vega IV seemed a natural choice. The GCH and MERLOGH are located on separate continents, and do remain fairly detached from each other. The main MERLOGH computer is in fact located on Thor, Valhalla's largest moon — along with a massive TBD uplink/downlink system.

9.3 LEGISLATIVE BRANCH

Location: Sol II: Venus

The Imperial Senate is made up of the Great Houses, each given votes relative to size and power within the Imperium. Inner Provinces, and those which have been allied with the Empire longer, have correspondingly more votes in the Senate. Frontier delegates usually have no voting power at all, but are permitted to attend and speak on matters directly affecting their region.

The Senate (with the Emperor's cooperation) makes the laws that the GCH and VegaPol enforce. Although the Senate has some administrative power, it is very restricted and limited only to general policy legislation. It has some veto power, but the majority required is almost impossible to assemble; what votes the Emperor does not have from allies he can usually acquire through blackmail, bribery, or outright threats. Thus, the Emperor maintains nearly complete political control of his feudal government (not to mention packing the military clout of the Imperial Fleet). The main function of the Senate is to debate minor legal problems and to supervise the operation of MERLOGH and the GCH. The Senate meets once each Imperial Year for a 20-day session.

Provincial titles are a holdover from ancient terminology, and are outlined below:

Duke: The highest grade of Imperial Nobility, held by only a handful of the Inner Provinces.

Count: Second only to Duke, this title reflects a holding of considerable power and scope.

Viscount: Relatively rare, the term Viscount indicates a sizeable holding, though lacks the prestige of Count or Duke. More recent additions to the Imperial fold have sometimes been assigned this title.

Baron: The lowest 'landed' Major House title, baronies proliferate along the Inner Province fringes.

Lord: Somewhat indistinct, this title is often used to designate Frontier Province rulers. One prominent exception is Devon, whose leader Antikythera II chose the name in defiance of the Emperor. The Devonian family head had been Duke for some time, until the Emperor downgraded their status to lowly Thain in punishment for an unsuccessful power play. It is presumed to be only a matter of time before the Devon leaderfully retakes his original title, from Lord to Duke.

Thain: A catch-all title usually applied to leaders of Minor Clans.

Forms of Address

The Emperor is addressed as "Your Imperial Majesty"; and Imperial Heir (Prince or Princess) is "Your Imperial Highness". A Duke is addressed as "Your Grace"; Counts, Barons, Viscounts and Lords are "Your Lordship" or "My Lord." A Thain is merely referred to as "Your Honor"



10.0
PROVINCES OF THE IMPERIUM

The Provinces to be found within, or bordering on, Imperial Space are called Inner Provinces, each of which is ruled by a Royal Family whose roots harken back to the first leaders of the Province in question. The remaining "outer" territories are called Frontier Provinces, the rulers of which are often Minor Clans who wield much less power than the Royal Families. Under the terms of the Empire's Liege Lord agreement, each Royal Family is entitled to field its own Provincial Defense Fleet, train and keep its own soldiery, and mint its own hard currency. But because the Emperor charges regular tithes in proportion to the economic and military strength of a given Province, there is little incentive for a province to become very powerful and a great incentive to hide one's true strength — which is of course a capital crime.

On the other hand, the Minor Clans are outlawed from maintaining private armies and must use the Imperial Monit for interprovincial commerce when needed. Each Minor Clan territory is granted a garrison force of Imperial troops for defense purposes and the Clan is allowed to maintain their own exploration vessels. These expeditionary fleets seldom lack Imperial "observers" or "advisors" to keep an eye on the resource wealth of star systems newly discovered in the Frontier. With the advent of the Province, Family and Clan have created a vehicle for somewhat autonomous states. It is quite apparent that this feudal structure has efficiently extended the realm of the Imperium without the corresponding expenses.

Some of the more prominent Inner Provinces are briefly touched on below. They by no means represent all of the Inner Provinces, but are given as examples and for reference purposes. Dates provided next to a given ruler indicate the period of reign.

The motives and allegiances of these Families are mutable and are never absolutes. They are not even necessarily accurate, being only the generally perceived attitudes.

AUGUSTUS-HAYES

CURRENT RULER: Count Brandon Kothus Tyreus Hayes VIII (Imp. 463 —)
HOMEWORLD: Alpha Virginis [-23X-40Y-55Z]
POLITICAL ALLIES: Carlisle
OPEN ENEMIES: ?
GENERAL COMMENTS: Considered by some to be a relatively 'backwater' province, Augustus-Hayes is indeed far below the galactic plane, and in a sparse quadrant. This is fine for Count Brandon, who works to maintain a low profile for his house. Being a neighbor to Countess Alana, he sees anonymity as preferable to becoming an unwilling acquisition.

CARLISLE

CURRENT RULER: Duke Preston Toren Carlisle IV (Imp. 458 —)
HOMEWORLD: Aldebaran V (Oreign) [+6X+12Y-39Z]
POLITICAL ALLIES: Devon, Jade-London, Augustus-Hayes
OPEN ENEMIES: None
GENERAL COMMENTS: The Carlisle family has a centuries-old reputation in the Imperium for being "a bunch of really nice guys." As such, they have earned the disdain of many other houses. Devon, and Jade-London especially stay on outwardly friendly terms with Carlisle while remaining always on the alert for a way to take advantage of them. However, the Carlisles — while honest — are not stupid. Their intelligence divisions are as good as anyone's, and they have foiled a number of attempted overthrows, assassinations, and other, more subtle attacks. The Carlisle citizenry is largely of western Europen decent.

COLOS

CURRENT RULER: Lord Kibakee Colos I (Imp.469 — 471)
Lord Alexander Telax Colos IV (Imp.471 —)
HOMEWORLD: Gamma Vulpeculae IV (Orpheus) [+4X+40Y+14Z]
POLITICAL ALLIES: ?
OPEN ENEMIES: Devon
GENERAL COMMENTS: Colosians have a well deserved reputation for unsubtle aggression against their enemies; they are not known to be nice guys. If they could, they would pull every sneaky, underhanded trick possible to thwart their opponents. Unfortunately (for the Colosians) they aren't that clever; usually their plots end in embarrassing failure. While varied, the peoples of House Colos are mostly of Slavic origins.

DEVON

CURRENT RULER: Lord Yama Pythagor III Devon (Imp.460 —)
HOMEWORLD: Delta Cassiopeiae VI (Karoline) [+32X+30Y+11Z]
POLITICAL ALLIES: Jade-London, sometimes Carlisle
OPEN ENEMIES: Colos
GENERAL COMMENTS: Although certainly not altruists, the Devonians are probably among the least corrupt of the Major Families. Recently, House Devon has suffered a number of setbacks and Lord Yama is fighting to put down several minor uprisings. His Imperial Majesty is watching these proceedings carefully, perhaps with an eye towards restoring the house's Ducal status. Devon lost its rank in Imp. 302 when Duke Butara I made an unsuccessful coup attempt. Since then, House Devon has recovered nearly all of its privileges and is one of the most powerful Inner Provinces. Should Lord Yama manage to put down these troublesome uprisings, he is likely to regain his royal title.

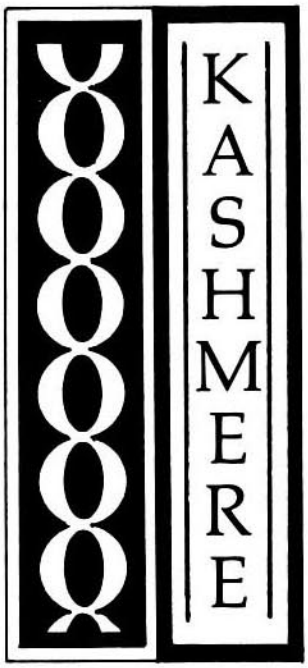
HULUGU

CURRENT RULER: Baron Teril Langdon Sirood Hulugu I (Imp. 441 —)
HOMEWORLD: Regulus V (Regula) [-48x+31y+27z]
POLITICAL ALLIES: Moskava
OPEN ENEMIES: Kubischev-Lloyd, Jade-London
GENERAL COMMENTS: One of the original Inner Provinces, Hulugu has declined in prominence somewhat since its inauguration. The House still maintains a respectable MERLOGH stock, however, primarily due to its massive mineral wealth. Hulugu maintains ties with Family Moskava, but Baron Hulugu (and perhaps too many of his predecessors) is willful and independent, sometimes to the point of recklessness. Hulugu is frequently antagonized into foolish aggressions by the Jadists (who never tire of taunting a dumb animal), and is considered by many to be the only House to exceed Colos in sheer political stupidity.

JADE-LONDON

CURRENT RULER: Count Matthew Daniel Jade-London VI (Imp. 463 —)
HOMEWORLD: Alpha Volantis III (Lamaraine) [+45x-19y+3z]
POLITICAL ALLIES: Devon, Carlisle, Kubischev-Lloyd
OPEN ENEMIES: Colos

GENERAL COMMENTS: Like the Colosians, the Jadists frequently stoop to underhanded means to get what they want. Unlike the Colosians, the Jade-London operatives are frequently intelligent, clever, and creatively devious individuals. Their hands are always clean. Jadists are generally loyal to their friends (space help their enemies). Not surprisingly, (from the name) the Jade-London citizenry is for the most part Anglic in descent.



KASHMERE

CURRENT RULER: Duke Caitlin Pliny Bently Kashmere II (Imp. 462 —)
HOMEWORLD: Astra I (Olympus) [+47x+9y-49z]
POLITICAL ALLIES: ?
OPEN ENEMIES: Colos
GENERAL COMMENTS: A relatively new force in the Empire, Kashmere has recently attained Major House status and is quickly consolidating its political and military position. They have a much higher percentage of Telepaths than the Imperial average, apparently due to their protracted isolation and mutation. Kashmere is actually a coalition of six system-clans which — because of their mutual heritage and common interests — have united to create a single, formidable political unit. The Kashmerian origins are mixed, but were originally dominated by Nordic and Middle-European peoples.

KUBISCHEV-LLOYD

CURRENT RULER: Baron Kevin Ilianovich Skakis Kubischev-Lloyd (Imp. 463 —)
HOMEWORLD: Eta Pavonis IV (Urkusk) [-10x+59y-13z]
POLITICAL ALLIES: House Jade-London
OPEN ENEMIES: Houses Hulugu, Moskava, occasionally Devon.
GENERAL COMMENTS: One of the less prominent of the Houses Major, Kubischev-Lloyd owes its continuing existence to an alliance with Jade London. The families have a common heritage and Count Matthew and Baron Kevin are personal friends. The Jadists and Lloyds often cooperate in schemes to thwart House Hulugu plots.

LeGRANGE

CURRENT RULER: Marquis Nicholas Hishiiir LeGrange (Imp 439 —)
HOMEWORLD: 117 Phoenisis (New Charon) [21x-49y12z]
POLITICAL ALLIES: Thaan
OPEN ENEMIES: Jade-London, Carlisle, Devon.
GENERAL COMMENTS: LeGrange is somewhat of a bumbler; a lesser heir to what was once a pre-eminent house. Only by his association with the powerful ThaanComp Corporation (of House Thaan) has he held on at all. There are rumors of his alliance with the League of Merchants, but he has so far escaped prosecution.

MOSKAVA

CURRENT RULER: Countess Alana Channing Circe-Leonova Moskava II (Imp. 435 —)
HOMEWORLD: 61 Ursa Majoris III (Aldomaine) [-24x+2y+32z]
POLITICAL ALLIES: Hulugu
OPEN ENEMIES: Kubischev-Lloyd, Jade-London
GENERAL COMMENTS: If anyone is more wily and clever than the Jade-London Intelligence corps, it is Countess Alana Moskava. The venerable matriarch for nearly 40 years, Countess Alana has masterminded innumerable schemes against her political rivals, and has precipitated the fall of more than one Provincial government. She has survived dozens of assassination attempts and punished the (suspected) perpetrators with brutal retribution. The Moskavian Intelligence Ministry has amassed considerable 'personal' data on virtually every significant personage in the Empire, and Countess Alana is not afraid to use it. The Emperor spends considerable time monitoring her activities — wary of her powerbase and concerned that Alana Moskava might have designs on the Imperial throne. The Moskavan population is almost entirely made up of Slavic peoples.

STRUIN

CURRENT RULER: Count Alistair Jordan Struin (Imp 455 —)
HOMEWORLD: Arcturus III (Kowloon) [-25x-17y-11z]
POLITICAL ALLIES: Carlisle, Augustus-Hayes
OPEN ENEMIES: Moskava
GENERAL COMMENTS: Count Alistair came into power rather abruptly at the assassination of his father. He has, however, pulled his once-powerful province together, and is in the process of rebuilding what was once one of the pre-eminent trade empires in space. House Struin is a mixture of Oriental and Anglic origins.

THAAN

CURRENT RULER: Duchess Zirina Ophesia Thaan (Imp 445 —)
HOMEWORLD: Theta Herculis III (Osara) [-6x-40y+24z]
POLITICAL ALLIES: LeGrange, Colos
OPEN ENEMIES: Carlisle, Devon
GENERAL COMMENTS: Zirina Thaan is a clever and powerful woman, having bargained her way into a position which elevated her from Countess to Duchess just four years ago. She is ruthless and has destroyed many an enemy on the way up. The Thaan citizens are largely of Oriental origin.

TITANIA

CURRENT RULER: Baron Foeg Huronak Titania (Imp 385 —)
HOMEWORLD: Omicron Lacertae IV (Titan) [27x-47y45z]
POLITICAL ALLIES: Colos
OPEN ENEMIES: Jade-London, Moskava
GENERAL COMMENTS: An obscure Inner Province, Titania has always been on the periphery of political power in this Empire, while maintaining a certain stability. Titania's current advantage is the marriage of Baron Foeg's daughter to Emperor Modestinus III.

11.0
OTHER ORGANIZATIONS

"They [corporations] cannot commit treason, nor be outlawed, nor excommunicate, for they have no souls"

Sir Edward Coke
c. PreImp 10,015

When the Empire formed nearly five centuries ago, most of the megacorporations were already pseudo-political bodies, controlling entire solar systems and populations. Many represented themselves in the ill-fated Terran Federated Democracy. With the Consecration of the Imperium, they were transformed into 'legitimate' governments. However, there are a few groups which exist as pure corporate entities. They either came to prominence after the Consecration, were too small to claim Provincial status, or simply wished to remain aloof from the politics of the situation.

11.1
DIA KHOVARIA

Turning and turning in the widening gyre
The falcon cannot hear the falconer;
Things fall apart; the centre cannot hold.

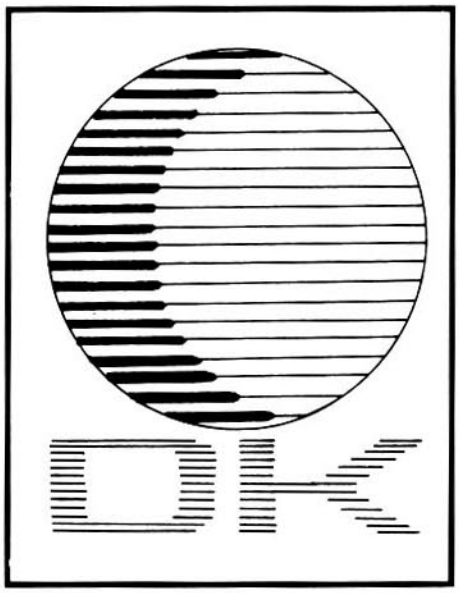
W. B. Yeats
Terra, PreImp c. 9730

Location: Hanaan IV (Hannan) [33x0y-10z]

Otherwise known as The Church of the Word, the Holy Tabernacle of the Word, or simply The Church, the Dia Khovaria is one of the largest independent organizations in the Empire, and is officially sanctioned by the Emperor.

The D.K. was at one time a religious organization which traced its roots to pre-technology Terra. During the dark times before machines (according to the Khovarian claims), humans actually manually copied information from speech, writing with their hands. The houses of the Tabernacle held the only real data archives anywhere, and it was to those libraries that anyone seeking information would go. Even there the prelates of the Church jealously controlled the dispensation of data, and they released only information which would further the power and authority of their religion (and so also, themselves).

With the coming of certain technic advancements, though, the usefulness of this aspect of the Church was on the wane. They went through a number of revitalizations, but never enjoyed the political sway they held during the Dark Ages of Terra. One such time was the Universal Technological Recession, when D.K. archives were among the few data storehouses to survive.



Within a few hundred years after the development of the Hyperdrive engine, however, the Church had all but collapsed — the victim of humanity's diversity and headlong rush to the stars.

In PreImp 1076 all this changed. The Tachyon Beam Dictor, a nearly instantaneous sublight communications system, was invented. With a range of only about 50 light-years, it required an extensive network in order to be truly effective. The Church was a party to the coalition which developed the device, and recognizing the potential significance of combining an instantaneous communications system with their vast data storehouses, moved quickly to consolidate a leading position. Calling in their debts from the many who depended on D.K. data after the Technological Recessions, they bargained their way to a decisive edge in TBD development. Though they could not secure a monopoly, they had considerable lead time on all competition, and risked all of their resources to set up the most complete Datanet possible.

The hierarchy of the Tabernacle was ambitious, and more clever than most would have thought. For several hundred years they played one faction off of another, regaining power and authority. Now they have evolved into a virtually secular group, dealing in information as a religion and commodity, while developing their own massive database.

To this day *Access Tachyon Technology* — a division of the sprawling Church organization — is recognized as the leader in communications and data commodities. The Imperial Executive Division uses them exclusively. The GCH utilizes local groups and independents in what some consider a calculated snub of the D.K. This isn't surprising considering the cool relationship between the Truthsibyls and the Church.

The organization is also frightfully efficient and politically powerful. Their 'research' agents regularly make fools of Provincial and Imperial operatives by their expertise. The D.K. denies fervently that they even have an intelligence arm, or that the fabled "Tabernacle Police" really exist.

11.11 DIVISIONS OF THE D.K.

The Church is divided into several components, all controlled by the Khovarian Curia.

Curia Headquarters: located on Hanaan IV, it is the home of His Holiness the Reidyr (the Chairman of the parent company and supreme head of the Church). It is also the meeting place of the Cardinals (company presidents and directors).

Access Tachyon Technology (ATT): The group responsible for operation of the Tabernacle Datanet, the Imperial Tachyon Beam relay installations which connect the Empire in a faster-than-light communications system. They also operate the related courier/paging system which allows TBD messages be carried from terminal to final destination. The acronym was deliberately chosen in tribute to a semi-mythical group which reputedly pioneered the tenets of the D.K. in the Dawn Ages of Technology.

Tabernacle Central Archives: The branch which administrates the databases and 'libraries' of information, found on all Provincial Homeworlds. Archives are usually supervised by a Bishop or Archbishop in conjunction with a Church Diocese.

Tabernacle Police: This group really does exist, though it is not the terror it is made out to be. Tabernacle Police spend most of their time investigating TBD interference and other attempts to defraud or defame the D.K. Their enforcement powers are very limited, but they are said to work in cooperation with the IID. They do not get along well with VegaPol.

Tabernacle Research Agency: A much more secretive and formidable group than the Tabernacle Police, TARA is ostensibly a benign investigative division, their sole purpose — the acquisition of new data for the Church files. Strictly speaking, this is true. However, TARA operatives are possibly the most highly trained and best equipped intelligence agents in the Empire. Many are Telepaths, and all are trained in such unusual skills as unarmed combat, trickery, and propaganda. Their purpose is indeed to gather information of all kinds, although sometimes the desired information — as well as the gathering method — is highly unusual.

Church Diocese: The Church has divided Human Space into administrative areas (often corresponding to current political units such as Provinces) which it calls *diocese;* larger or more important ones are *archdiocese.* Diocese Chapterhouses are regional headquarters which frequently house databases and TBD relay administration as well. A Bishop controls the database and all D.K. operations within his diocese, and has free access to the ATT network. Nary a Provincial Lord has turned down a Church request to place a Chapterhouse on their Homeworld, though some barely conceal their dislike for the powerful organization. Some Provinces — and of course the Emperor — work closely with the Church and have benefited from D.K. information-gathering facilities.

11.12 SYMBOLS OF THE D. K.

The Dia Khovaria remains — at least outwardly — a very arcane organization. They retain the ornate vestments and rituals of their distant origins — though some rituals have been adapted to suit their current organization.

The uniforms of the Church are briefly summarized below. In general, they are full, flowing robes which sweep the floor. Monk's robes are hooded and tied at the waist by a simple tool belt, while the upper echelons often wear small skullcaps of a color to match the robes, which are more fitted than the loose monk garment.

The Reidyr: Wears only white with silver or gold trim. He carries a staff of pure silvery alloy.

Cardinal: A Cardinal wears scarlet robes and a small red skullcap. Each Cardinal has a unique, large, ornate amulet which indicates his division in the Church. Most Cardinals reside on Hanaan or their Division Homeworld.

Archbishop: This most powerful regional authority has robes which are primarily purple, but the style varies with the Archdiocese. They also wear skullcaps and have distinctive amulets. Their area of authority is usually an entire province or Imperial Sector.

Bishop: Men of this rank wear pale blue. They administrate a planet or Minor Clan.

Monsignor: Monsignors are often personal aides to Cardinals or Archbishops. They wear black trimmed with scarlet or purple (depending on which prelate they serve).

Priest: Wear black robes trimmed in white and decorated with a colored surcoat which indicates their division. They wear no cap or hood, and their function is essentially support and lower bureaucracy. Highest ranking priests are in charge of TBD relay stations.

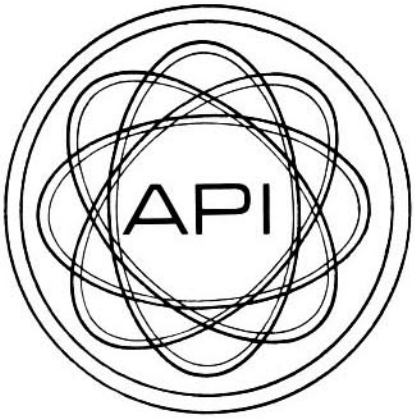
Monks: The vast majority of this all-male institution is made up of Monks (and monks in training: *Novitiates*). The standard color is a featureless black habit with a dull grey web belt. The robes are voluminous and flowing, has full sleeves and a deep hood, and is designed to be unencumbering but capable of concealing a number of devices. Novitiates wear white, while TARA monks have grey habits.

Church officials are properly addressed in the following manner: The Reidyrr: "Your Holiness", Cardinals: "Your Eminence", Archbishops and Bishops: "Your Grace" or "Excellency," Priests: "Reverend Father" or "Father", Monsignor: "Father", Monks are addressed as "Brother".

Every member of the Church has an *Integrated Signet* ring. This device is a means of identity verification (sort of an ident disc for internal Church purposes), and every ring is keyed to its wearer. Each is encoded with appropriate security clearance both for entry into certain facilities (in this capacity it functions as a sophisticated electronic key) as well as access to the various classified levels of data.

The rings of the upper hierarchy (Bishops and above) have an additional feature not known to outsiders. Each is a combination microcomputer/brain pattern scanner. Through the ages the Church has insisted upon maintaining the ritual in which, when one meets a prelate, the prelate's ring is touched to the forehead. With the sophisticated rings, a church member can record the brain wave patterns of officials they deal with regularly and so covertly confirm that official's identity at every meeting.





11.2 API (Andrium Producers of the Imperium)

Location: Sol IV [0x0y0z]

Formerly the *Andrium for Science League*, the API owes its continuing existence to one thing: a monopoly on Andrium production. Without this material, interstellar travel would come to a complete standstill. API is a production cartel and distribution company, protected and monitored by the Emperor but in many ways, an independent corporation. They have thwarted countless plots to undermine their monopoly, both through theft of the secret and outright destruction of their production plants.

The question arises: If Andrium is necessary to FTL travel, how can API really have a monopoly on Andrium production while other races known to the Empire are also capable of FTL travel? Where did they get their fuel to perform the necessary protracted research, and how do they continue to power their craft?

The answer is multifold. The actual, closely-guarded truth is that Andrium does occur naturally in very specific environments. Such material is very rare and requires processing before it can be used in most starship reactors. Additionally, it is clear that *homo sapiens* were not the first to create Andrium (or a corresponding material). There is nothing to stop another technically advanced race from developing the material. Pirates also haunt system perimeters, hoping to snare an unwary merchant vessel and take its Andrium supply. Also, the API will sell to just about anyone with viable cash, whether they are allied with the Imperial government or not.

11.3 VIRTUAL HUMANATRONICS

Location: Jym-bob 77 VI [+8x-54y-45z]

One of few interstellar corporations still in existence, V.H. is similar in many ways to a small Inner House, though they shun any such comparisons. The company director has always politely declined the offered Imperial Senate seat, choosing to operate exclusively on economic power. Indeed, Virtual Humanatronics has produced android molecutronics of unequalled quality for over six thousand years. Of course, current technology, even with the numerous setbacks and near-disasters of the Technological Recessions, bears little resemblance to what existed then. Androids were crude and unwieldy machines, subject to bizarre and unpredictable psychological problems. By all evidence, the Imperial Era models are reliable and efficient.

Operating from their remote headquarters on Jym-bob 77 VI, V.H. maintains a stable niche in the Imperial economy. The uninitiated will undoubtedly find the name of the system amusing, but when the Company decided to move from their original headquarters among the Core Worlds and selected a system near the frontier, the reigning director named the star after one of their most reliable early models whose main function was agricultural supervision and machine maintenance. Jym-bob models II through VI were essential to Virtual's economic success. (Model I was not entirely successful).

V.H. produces some high-quality memory storage systems (mostly for the Dia Khovaria and the Emperor, who can afford their prices) but most production and R&D is focused on androids. Several Houses — including Devon, one of V.H.'s biggest electronics competitors — would like nothing better than to see the company vanish. They fear that one day Virtual will decide to apply their abilities to mainstream electronics, dramatically increase production and possibly destroy the market. Recently V.H. took House Kashmere to the Galactic Court of Humanity, charging that Kashmere's subcorporation *Humanadyne* stole molecutronic secrets from V.H. employees' minds. The case was eventually dismissed due to lack of evidence.

11.4 INTRACOM (Interstellar Trade Combine)

Location: Sol VI*n* (Titan) [0x0y0z]

Each province, while capable of surviving on its own if suddenly cut off from its neighbors, would undoubtedly suffer certain hardships. Each of the Inner Houses has developed a reputation for producing the very best of some product or products, and eagerly exports such products to the rest of the Empire. While most of these Houses have their own fleets of commercial vessels, it is often profitable to use an independent carrier and wholesaler. Since the consecration of the Imperium, a number of these Interprovincial carriers have sprung up, and a few have gained megacorporation status.

INTRACOM is also an extremely old organization, dating some millenia into PreImp days. Because of this, it was able to secure a prime territory for its headquarters: Titan, the largest moon of Saturn in the Sol system. (Titan was terraformed during the initial Human expansion, and, in addition to a few elite corporate headquarters it supports a number of exclusive resorts.)

One of the largest interprovincial trade corporations in the Empire, INTRACOM serves all of the Inner Provinces as well as the Imperium itself. Because of its nature and scope, INTRACOM is forbidden to have political affiliations — a lack more than compensated for in its economic strength. INTRACOM deals mainly in nonmilitary technic equipment (as opposed to clothing, food, or rare commodities).

11.5 DeBARTON ENTERPRISES

Location: Beta Hydri II [4x-1y+12z]

Another Empire-spanning trade corporation, DeBarton's deals exclusively in rare and expensive merchandise. Their fast, light trade vessels sometimes are dispatched to transport a single item for a specific client. Scents, jewelry, rare spices and liquors are among their primary cargoes. DeBarton's has officially denied charges that they deal in Sianetic Harbinger artifacts, yet they have been linked to a number of mysterious appearances of such items.

11.6 LEAGUE OF MERCHANTS

Location: Omega Agenus V*a* (Starhaven) [-24x-5y+10z]

A Secret Report to League Council, Starhaven

SUBJECT: *Imperial Archaeological Institute Survey 29776759045-ZH-745*

SUMMARY: *It has come to the attention of the Council that the IAI has discovered a Sianetic Harbinger installation of surpassing importance in Sector Omega Serpentis. Investigation has revealed that a find has indeed been made and the IAI is in the process of exploring the main site on Planet III of system Delta Cultho. Further study of IAI files was not feasible at the time of this report; however, interviews of some IAI operatives has revealed that an operational installation has apparently been entered, and that several intact technic artifacts as well as functional cryogenic units have been discovered.*

RECOMMENDATION: *Send a League Acquisition Force immediately to Delta Cultho III, seize all records and artifacts, and nullify IAI staff on-site.*

In any capitalistic society there are not only the huge corporate trade networks competing with each other in the large, high-profit fields, but also the independent merchantmen, scavenging a subsistent living on the cargoes too small to be worth a megacorp's trouble. These 'free traders' often engage in marginally legal (or indisputably illegal) runs in order to turn a profit, and as such, find themselves always dodging Imperial and Provincial security troops — not to mention VegaPol.

Many of these traders are allied in a loose association which bears the name *League of Merchants.* A number of the upper echelons of the League are located on the independent world of Hyperion IX in Devon Province, as well as Palenque IV (Tikal). Others are scattered throughout the Empire. The League coordinates a number of illegal activities, including drug smuggling, gunrunning, interprovincial espionage and sabotage.

There are myriad legends surrounding the League; its origins predate the Empire, and some say it existed even before the entrance of Terran Man into space (although its present membership is dominated by Humanoid species). The League has even inspired countless sensationalist Holovids, most of which paint the Mythical League as a powerful, evil organization bent on the downfall of the Good and Just Empire. (Of course, the Empire is not painted as evil, for fear of censorship and/or arrest of the writers and producers.) His Majesty is usually not amused by what can only be considered treasonous propaganda. In truth, the League is not as evil as it is sometimes portrayed, but neither is it a righteous band of do-gooders rebelling against an oppressive empire. The League of Merchants is essentially a parasite (keeping in mind that some parasites are actually somewhat beneficial to their host) and, like any parasite, it is not in its best interest to kill the host outright.

At the center of the League of Merchants is the *LeagueCouncil,* a body of semi-autonomous heads of illegal empires, most of whom are also leaders in legitimate corporations or clans. Although each LeagueMaster or Mistress operates independently, they meet to coordinate an occasional large effort, and to avoid getting in each others' way. (Of course, a LeagueMaster might decide on his own that another Leagueman is "in his way" and dispose of the obstacle.) The meeting-place of the LeagueCouncil and the center of League activities is the place known only as *Starhaven.*

The location of the headquarters of the League of Merchants is one of the best-kept secrets in Human Space. Just mentioning the name is enough to evoke fantastic tales from Independent Traders who claim to have been there at some dark point in their careers. Not situated on a planet at all, Starhaven is actually a large and very ancient space station, a huge artifact of one of the younger Sianetic Harbinger races, orbiting a white dwarf in a dead solar system. This alone has helped to confuse any search, and it is only the beginning.

Apparently, not so long ago (in stellar terms) the dying sun *Omega Agenus* novaed. The explosion threw off much of the star's mass and collapsed the remainder into a white dwarf. Starhaven was in the shadow of the planet it orbits and was spared the full fury of the destruction. That, combined with its still-operational deflectors, spared the already long-abandoned station. The expelled stellar material created a nebula about the system, clouding the star and its six planetary children (now all blasted cinders) from accurate analysis.

The secret of Starhaven's location continues to be protected via the use of code-locked coursetapes, which cannot be duplicated or read. The tape is fed into a ship's navigational computer and the trip is completely automated — including two or three out of the way jumps to mislead passengers about the distance and location of the base. Once visitors have arrived at the Omega Agenus system, they are within the dense, hazy nebula where very few stars can be made out through the beautiful violet cloud without careful study. Before a thorough analysis can be made, any unwanted intruders are invariably dispatched.

Starhaven is itself — as previously noted — an ancient space station, apparently intended to function in a manner similar to current Imperial Instations. In design, however, it differs radically, being torus-shaped with a spherical core which holds the main docking bays.

12.0 RENEGADE HOUSES

"We thank His Imperial Majesty for his kind offer of membership in the august Imperial Fellowship. Unfortunately, however, the Aquataine Government is forced to decline. We do not believe that such membership would serve the best interests of our people, for the empire clearly does not serve the interests of its own citizenry...

"As with a realm on Earth itself long ago, it has become apparent that the Empire has always been disinclined to recognize human nature."

Excerpts from
"The Provincial House Refusal Speech,"
Aquataine President Kaliv Duram II

Although the Terran Empire is clearly the dominant force in this corner of the galaxy, other political entities do exist. There are a handful of Renegade Houses — groups which refused to cooperate in the Imperial Drive — which the Emperor has not gotten around to squashing.

While there are no doubt countless humanoid groups scattered throughout space, (records of their journeys lost in the Recessions of mankind) there are a few corporations which have more recently fled the fold. When the Terran Federated Democracy began to disintegrate they soon saw the way things were going. Realizing that their political and economic strength was not up to finagling positions in the new Empire, the corporations fled the tyranny of the Imperial Fleet.

Since that time a few Houses, initially consecrated with the Empire, have also seceded. Most of these organizations have been liquidated; a few survive, either through subterfuge or enough military power to dissuade what would prove to be a long, profitless campaign by an Imperial Starmada.

12.1 AQUATAINE COMMONWEALTH

GOVERNMENT (RULER): Republic (President Leland Iarius)

HOME SYSTEM (PLANET): Cera, +201z, Frontier Zone 9 (Aquataine)

A contingent of the shattered Terran Federated Democracy was unwilling to cooperate with the Imperial drive, and, seeing that their only alternative was exile, fled to the northern fringes of the galactic plane. There they located a suitable Homeworld and set up a representative government, determined to prove to the "damned Imperialists" that a democratic government would work on a large scale.

The Commonwealth has not fared as well as the Imperium in the last several hundred years, primarily due to a lack of manpower and available habitable worlds. In technology they rival most Imperial Provinces, and it is rumored that the quality of life in the Aquataine Commonwealth is actually significantly better than the average in the Empire. It is also suggested in some circles that Aquataine owes most of their technical knowledge to House Jade-London, which is near the Commonwealth border and is said to trade with them (an activity declared illegal by the Emperor). There is no proof of course; the Jadist's hands are always clean. Despite their hardships, however, the Commonwealth has spread to encompass a dozen star systems and their star fleet, though small, is not to be taken lightly.



Aquataine is a basically peaceful nation, though fiercely independent. Once, in Imp. 154 the Emperor sent a task force to Aquataine and "offered" the President membership in the Imperium as an Inner Province. The task force was destroyed but for one ship, which the President sent back with a message, reportedly telling the Emperor what he could do with his Provinces. The offer has not been renewed, and the Emperor awaits a time of relative peace in which he can afford to send a real fleet to Aquataine and teach them a lesson.

12.2 TAELONS

GOVERNMENT (RULER): Monarchy (Tarius IV)

HOME SYSTEM (PLANET): Gamma Arietus, +113Z, Frontier Zone 3 (Taetalus)

Very little is known of the Taelons, though Imperial Intelligence suspects that they are capable of producing very high quality Alterant Replicants. In fact, one theory is that the entire race is composed of "renegade replicants", warped genetic descendants of the original colonists. Most reasonable people dismiss this as an overly paranoid and romanticized theory. The few documented contacts with Taelons describe them as very charismatic, attractive beings, though they have refused to accept Imperial Sovereignty. Their remote location, strong planetary defenses and small, stealthy ships have al-lowed them to remain independent thus far.

12.3 ATHION

GOVERNMENT (RULER): Oligarchy (Five Planetary Governors)

HOME SYSTEM (PLANET): Athys, +41z, Frontier Zone 6 (Aurelin)

The Athion Confederation is considerably smaller than the Aquataine Commonwealth, and is in real danger of being absorbed by the Empire. In fact, if the Colosians had not bungled the takeover so badly, they probably would have been subjugated long ago. The Emperor has become impatient and may soon give the Jadists or Devonians a crack at it.

Made up of five systems, the Athions are descendants of an Earth colony launched thousands of years ago. Their original Homeworld was Athys IV, and they have since spread to four other stars. Being stubborn and independent, the Athions quarreled amongst themselves and eventually broke into the five independent states. They remained aloof from the Federated Democracy, and would prefer to avoid the questionable overtures of the Empire.

Various Athion worlds have been linked to the League of Merchants; some even believe that Aurelin is the League headquarters. This remains to be proven. (It is in fact untrue, of course. See the section on League of Merchants.)

13.0 NON-HUMAN RACES

Although Mankind has effectively dominated his little corner of the galaxy (for the time being), other intelligent species exist besides *Homo Sapiens*. Here is a selection of others.

13.1 HOMINOIDS

Hominoids are beings who resemble humankind either superficially or genetically. Some are simply further along the evolutionary scale by random selection and environment (Neohumans), or via scientifically directed breeding (Transhumans). Others are mutations (Telepaths and Humanoids) or manufactured artificially intelligent 'synthetic persons' (Androids). Some are the product of direct gene alteration and adjustment (Alterant Replicants), and others — who have turned up on planets other than Terra — are clearly the result of seeding by the Sianetic Harbingers. Two mentioned below may indeed be more closely related to the 'Old Race' than man.

As archaeological work progresses on various former homeworlds of the Harbingers, it becomes increasingly clear that they were humanoid to a high degree, and that they not only 'seeded' humanoids on many planets, but engaged in a variety of genetic and psycho-environmental experiments with many of their seedling cultures. Thus the resulting plethora of humanoid-inhabited planets in various stages of development.

13.11 TELEPATHS, NEO-HUMANS AND HUMANOIDS

Civilized Man, now about twenty thousand years old, has changed little, physically, throughout his history. True, he is a little taller, more physically fit, lives a little longer, and can have children somewhat later in life, but these changes are minor when compared to how his mind has developed. The average man is now capable of retaining a greater amount of what he learns due to the spontaneous mutations which have affected the evolution of the formation of the brain. There are now, on average, a greater number of convolutions in the cortex and an increase in the quantity of neural support cells to be found therein. In a few individuals, these changes have sparked quantum leaps in mental facility resulting in the Telepathic phenomenon.

Although Telepathy is not unheard-of in the Imperium, it is still a rare gift possessed by only one citizen in 100 — and 90% of the known Telepaths have only rudimentary skills. All children are tested at an early age, and if they show an aptitude, are offered admission to special training classes, at their parents' discretion. Telepaths who publicize their abilities (e.g., by using their skills professionally, such as in a special Provincial agency) are treated with a mixture of awe and suspicion. "Professional" Telepaths are almost invariably members of a guild or other reputable agency with a code of behavior: no abuse of powers for personal gain , no invasion of another citizen's personal privacy, etc. This parallels other professions, such as medicine. As always, though, there are renegades, using Telepathy as a weapon, and a tool for profit. The League of Merchants is suspected of exploiting Telepaths in many capacities.

A branch of the Imperial Intelligence Directorate (IID) has agents always on the lookout for Telepathic crimes. Punishment for abuses of Telepathy are severe: usually a selective mind-wipe which either dulls or obliterates the offender's powers.

In general, any Telepathic act which probes into or affects another sentient's mind, or has a physical effect on another's person or property is considered criminal. This includes use of Voice Psions except in self-defence. Telepathic communication is not illegal, nor is Psionic transportation. Psions for personal enhancement or healing are also permitted. All Telepaths are legally bound to be "licensed" through an Imperial or Provincial agency, and their Ident Disc carries the data. Practicing *any* act of Telepathy while knowingly unlicensed is also a crime.

Many Imperial and Provincial special forces teams employ Telepaths, and it is widely rumored that those team members are permitted and even trained to utilize offensive Psionic powers.

One of the most renowned Telepath organizations in the Imperium is the Order of Truthsayers (also known as "Truthsibyls"). Invariably women, they have established an order and training center on Alpha Mensae IV. Since their first introduction to the Galactic Court of Humanity in PreImp 27, the Order of Truthsibyls has acquired a mystical, quasi-religious stature. Although they are technically a part of the Vega group (including VegaPol, the GCH, and MERLOGH) they remain pointedly aloof from all political and social alliances. This only enhances their image as absolute mistresses of Truth. In Imp. 79 the Order made members available to Inner Provincial Courts (for a substantial fee, of course), greatly relieving a backlog of cases at the GCH.

Membership in the Order is by invitation from the Truthsayer's Council, based on review of Telepathic testing. Truthsibyls undergo rigorous training before being accredited, ten years of mental preparation in an ascetic environment. Members of the Order wear a gown of pure white under an open, hooded black robe. Their only jewelry is an elaborate golden earring of their office. The earring serves another purpose, the settings being crystalline *Psion Prisms*. Truthsibyls do not marry (though they are known to bear children, mainly to further their Telepathic genes) and are forbidden any but the most superficial ties with anyone outside of the Order. In the history of the organization's existence, never (as far as is generally known) has a member been found to be incorrect at judging truth, nor has a Sibyl fallen to bribery or other corruption.

There have been some changes to man's physical makeup as a result of his colonization of the stars. In addition to a variety of Humanoid variations, there has evolved a "new man": the Neohumans. This term does not imply a 'master race' or other artificially created species; rather this is just a slightly improved version of *Homo Sapiens* which has developed over the past several thousand years.

The various Humanoid subspecies are all the result of environment inducing minor changes in physiology. Bones are shorter and more dense on planets with high gravity; ears, nose and lungs are larger on planets with a thin atmosphere; eyes and skin develop defenses against radiation on planets with bright and/or close suns. These are just a few of the myriad variances which have slowly evolved.

13.12 TRANSHUMANS

Transhumans, being by their very nature 'natural' humanoids, are often indistinguishable from the average citizen. Only the types bred for certain very specific physical attributes (e.g., superior overall strength: huge skeleton and musculature; superior dexterity: long fingers, or additional digits; superior endurance: greater lung and heart capacity) show obvious signs of their specialized breeding. Depending on their genetic history, they possess aptitudes for certain mental or physical tasks, and are invariably guided into that field. Applied Eugenics is not a widespread phenomenon, limited to certain 'clubs' and a handful of Minor Clans where it can be enforced. Transhumans — like Telepaths — rarely advertise their background, for when they do, they are frequently greeted with jealousy and suspicion by their "peers". Only the Transhuman V's consistently flaunt their breeding. Of course, the Transfives are the overall "supermen" gifted in all aspects — including ego. Transfives tend to take the attitude of "Yeah, I'm a Transhuman, *prag* "(slang for Product of RAndom Genetics: an insult often heard in Kashmere), "you got a problem with that?"



House Kashmere is the most prominent example of a large-scale Eugenics program, and any Kashmerian citizen is automatically assumed (accurately so) to be a product of controlled breeding.

13.13 ANDROIDS

First let us draw the distinction between Android and Robot: an Android is built to closely resemble a humanoid (or other racial) being. Androids by the time of the Fifth Imperial Century are so well constructed that a multiscanner (or similar probe device) is required to differentiate their presence from that of a living being. Advances in synthetic materials and molecutronics allow for such luxuries as heat units to warm the skin and pseudovascules to pump fluids simulating blood flow. An Android's eyes and mouth are moist, his body hair is articulated, etc.

Robots, on the other hand, are more specialized, less flexible, and do not resemble living beings in the least. Robots are produced in a number of forms, and their only defining features are that they are usually mobile and possess manipulative limbs.

The best Androids are sentient, and granted full citizen status by Imperial decree. These intelligent machines are allowed such freedom because of the very special nature of their molecutronic brain. A unique, quasi-living organ, the unit functions just like a human brain. When the android is first activated, the cerebellum has been programmed with the necessary autonomic functions, but the cerebral cortex is essentially 'blank.' Basic traits can be programmed, just as genes and early childhood 'program' humans, but beyond these basic tendencies, the brain is self-programming, independent, and self-aware. A requirement of full citizen status for any android is certification of the installation of the *morality program.* This is a standard control, composed of basic Imperial Law and a set of priorities, setting up severe prohibitions against High Crimes (e.g., murder) and mild anxieties against lesser infractions. Such controls are necessary to prevent the creation of Android assassins — a truly terrifying concept. Android production is carefully monitored by Imperial agencies to prevent black market models.

Equal status under Imperial law does not necessarily mean that Androids are actually treated as equals by all humans. Normal humanoids are often insecure when dealing with an Android who they know is potentially much more intelligent, and definitely more physically powerful than themselves. This prejudice is similar to that encountered by Transhumans.

13.14 HUMANOID REPLICATIONS

These beings are the result of direct, artificial gene alteration, "created" beings rather than refinements of a natural process. Genetic material is altered in the laboratory, and the cells are grown (at an accelerated rate) in tanks, creating numerous duplications of the same being (like cloning). Gene alteration is much faster and more certain than Eugenics, and problems can be suppressed, such as too much intelligence, ambition, etc. The original cells are living human tissue, but the genetic memory of the cells has been tampered with.

This possibly subtle distinction is a crucial one in Imperial society. Replicants are generally considered subhuman — at the absolute bottom of humanity's social ladder. The reputation has stemmed from their prime function, which is to do every dirty, disgusting, and immoral job that must be done in a typical human society which humans themselves refuse to do. Most Replicants are laborers, created for menial and personnel-expendable tasks, but the mass Replication centers also churn out armies, recreational harems, and technical worker pools. Replicants are grown 'blank' like Androids, but since their human brain is not as fully understood as artificial Android brains, there is a limit to the complexity of the programming. They are given very strong, specific conditioning, depending on their intended function, and there is very little left after the conditioning process.

Replicant oppression is repugnant; their imaginative facilities are suppressed and atrophied, their speech centers often removed, and the penalties for killing a Replicant are usually trivial. The entire concept is inhuman but the profit and pleasure seekers of the Empire do not maintain a moral viewpoint on the subject because there is too much to gain by using Replicants instead of *real people* for many practical applications.

Nearly all Replicants have a noticeable "dull" expression (the result of their conditioning) which brands them as effectively as the small tattoo which is required to be imprinted on the left temple of all Replicants. Replication science is advancing rapidly, and it is feared that black-market, unbranded Alterant Replicants are being produced, indistinguishable from normal humanoids. These new "smart" Replicants could be living time bombs because of the possibility of elaborately concealed violent programming.

13.15 CHURG

The humanoid sub-race known as the Churg has evolved from what was apparently a Sianetic Harbinger experiment. To all appearances, these beings are completely human, yet they harbor some significant emotional and intellectual differences. Churg brains are conditioned so as to be far more organized than Human brains, and have the capability of near-total recall. Coupled with this is a mental discipline allowing a willful screening of the recall process. As so often conjectured in the past, it has been established that all humans retain full memory of their experiences, but recall is filtered to prevent a paralyzing 'lock' on all negative memories, preventing growth. The Churg mind has overcome the problem.

Not very technically advanced themselves, the Churg have an egalitarian social structure and generally show very little drive or ambition. They are excellent scholars and many have proven themselves as pre-eminent authorities in the social sciences. The Churg have only recently begun to leave their home planet in any numbers, accepting positions as teachers in schools of higher education throughout the Empire.

The Churg reside on a planet in Imperial Space under the direct political control of the Imperium, though Churg internal affairs are self-governed. They have been granted Minor Clan status.

13.16 IDORIANS

Racially the Idorians are so similar to *Homo Sapiens* that few would dispute their common heritage. Clearly they are another "seeding" experiment by the Sianetic Harbingers.

However, these beings refuse to have anything to do with Terran government. They denounced the Terran Federated Democracy, and now take every opportunity to antagonize the Empire. Although currently only inhabiting a few systems, the Idorians are aggressive and possess technology on a par with the best the Empire has. They are notoriously xenophobic, detesting especially other humanoid races (all of which they consider to be inferior). The current Lord of Idor has made it quite clear that he intends to destroy all other peoples in this section of the galaxy within his lifetime. Imperial Intelligence reports indicate that this threat is somewhat overblown, although an all-out war with Idor could be expensive and draining for the Empire. The Emperor is considering a preemptive strike to eliminate the problem permanently. In the meantime, the Idorians are forced to sate their bloodlust by raiding Imperial vessels which stray too close to Idorian Space.



13.17 ALTHA

The exact location of the Altha planet is one of the best-kept secrets of the Empire. Discovered only a few years ago, it is a very likely candidate as home planet of the predominant Sianetic Harbinger Race. Thus the name: *Altha*, after one of the Old Races. One of the favorite tales recounting the discovery of the planet Altha claims that an Imperial Survey team discovered it on a routine mapping trip in Frontier Zone (take your pick) and was drawn to a particular planet by unusual long-range sensor readings. Once in orbit, they detected trace levels of radiation, along with massive readings which indicated the presence of Ordium II. Life-form scans revealed vast jungle-like flora along the temperate zones, with scattered fauna. The poles were quite frozen and the equatorial regions an uninhabitable desert. Ocean covered about three-quarters of the globe.

Landing along the temperate/desert borderlands, the Survey team quickly discovered one of the causes of the bizarre Ordium scans: a huge spaceship derelict, a hulking black saucer three kilometers in diameter. Analysis revealed that the craft's hullmetal was an unheard-of Ordium alloy, considerably superior to Ordium II. Despite the fabulous material — which the crew was unable to even scratch to obtain a sample — the craft was clearly damaged, holed in several places. Further scans picked up dozens of the ships in the immediate area, most completely buried. The planet apparently sported many other such 'graveyards'.

An encounter with the inhabitants was no less incredible. Within a few hours of landing, the crew was met by a group of Altha: three men and a woman, all of late-adolescent age (apparently). They wore only short kilt-like garments and carried spears and what looked like small knives. All had skin like deeply tanned caucasians, with straight blue-black hair no more than four centimeters long. They were humanoid to a very high degree — a bit smaller than average. They were also Telepathic.

The apparent leader of the group, a boy with bi-colored eyes (one blue, one violet; both with slitted irises) stepped forward and touched one of the crewmen — a supposed greeting and method of establishing communication. The natives appeared quite friendly, and the crew soon learned that the Altha society was a simple tribal organization, hunter-gatherers with a very basic agriculture. While they seemed very bright and learned quickly, the Altha were clearly uncivilized, almost childlike — with a few strange exceptions. Their tools were fashioned of extremely high-tech alloys which showed absolutely no wear. The Altha seemed surprised at the team's fascination with their tools and were reluctant to part with them or even discuss where they came from.

Of the huge starship wrecks they refused to say anything. However, they displayed an intense curiosity about the Survey team and their ship. While they would not go inside the craft, they 'hung around' for several days, camping just outside under the trees. When asked about most aspects of their society, they were very open and informative.

The ship captain of course realized the tremendous potential of this find, and in what is supposedly typical Imperial policy, decided to take a sample Altha back with him. However, the moment one of his crewmen laid a hand on one of the boys, the crewman screamed and collapsed — quite dead. The tribe leader coldly informed the captain that he was not welcome and they must leave immediately or all die. They departed. Followup journeys have no doubt taken place, with results yet to be revealed.

13.18 K'TA'VIIRI

Although these rare and reclusive humanoids are said to refer to themselves as the K'ta'viiri, the recent discoveries seem to confirm what Sociohistorians have suspected for some time: they are the remnant of one of the Sianetic Harbinger groups: the Imperial Race of Luar: the High Old Ones who ruled the galaxy hundreds of centuries ago. Very similar to the Altha in appearance, the K'ta'viiri are said to have lighter skin and all have the bi-colored eyes (one blue, one dark violet) and have six fingers on each hand, six toes on each foot. The fingers are slender and the presence of the extra digit is almost unnoticeable.

How did they survive? Where did they come from? These questions are among the many being asked in secret conferences on Old Earth. These beings may have recently been awakened from a prolonged cryogenic freeze, and are insinuating themselves into Human space.

The location of the K'ta'viiri home planet is unknown, if indeed they possess what could be called a 'home planet' — or if it still exists. No more than a handful of K'ta'viiri are even widely rumored to exist, and those individuals have an annoying tendency to disappear, despite the best efforts of Imperial agencies and VegaPol to track them. It is possible in fact that there are no more than a half-dozen of these beings. Some seem to have ties to the murkier divisions of the League of Merchants and other underworld groups. The Emperor desperately seeks more data on these beings, partly out of lust for power through the knowledge they might possess, partly from fear. Perhaps the Luar wish to rule again.

13.2 ALIEN RACES

Most non-humanoid races are so different (both physically and technologically) from man that there is no common ground and therefore little or no cultural interface. They are aware of humans, but see no need to deal with them. A few, such as the Trilopters and Aoemarans, enjoy humanoid company, but this seems to be more the exception than the rule.

Finally, here are also a few radically different races which evolved independently on their home planets. Some have been integrated into the Terran Empire, while others lie beyond the Imperial "borders", having either proven to be xenophobic or outright hostile.

13.21 SNEE

The Snee are by far the most gruesome and hated of all races that humankind has ever encountered. Few have even seen the Snee, but they are reportedly the stuff of nightmares. Large, hulking creatures with black, glistening skin, they are carnivorous and reputedly consider *Homo Sapiens* a rare treat.

Communication with the Snee has been sporadic and inconclusive, and recent contact has consisted entirely of Snee raids on Terran Starships. Even the borders of the Snee Empire were only learned through the Aoemarans — the only race capable of dealing with the Snee on any level other than predator and prey (the Snee found them indigestible). Imperial Intelligence believes that their empire consists of no more than a handful of stars, but Snee ships are powerful and able to hold their own against a Terran ship of comparable size. Their plasma guns are especially devastating.

15.22 WIHR-KOHL

Little is known of the Wihr-kohl beyond the fact of their existence (and some dispute even that). These beings are amorphous in form, naturally existing as gaseous creatures of variable density. They are highly intelligent and Telepathic, and seem able to travel through space (even Hyperspace!) freely without need of craft or propulsion system.

The Imperial Intelligence Ministry believes that the Wihr-kohl originated on a gas giant in the Gamma Doradus system (Frontier Zone 19) and from there spread to inhabit a number of systems throughout the Empire, but that is pure speculation. It is clear, however, that this is a race of sophisticated creatures capable of feats beyond imagining. They almost never involve themselves in the politics of the Empire. However, there are strange tales of the Wihr-kohl transporting the crews of disabled ships to safety (much like a human might save a beached fish or other animal in need) but otherwise this elusive, advanced race is not encountered.

13.23 KLAKYTHERIS ADANAK

A race of bipedal, hydrocarbon based sentients. They are exceptionally strong, intelligent, and long lived. They are one of the few starfaring cultures the Terrans have encountered and been able to communicate with, but the Adanak remain somewhat aloof from man because of the Terran preoccupation with conquest and exploitation. The Adanak civilization predates humanity by several million years, and they are not so concerned with interstellar colonization as with philosophy of being and individualism. It is therefore not surprising that the Adanak no longer maintain a central government for law generating purposes; rather, each individual is ultimately responsible for his own actions. There are three major sexual distinctions between Adanakees. A few distinct male and female types exist, but they are outnumbered by the quasi-male contingent. The Quasi-males are capable of procreating with any Adanakee.

Adanakee starships are exclusively sublight and carry a form of deflective shielding to protect them from space debris. They bear no armament. The Adanakee have settled a few worlds, but mostly pass their time in conversation (in a language which few humans can master because of its complexity of innuendo). The Adanakee see humans in general as an annoying intrusion into their laid-back lifestyle, but the younger ones like human company for the excitement they generate.

Unfortunately for these young Adanakee, few humans can stand the sight of them. Adanakee are faintly amphibian in configuration and have no noticeable sensory receptors on the surface their skin. This lack of reference points on their bodies makes them appear malevolent and mysterious to humans. Adanakee "perceive" through highly adapted electromagnetic and chemical interpreters in their pores. Adanakee rarely carry offensive armaments.

13.24 OLZE ALIRRA-MUKARRAM

The Olzes are tremendously large (5 — 10 cubic meters in volume) creatures who at some point in their long history were able to achieve a symbiotic relationship with virtually inert crystal lattice structures. Able to extend their lives by virtue of the symbiosis and manipulate the structures that they were joined to, the Olze have been able to create unimagined technological feats, of which any individual may be an integral part. Needless to say, no two Olze are alike.

Humans do not interact well with the Olze because they are just too alien. Olze motivations and personal communication techniques are beyond human (and human-built computers') understanding.

13.25 PEARTA GHED

Researchers believe the Pearta Ghed to be a race of very advanced Androids. Their cellular replicative technique could have been an induced fabrication in the race's infancy. Needless to say, DNA has very little to do with these interesting creatures, as living metallic molecules are involved in their basic biochemical makeup. If they are androids, their creators have not made themselves available for comment.

The Ghedians appear as man-sized bipedal felines covered with a great deal of fur. They are intelligent and integrate well into human societies. Excellent mimics, they have been able to pick up human tongues with ease. They rarely procreate (or it is rarely successful) but they are nearly immortal by human standards. However, they are reckless and don't have a firm concept of self-worth. As a result, Ghedians often get themselves killed.

13.26 AOEMARANS

The Aoemarans, while physically bearing absolutely no resemblance to mankind, have a mental outlook surprisingly similar. To all appearances the average Aoemaran is a blob of protoplasm about two kilos in mass, semitransparent and bluish. Aoemarans themselves, while somewhat mobile, possess virtually no manipulative abilities and would certainly never have progressed to their current evolutionary level without their unique parasitic/symbiotic abilities. Long ago the Aoemarans evolved into creatures which could infuse themselves into a "host" body (preferably one with manipulative abilities), take control of the host and utilize its form. The resident Aoemaran gained nourishment from the the host's bloodstream, and in return was able to effectively fight infections, heal wounds, and provide a number of other helpful compensations. This was originally done with nonintelligent creatures on the Aoemaran Homeworld, but as the race developed starflight and met with other beings, they learned that the same results could be achieved with intelligent humanoids, while maintaining a cooperative rather than dominating relationship. Some humans find the whole idea disgusting and revolting, while others welcome the intellectual intimacy — not to mention the physiological benefits.

13.27 TRILOPTERS

These peculiar beings are among the few radically different races who find humanoids tolerable (and in some cases even interesting) companions. Trilopters were first encountered in PreImp c. 500 by a Jade-London Corporate Survey expedition, who entered the Pulwarin system [-13,62,91] only to find it already fully developed by the indigenous race. Although the Trilopters had not yet developed the Hypershunt Drive, their fusion and gravitic technology was quite advanced (including effective weaponry). The Jadists opted for an alliance rather than conquest. Since that time the Trilopters have achieved Minor Clan status in the Empire, maintaining their mutually profitable relationship with the Jadists.

Trilopters earned their anglicized name from their trinary-based evolution. In appearance they have a vaguely peanut-shaped torso, with three 'leg' appendages sprouting from the bottom of the lower swelling. Three equidistant 'mouths' ring the upper half, and above each is a tentacular trunk, above that is an eye on a shorter stalk. The trunks split into three long, highly-dexterous, tentacular fingers at the end, forming the basis of the 'Lopter manipulative ability. Trilopters can also balance on two legs and utilize the more stubby (and very strong) three-toed free leg as a manipulator when necessary. Trilopters have three basic modes of locomotion on their flexible legs: one is relatively clumsy and rarely used in which they walk on only two legs 'like the bipeds'. The effect is a comical swinging gait like a fat hominid and is only used when carrying something in the third foot. Another is the usual method, alternating between the 'lead' leg and the other two, the body always oriented in one direction. The third is a bizarre motion only used when in a great hurry where the 'Lopter whirls forward, only one leg on the ground at a time in a headlong spinning motion. They can move very fast in this mode but tire quickly.



Each of the three mouths has a long tongue, and is connected to lungs, vocal cords and digestive system, so the 'Lopter may speak, eat and comfortably breathe all simultaneously (or sing in three part harmony, or eat with three mouths...). The Trilopter has three lungs (one for each mouth) but one stomach/digestive system. The manipulative trunks are long enough so that all three may work on the same project at once, though the eye stalks are only long enough for two to see the same close-up object — unless it is directly overhead. It is almost impossible to sneak up on a Trilopter.

Perhaps the most interesting aspect of the Trilopters is their trinary brain configuration. It is conceptually similar to the dualistic humanoid configuration, but in three parts. Additionally, the 'Lopter can almost completely sever inter-lobe interference, and operate each trunk/eye/mouth as an independent subentity, thus performing up to three functions independently. They claim to find this somewhat unnerving after long periods of time, however, and avoid doing it. Almost invariably one lobe becomes dominant during adolescent development, and the other two become 'secondary'. They can route a thought problem (such as an equation or other logic process) to one of the secondary lobes for independent analysis. An analogy to this would be a computer with only one processor (the human "conscious") while the 'Lopters have up to three "processors".

On the other side of the Monit, though, is the Trilopters' infamously short attention span. They are easily bored, and though they might be able to shift work from one lobe to another, the central consciousness is still there, and it is childlike by comparison to humans in many ways. "You've got the patience of a 'Lopter" is a frequent derogatory comment among Jadists.

Trilopters are superb technicians and engineers — skills partially attributable to their superior manipulative and analytical abilities. Their short attention span explains why they had not progressed any further than they had when encountered by mankind (the Trilopter race is — in fact — much older than man).

14.0 REFERENCE

This section is designed to provide the GM with some background on specific individuals in the Imperial milieu, as well as general information on the personnel and equipment of various organizations who might interact with Player-characters.

14.1 IMPORTANT NPCs

Included below is a selection of important NPCs with an eye towards "fleshing-out" their personalities in the course of a campaign. An NPC chart at the end of the section summarizes their combat abilities.

14.11 THE EMPEROR AND HIS FAMILY

Akthoes Modestinus III is the twenty-seventh Emperor of the Known Universe. (This is according to the Imperium, of course; there are several known governments and alien races do not recognize His Imperial Majesty's universal claim.) Modestinus III is the absolute ruler of vast resources, however, and he and his family are worthy of some attention here.

Modestinus wears the traditional crown of the empire: a platinum-iridium circlet skillfully fashioned to resemble a laurel garland, studded with diamonds, emeralds and yellow tiraq gems. The circlet generates a continuous halo about the emperor's body, adding to his appearance of power. In addition, he bears the primary symbol of the Empire: the Galactic Scepter. A beautiful Sianetic Harbinger artifact, the scepter is a 50cm long, ornately decorated rod of an indeterminate Ordium alloy, white Ardinium, gold and platinum. Set on one end is a perfect sphere of clear diamond 5 cm in diameter, and on the other is a shallow bowl of some black material. Whenever the scepter is held, the bowl generates a globe of darkness 20 cm across, within which spins a fabulous hologram of the Milky Way. The scepter is also a x10 Psion Prism.

Itzámna and Imperious, the Emperor's sons, wear a simpler version of the platinum laurel garland at court functions. The Empress-consort wears a glittering platinum and diamond tiara. All members of the Imperial Family also wear a ring imprinted with the Imperial Digital Seal, which allows access to security areas and datafiles, monitors brain-wave patterns (to verify the wearer's identity) and 'seals' official Imperial 'documents' with its distinctive code.

Akthoes Modestinus III

Supreme ruler of the Terran Star Empire since Imp. 441, Modestinus is fairly moderate as Emperors go; he isn't one of the liberal rulers who tend to allow the Provinces substantial Home Rule; nor is he an Imperialist Ideologue constantly trying to suppress growth. His critics alternately accuse him of being too lenient and too overbearing. He once said to his wife, "As long as I am accused of being both a tyrant and a spineless puppet, I know that I am serving my people well."

This is not to say that Modestinus is a kindly gentleman whose only goal is to protect the rights of all his subjects. He has sent thousands to their death with a wave of his hand; the Imperial fleet has laid waste to entire planets in his name; he has ordered the destruction of many a promising young culture with the imprint of his Imperial Digital Seal. It is widely believed (but never mentioned) that he murdered his father and older brother to expedite his ascension to the Throne. All part of survival in the Imperial Court.

Modestinus has noted with some concern his Empress-consort's marked preference for the younger of their two sons. And while the elder, Itzámna, shows no signs of being impatient for the Throne, he has noticed the ambitious tendencies of his younger son Imperious and remains alert for trouble. It would not be paranoid to suspect a conspiracy between Consort Philippina and Imperious to arrange an accident for the Emperor and his heir (after all, how did Modestinus come to power at the young age of 21?).

In appearance, Modestinus is an impressive man: 190 cm tall, massing a muscular 90 kg (he keeps himself in excellent physical condition) with silver hair and dark grey eyes. He wears white, trimmed with gold, and his personal barrier shield is an ornate gold belt.

Philippina T'sganus

The Empress-consort is the wife of Modestinus and the mother of his two sons. She is the sister of Baron Foeg Huronak of House Titania, a relatively obscure Inner Province, yet with a considerable history. Philippina accepts her role as Consort with no political power, yet rules all domestic affairs as a true Empress. She is tall, with golden-blonde hair and sapphire eyes. Her figure is the envy of many a younger maid at the Court.

Philippina, while always outwardly deferring to her husband in any decision, relentlessly uses her considerable skills of manipulation and disinformation to influence his decisions to her advantage. Though her methods are not always successful, Philippina's labors frequently bear fruit. One area in which she has repeatedly failed is with the upbringing of Itzámna. She would prefer him to take a greater interest in Court functions and what she calls 'Emperor-track activities'. She was devastated when Itzámna left the Service after his required tenure was up, and is vexed by his predilection for study and scholarship. She has always disliked the D.K. (Her suspicion of being constantly monitored by them borders on the paranoid — or it would, except that they *are* monitoring her). On the other hand, she goes out of her way to protect her younger son from the wrath of the Emperor, and sometimes the arm of the Law. While an Imperial Prince can get away with just about anything, Imperious still manages to push his luck.

Itzámna Augustus

The Emperor's eldest son and heir to the Throne, Itzámna is a quiet young man, born in Imp. 447. While more scholarly than his father, Itzámna does not neglect the call of martial training, and served the required term in an Imperial Starmada. He is said to be a master of the Changramai techniques of unarmed combat. At 194 cm, Itzámna is tall like his father, but more slender (80kg), with black hair and dark eyes. Less than polite court gossip labels the Imperial Crown Prince as "sullen and ill-mannered." Truthfully, he is an intellectual who would prefer not to have the Imperial Scepter thrust upon him any time soon (which is fine with His Majesty). He spends considerable time in the D. K. Archives; more than his mother would like.

Itzámna's titles include Imperial Crown Prince, Grand Duke of Centauri, Lord of Jovia (the Jupiter planetary/lunar system).

Imperious Culthos

The Emperor's second son — born in Imp. 453 — is nearly the opposite of his eldest. Imperious is shorter (barely 175 cm at full growth) and is definitely a more action-oriented youth, already massing over 80 kg's. Joining the Imperial Fleet at 16, he quickly distinguished himself as a skilled warrior and fighter pilot. Imperious is blond and blue-eyed, and never hesitates to use his phenomenal good looks and confident charm (not to mention his status) to further his lustful desires. His various exploits while on leave have so far been tactfully overlooked by the Court, but his appetites are becoming less acceptable and his improprieties more flagrant.

Imperious' title is Imperial Prince, and in Imp. 470 was granted the title Duke of Mars.

14.12 THE IMPERIAL CABINET

All of the members of the Imperial Cabinet have an interesting history, some whose origins are clouded in a dark mist of political intrigue; others who have risen through the ranks of the Imperial Services and earned His Majesty's recognition; still others are courtiers whose families have gained favor with the Imperial House through the centuries. All have secrets to hide; all are ever at work hatching new schemes to further their own interests and swell their Elmonit accounts.

Cardinal Aurelis Nogia

A tall, white-haired man with pale, wrinkled skin who looks like he could be over 100 standard years old, Cardinal Nogia sports a noticeable paunch. He stands very straight and unbent with age, however, and seems to have no lack of energy — especially when sparring with the Justice Minister, Truthsibyl Olvana Giovanyn. Cardinal Nogia always wears the red, flowing robes and skullcap of his Dia Khovaria office, and over them the appropriate embroidered vestments. Draped across his shoulders is the heavy, thickly jeweled platinum-iridium necklace of the Minister of Information.

Nogia frequently tries any number of tricks to get the Emperor's ear, but His Majesty has shown a preference for the advice of Sibyl Olvana in recent years. Considering Nogia's dislike for the Sibyls of the Galactic Court, and the Church's well-known distrust of the Telepathic "truthsaying" powers of the women, it is not surprising that he finds the Emperor's preferences distasteful. He has been known to refer to Olvana's powers as 'witchcraft'.

Sibyl Olvana Helene Giovanyn

Although Sibyl Olvana Giovanyn is a member of the Imperial cabinet, her first loyalty is to the Order of Truthsibyls. The objectivity of the Order must remain above dispute, or their power and authority in the Imperial government would be shattered. Sibyl Giovanyn is a member of the Truthsayer's Council, and is revered throughout the Order.

Olvana reports to His Majesty regarding the status of the GCH, but also serves as his personal Truthsayer. She is rarely away from his side, her Telepathic powers always at his disposal. Just her presence is enough to enforce truthfulness from anyone in audience with His Majesty.

As a Sibyl, Olvana wears the shimmering white gown and full, diaphanous black hooded cloak of the Order. Her single large earring holds a cluster of glittering Psion prisms. She also bears the necklace of her Imperial office. She is a small, frail-looking woman, her black hair shot with grey. Though Olvana appears to be about 50 standard years of age, she is actually considerably older.

Minister Huel Gosangda

Gosangda is quite nearly the exact opposite of what one might expect for head of the Intelligence Ministry. In his mid-thirties, he looks even younger than his years. Though he wears a simple steel-grey uniform over his slender form, his brown hair is cut in a fashionable style and he wears a non-regulation diamond stud earring (as a civilian, he is not technically bound by Imperial Military uniform regulations). Huel always looks vaguely confused and distracted when in public and even at Imperial Cabinet meetings. He always has a holoclipboard under his arm, but never seems to use it. It is generally assumed that the man is either an idiot or in a permanent drug-induced stupor.

It's all a ruse, however. Gosangda is a brilliant man and consummate actor. He has a holographic memory and runs the Intelligence Ministry with frightening efficiency. Only a few trusted aides know his real mental abilities, and he essentially runs the operation through them. Only these aides, the Emperor Himself, and perhaps Olvana and Nogia know of Gosangda's dissembly. The IID (Imperial Intelligence Directorate) division of the I.M. is Gosangda's pride and joy, an information gathering force without equal in the Empire.

14.13 LEAGUE PERSONALITIES

The hierarchy of the League of Merchants is a murky, secretive lot, known to few beyond the LeagueCouncil itself, and the members of that august body take great pains to maintain the image of upstanding Imperial citizens to cover for their darker occupations. Below are profiled three members of the LeagueCouncil.

Nakira Anastasia T'sraang

Nakira is a Kashmerian Admiral, in charge of security on the Planet Oberon. Slender, tan, mahogany maned and brown eyed, Nakira is a dark beauty not to be underestimated. Her rank gives her the freedom to travel as she wills without being questioned, and access to information which she uses to her advantage as a member of the League.

Never far from her side are her "boys" (as she calls them): Android bodyguards Lars and Fredrik, both a muscular 200 centimeters tall with white-blond hair, pale skin and blue eyes. They are Centurions of the Ducal fleet, assigned to her division.

As a planetary commander, Nakira wears the regulation uniform: white leggings of the skin-hugging material *velaise* and loose silver-grey tunic with epaulettes.

Jaison Menzies-Lloyd

A smirking youth of 26 years, Viscount Jaison is the nephew of Baron Kevin Skakis Kubischev-Lloyd. Though his actual political power is very limited, he has many friends and contacts at the Imperial Court — enough to make him a useful voice at LeagueCouncils despite his vanity, overblown sense of self-importance and his unrepentant disdain for anyone not of royal blood. When not decked out in the latest Coreworld fashions, he wears a simple, loose grey coverall over his slender form, open at the neck and adorned only with the silver triangle of his family on the left breast. Dark-haired with green eyes, he is strikingly handsome and doesn't hesitate to use his charms when they can get him his way.

His personal guard, an imposing young man named Kaal, is at his side constantly and watches him with an almost possessive intensity.

Soris

The LeagueMaster is a slightly-built man of 170 centimeters, his hair short, straight and snow white (except where an azure streak colors it from left temple to nape). Soris' skin is a natural chocolate brown. He likes to wear flowing garments of silk, sometimes long, sometimes a short tunic, but always in bright colors like orange, yellow or blue. He also is never without a pair of polished irulon hoop earrings. Even his feet are usually bare.

Soris commands a considerable fleet of small, unregistered 'trade' vessels, well-equipped for smuggling and 'tactical strike' missions such as frontier raids. He is also the official commander of Starhaven, the League headquarters, and is responsible for its security.

Om, his bodyguard, is a giant of a man who wears only loose black truesilk pants. Om can crush a man in the crook of each arm with seemingly little effort.



14.2 EXAMPLE GROUPS AND EQUIPMENT

The GM may find this section handy in developing and equipping NPCs for the campaign. Inevitably, the PCs will come into contact with any number of governmental and corporate officials, and a few of the more interesting types of those are touched on below.

14.21 IMPERIAL AGENTS

Vast indeed is the array of operatives at the Emperor's disposal. The network of military, paramilitary and intelligence forces at His Imperial Majesty's command numbers in the hundreds of millions and is scattered throughout the Imperium, Provinces and the Frontier.

Imperial Police

The "Imps" as they are not-too-fondly referred, are His Majesty's personal guard (all 10,000 of them). In addition to providing protection for the Imperial Family, they are entrusted with errands of special interest to the Emperor.

Division: Elite Personal Family Guard.
Recruitment Source: Imperial Services.
Training: 3 Years: Martial Arts, Adrenal Moves, Strategy, Tactics, Perception.
Equipment: Armored Exoskeleton with Barrier Shield, +20 Assault Blaster, Power Sword.
Uniform: Golden Armor.
Symbol: A Golden Fist outlined in black holding a Lightning Bolt.

Intelligence Ministry

The IID is a ruthless, insidious spy organization with state of the art technology and a highly trained staff of agents.

Subdivision: Imperial Intelligence Directorate
Position (Rank): Field Information Agent (Lieutenant)
Recruitment Source: Imperial Starmadas, other services.
Training: 5 years: (can vary) Surveillance skills, Weapons, Crime Technics, Interrogation, Seduction, Acting, Comp Technics.
Equipment: Tier Four Security Scanner, Pulse Laser, Belt Barrier Shield, Personal Sensor Cloak, Compact Repair Scanner with special Security system detection/disable capabilities; Special tools.
Uniform: Varies (under cover).
Symbol: The All-seeing Eye.

Imperial Science institute

The Empire's Investigative division for all archaeological artifacts.

Subdivision: Imperial Archaeological Institute
Position (Rank): Field Archaeologist (Team Associate)
Recruitment Source: Imperial Starmada, other services.
Training Period: 1 year (in addition to schooling) Appropriate applied sciences.
Equipment: Varies with assignment.
Uniform: Varies with assignment; normally a khaki coverall with utility pouches.
Symbol: A planet with relief land masses.

Imperial Shock Troops

These troops accompany Starmada ships and are primarily used as ground assault forces and boarding parties.

Subdivision: Starmada Assault Marines
Position (Rank): Strike Leader (Corporal)
Recruitment Source: varies
Training: 3 years: Various combat skills, Survival, First Aid, Martial Arts.
Equipment: kevlar or duralloy armor (sometimes better for special units), assault weapon, headset communicator, basic survival gear, distance and infra-goggles, combat knife, grenades.
Uniform: Grey coverall with black and silver trim.
Symbol: Varies with division, but always incorporates the Starburst.

14.22 VEGA OPERATIVES

Next to Old Earth, Vega IV (Valhalla) is the most well-protected planet in the Imperium. As the core of the Empire's economic and judicial systems, Vega is also somewhat of a mysterious place to those who are not closely associated with its operations. Unlike Sol III, visitors to Vega are discouraged and security measures — even for individuals — are extremely tight. (It is *not* a stop on the popular Imperial tour routes.)

VegaPol Agents

The Vega Police is a relatively low-profile organization, a stance they cultivate for a number of reasons. First, VegaPol agents are usually called in only on matters of financial improprieties, or to investigate matters brought before the Galactic Court of Humanity.

The vast majority of VegaPol agents are undercover operatives, reputedly thousands spread through the Empire and surrounding Frontier. Although not thought of as masters of gadgets and secret technology (like the D.K.'s Tabernacle Police, the League of Merchants or the ISI), Vega agents have fairly sophisticated surveillance equipment. Masters of disguise, their specialty is infiltration and information gathering.

Subdivision: Field Research Agent
Position (Rank): Regional Supervisor (Major)
Recruitment Source: Varies
Training: 10 years: surveillance, computer skills, physical training, psychology.
Equipment: varies with assignment; usually a sophisticated personal computer, communications gear, special edition weapons.
Uniform: Sea-blue coverall (unless operating under cover).
Symbol: A Shield with scales on it.

14.23 TRUTHSIBYLS

Although actually a small minority in the support structure of the Galactic Court of Humanity (GCH), the Truthsibyls are probably the most interesting. The rest of the GCH is primarily lawyers and clerks, the vast bureaucracy required to support an interstellar legal system. Technically, the Truthsibyls are not even under the jurisdiction of the GCH, being an independent organization.

Subdivision: Court Truthsayer
Position (Rank): Rank Four
Recruitment Source: Truthsibyl Agents
Training: 12 Years: various Psionic techniques.
Equipment: Psion Prism.
Uniform: White gown under long, hooded, black flowing robes/
Symbol: Abstracted Scales with an Egyptian Eye over it.

14.24 DIA KHOVARIA

The division mentioned below is TARA, the Tabernacle Research Agency, an elite group of highly trained intelligence agents.

Division: TARA Investigations
Position (Rank):Monk (Rank Five)
Recruitment Source: D.K. Chapterhouses.
Training: 10 years: Martial Arts, Adrenal Control, Weapons, Crime Technics, Trickery, Falsification, Propaganda, sometimes Telepathy.
Equipment: Compact Multiscanner, computer, sense-enhancement and stealth gear, various weapons, comm implants.
Uniform: Black, hooded, full-length flowing habit.
Symbol: Printed circuit overlaid with an open hand.

14.3 TRANSPORTATION & COMMUNICATION COSTS

The following formulae are highly subjective yet will serve as a convenient base for determining the cost (in Imperial Monits) of standardized services.

14.31 TRAVEL

This section is designed to give some very basic cost guidelines for the appropriate services. Intraplanetary is so varied depending on speed, comfort and sophistication of the transport that it is practically impossible to give any really helpful information; the GM is on his own.

Interplanetary travel is also variable, but we can give some general guidelines and multipliers. Assume 100 Monits per A.U. (Astronomical Unit; the distance from Terra to Sol; about 150 million kilometers). A chartered shuttle (capacity 4-10 persons plus luggage) would cost 1,000 to 2,000 Monits per A.U.

Travel along transport route is:

Frequent:	x 0.2
Regular:	x 0.5
Intermittent:	x 1
Restricted:	x 10 or more

(note: If travel frequency along route is mixed, figure sections separately.)

Type of Passage:

Executive:	x 3
First Class:	x 2
Coach:	x 1
Bargain:	x.5

(note: some types may be unavailable across intermittent routes)

Most interstellar travel is either on board military transport (in which case the ride is free, but the destination may not have been what you had in mind) or by commercial star liner. The wealthy can charter a flight, and the very wealthy have their own hyperyachts. We'll assume liner rates, however. As a base cost, use 20 Monits per Light-year, modified as shown:

Cryogenic Berth:	x 0.1
Bargain Stateroom:	x 0.5
Mid-range Stateroom:	x 1
High Quality Stateroom:	x 2

Travel along transport route is:

Frequent:	x 0.5
Regular:	x 1
Intermittent:	x 2
Restricted:	x 10 or more

(note: If travel frequency along route is mixed, figure sections separately.)

For interstellar transportation of cargo, assume a base cost of 10 Monits plus one Monit per kilo, regardless of distance, within a Province or Imperial Sector; delivery within a Decaday. For transportation of goods outside of the Province, apply a multiplier of x 2 to x 10, depending upon the political/economic factors involved. Modify as shown below:

Type of Cargo:

Perishable Goods (special handling):	x 5
Fragile Goods:	x 2
Illegal Goods:	x 10-50

(Assumes pilot is willing to take the risk.)

Travel along transport route is:

Frequent:	x .25
Regular:	x 1
Intermittent:	x 5
Restricted:	x 10-50

14.32 COMMUNICATION

Below are listed the basic electronic communication modes in ***Space Master.*** These are all the more advanced forms, and so do not include low-tech broadcast transmission types, infra-red, etc.

Planetary

All civilized planets have a worldwide computer-controlled communications network, either satellite or cable connected. Intercomp, a private corporation, has installed most of the planetary optical and microfreq communications nets on Imperial Worlds. Tie-ins to planetary comm nets usually costs between 50 and 300 Monits annually, depending on location and sophistication of hookup.

Microfreq and Laser

Two of the primary modes of In-system communication, both of these utilize light-speed wave transmissions. Lasers have a longer range, but require more bulky and sophisticated equipment. Microfreq is used in smaller vehicles. This type of communication is limited only by the cost of the equipment.

Tachyon Beam Dictor

The base cost of a TBD transmission is 5 Monits per Light-Year to destination. Long transmissions (greater than thirty words) add 0.1 Monit per word over thirty words. All TBDs are sent in Anglaman — the official Imperial language.



The length of time required for a civilian TBD transmission to reach its destination is about one day plus one hour per every ten Light-Years travelled. (the actual transmission is instantaneous from one station to another, but there are transfer delays, and the physical delivery.

High Priority D.K. and governmental transmissions will travel up to ten times as fast, as will Civilian Express transmissions (at Two to Five times the cost). Two persons may converse instantaneously while simultaneously at keyboards and if linked by a top-priority TBD network linkup. The cost for this service for a private citizen is prohibitive. Most fairly wealthy citizens and members of the nobility have terminals in their homes connected to a planetary computer net, allowing a TBD transmission to be routed directly to their terminal. This is a considerable time saver, but a D.K. online TBD account is very expensive (as is almost everything having to do with the Dia Khovaria).

Even more expensive are TBD audio or Holotransmissions. Either of these requires some setup and a dedicated TBD channel. If relays are required (and they usually are) the cost is greater for each relay involved. This communication is always instantaneous, though it is subject to interference and there is often some breakup of the sound and/or image

14.4 POLICE/SECURITY PROCEDURES

Throughout the course of the Campaign, PCs will doubtless have many chances to run into various law officers, peacekeepers and security guards (not to mention the possibility of PC lawmen). Although the vast array of cultures and technologies present in the Empire precludes any in-depth analysis, GMs and Players alike should have a good idea as to what general procedures can usually be expected as regards law enforcement. This section includes a discussion of local Security Ratings, and guidelines for Arrest and Legal proceedings.

14.41 SECURITY RATINGS

One useful tool for the GM is the designation of local Security Ratings. These codes allow a general Difficulty Modifier to be applied to any criminal activity in the effective area without requiring the actual laws to be drawn up beforehand. The Security Rating (on a scale of one to ten) serves to indicate the Difficulty Level assigned to any such attempts. Security Ratings correspond directly to the familiar Difficulty Levels, and are shown below:

Security Rating	Difficulty Level
1	ROUTINE (+30)
2	EASY (+20)
3	LIGHT (+10)
4	MEDIUM (±0)
5	HARD (-10)
6	VERY HARD (-20)
7	EXTREMELY HARD (-30)
8	SHEER FOLLY (-50)
9	ABSURD (-70)
10	INSANE (-100)

NOTE: *These Modifiers are cumulative with any other Difficulty Mods inherent in the maneuver itself (e.g., if the Sec Rtg on Karoline is 7 (-30), and breaking into a grav-flitter is HARD (-10), then breaking into a grav-flitter on Karoline [and getting away with it] would be at a total of -40).*

14.42 SECURITY/PATROL PROCEDURES

The most often seen law enforcers will probably be the private security guards and public peace officers of the various Spacefaring Ports and cities. These Armsmen are chiefly concerned with the safety of the public and property, differing more in means than in motive. An outline of a typical Patrol process is given below:

1. Officers are employed to protect lawful citizens of the State, and/or their property, and to enforce the local laws in a manner determined by the State (bear in mind that "The State" need not be an actual political body; any organization which creates and enforces laws within its territory might apply here).
2. Officers are trained and armed to handle a variety of dangerous situations, depending upon their division and/or current assignment (i.e., "beat"/traffic, bunko, theft, vice, homicide, special tactics, etc). They are trained to identify signs of criminal activity, and are well-versed in current laws which pertain to their divisions. Even the Free-lance Security Guard has had some minimal amount of paramilitary training (indeed, a way of life for many of these folk!) Use Perception or Scanner rolls (if the PCs are hiding, subtract the poorest score in the party) to determine whether the Officer notices an illegal act as it is performed. On most civilized planets citizens who possess appropriate licences may bear arms of up to Mk. I (Mk. II in a few places). Most private Security Guards will fall into this category. For typical Peace Officers, a simple rule of thumb is to divide the local Security rating by two to obtain the Mk. # of their primary weapon. Special Tactics teams will commonly carry some sort of gas grenades. Riot Patrolmen will be trained in the use of heavy armor (probably Exoskeleton), and will commonly wear or carry Personal Shields.
3. Officers are primarily on the lookout for (or on call for) crimes in progress. They typically maintain a good communications network with other law enforcement personnel. The mobility and constant communication employed by metropolitan Police Force allows Officers to respond quickly to any reported threat situation. Some Police Forces may retain pools of expert drivers and/or communications operators. When an Officer sets off into a high-speed pursuit, other Officers in the area are generally aware of it.
4. On the scene, Officers will evaluate the situation as best as possible (e.g., threat to citizens or property, danger to selves, possible tactical approaches and legal technicalities, etc.), and will call for support if this seems warranted. Only a foolhardy cop would walk into an obviously dangerous situation without first calling for backup (whether a backup unit is available is another story . . .) Backup might consist of another squad car, specialized weaponry, medical technicians, special tactics personnel, etc., depending upon the seriousness of the situation and the number of Officers available.

   Note: *If the situation is* really *hot (rockets, plasma repeater rifles, starship fire, etc), chances are good that the local Planetary Defense Forces will be called in.*
5. Usually, the Officer's first priority is to ensure the safety of any present citizens and property (corporate property, as well). Once this is done, the next task is to make certain that the danger is abated — one good way to do this is to arrest the offending party. Unless the lawbreakers are using powerful weapons themselves, most metropolitan Police Forces will make use of non-lethal weaponry whenever possible (e.g., sonic stunners, tasers, gas weapons, tangler rifles, etc). Remember, it's hard to question a dead man.
6. In certain (high-tech) regions, Minor Crimes (or "Infractions") can be paid on the spot, via a simple Elmonit card transaction. If the plea is "guilty" or "no contest", the Officer may make a recording of the plea and the fined party's Ident Disc, and the fine is subtracted immediately from the person's Elmonit account. If any bribery attempts are made, they had better begin before the cop has begun his/her report. Such attempts are best handled by using Administration or Seduction skills; the base Difficulty level is determined by the local Security Rating, and the roll may be further modified by the cop's "Bribability" (-50 to +30), as well as by the size of the bribe (perhaps a +5 for every 20 Monits value).

   Note: *Bribery will not always be an option; there is a significant chance that attempting to bribe an Officer will only make matters worse. If a successful Psychology or Diplomacy roll is made, a PC may determine whether or not an Officer is surreptitiously asking for a bribe.*
7. For more serious crimes, or for any case requiring any amount of adjudic tion, arrest (or at least subpoena) wi necessary to facilitate trial. If Bribery attempted at this point, the chances be even slimmer than before, and th bribe will have to be larger.

14.43 ARREST PROCEDURES

Most PCs seem to spend an awful l time trafficking in areas of somewhat questionable legality; breaking into peoples' homes and offices, using weaponry of greater then the maximur legal civilian Mk. #, carrying unchecke cargoes and avoiding taxes, etc.

Although these crimes are not punish by death (in most places), they are nonetheless considered very serious infractions. PCs who continually pursu such means run a great chance of bein caught somewhere along the line, eithe by local Police or some other (private) Security Force (read "Goon squad"). If Goon squad gets you, what happens n is highly variable (depending primarily upon their employer's wishes). If the c get you, it's pretty obvious — you're g to jail. One thing which can be said for Police — as long as you stop firing an come out with your hands up, they generally won't harm you any further (which is definitely more than can be s for most Goon squads). The following an outline for a typical (Police) arrest process:

1. Officers will generally identify themselves as such before making an arr (in some areas this is required as mandatory). Reasons for this are twofold. First, it is an attempt to get pursued/stalked party to "listen to reason", to give up peaceably (which will certainly look better in court thar resisting arrest — a whole separate charge in most regions). Second, it i cover the Officer's hide in the event some legal technicality arises (e.g., "Yes, your Honor, I did identify mys as an Officer of the Peace, no, th defendant did not stop running etc).
2. In one sense, the word Arrest means physically stop from moving", and th is (obviously) required before an act arrest can be made. As noted above, Police Forces generally have all man of non-lethal weapons at their dispos with which to physically stop you fro moving. Officers might inform a subj (not "suspect") that he/she is under arrest before actually catching him/h

The "Halt; You're under arrest" approach may constitute legal arrest in a few areas, but more commonly it is simply a variant method of identifying oneself as an Officer (see above). Before the Arrest procedure may proceed, in any case, physical arrest must occur.

3. A major consideration for the Officer is the identification and nullification of any possible physical attack of the part of the subject. Scanners may be used to identify any weapons possessed (especially if the offending party is in a vehicle). Perception rolls, frisking of subjects, and even strip searches might be used instead/also. *Under no circumstances will an officer allow a subject any possibility of attacking while arrest is being made.*

   If the subject violently resists arrest or attempts to harm an Officer, force will be used to subdue him/her. Subjects will be moved away from any possible weapons before questioning, and may be restrained if necessary/applicable. All weapons collected by the Police will later be taken to the Crime Tech labs for registration verification and "Missing Weapon Checks" (to see if they might have been used in some previous, as-yet-unsolved crime).
4. The first thing an Officer is going to ask for is the subject's Ident Disk. In many of the Inner Provinces, it is against the law not to carry your ID in public (it is certainly against the law while operation any vehicle or other possibly dangerous machinery). Laws like this are also common in the Frontier Provinces, although the farther one gets from the Core, the less such things matter (and the more Police Forces resemble Goon squads). The tool used for the reading of Ident Disks is called a Security Scanner or Ident Scanner. It is described elsewhere in the Tech Book.
5. Subjects will be questioned before any report is made. Depending upon what the Officer actually saw, these questions will be more or less specific (and even tricky). There are many possible questioning techniques; a few are noted here. Subjects will generally be isolated from each other (at least 3 meters) before questioning, so that they cannot easily back up each other's lies. Significant questions, or questions which might easily be lied about, will often be rephrased and asked again and again, whether or not they received an answer before. If the subject is an NPC, an Interrogation roll may be made for the Police (alas, PCs are not that easy).

   In some regions (the less civilized ones), force (i.e., torture) may be resorted to. The "Good Cop/Bad Cop" routine may be used, in which one Officer takes an aggressive role, threatening and intimidating the subject, while the other Officer plays a supportive role, seemingly defending the subject, sticking up for him/her, or acting displeased with the first Officer (this is an attempt to get the subjects to trust and confide in the "Good Cop"). Officers on patrol often flip Monits to determine who gets to be the Good Cop; others take turns.
6. Before leaving the scene, Officers will collect/note any evidence present (Perception and Scanner rolls), or make certain that someone is there to do so.
7. Arrested subjects will be quickly transported to the local retention facility (holding cells, substation, courthouse, or whatever). There they will probably undergo a formal Booking process.
8. Although the actual methods used in the Booking process and the nature of the detention facilities differ vastly from place to place, there are a number of steps which will nearly always be covered (one way or another). These steps are listed below:
   a) Removal of possessions from the prisoner (Ident Disks are left in the owner's possession).
   b) More questioning, if necessary.
   c) Possible search for wants/warrants through a larger database (usually Province-wide).
   d) In-depth identification of Prisoner (e.g., Hair & eye color, height & weight, fingerprints, marks/scars, past crimes, retinal/vocal/hemoglobin/DNA scanning & typing).
   e) Placement in actual (group or solitary) holding area (might be allowed to contact family/friends/bondsman).

   Note: *Even though the prisoner may have the Monits for bail, most localities require transportation of arrestees to some station for formal Booking.*
9. Prisoners will be held pending trial (or whatever passes for the equivalent of a judiciary system here).

14.5 NOTE TO GMs

It is incumbent upon you to instill an air of authority and technological sophistication to the Provincial (and especially the Imperial) Police/Security Forces in your Campaign. To be sure, if these agencies could be easily overthrown (physically and/or in terms of support) this would have happened already. (There are, of course, incidences of successful revolution, but these are generally long-planned, well organized, and very expensive covert group efforts — nothing to be undertaken lightly.) The oppressive and apparently omnipotent power of the Empire (and the Royal Houses) are an important part of the ***Space Master*** universe. Without the technological edge, without the obsequious propaganda, without the authoritative manner, these agencies would never be able to maintain any sort of order in their jurisdiction. Worse yet, if your Players learn that the police (etc.) are just another bunch of opponents — and "just" is the operative word here — there will be nothing to stop them form walking all over your Campaign. Remember, most peacekeeping forces are exactly that; and their methods and abilities should be portrayed as being commensurate with their responsibilities.

14.6 CORPORATE READOUTS

Whether Imperial, Provincial, Independent or Renegade, every large organization (economic or otherwise) provides or does something for some one/group, and does it in its own way., from its own bases of operations. Military and religious groups likewise have their own individualities. The **Corporate Readout** (which might, at the GM's discretion, be pulled in whole or part by Players who access the proper computer files) allows the GM to record a large amount of useful data on a given corporate/military/ religious entity. A blank form is provided here for the GM's use, as well as a few examples.

CORPORATE READOUT

INTRACOM

Nature of Business: An interprovincial trade megacorporation serving the entire Imperium and Inner Provincial sphere, specializing in the distribution, handling and wholesale marketing of nonmilitary technics; it is forbidden to have military affiliations.

Market/Clientele: The Empire, Inner Houses and Core Corporations (bulk orderers).

HQ Location: Sol VI*n* (Titan) | **Gross Income**: 195 Trillion E./yr

Secondary Interests:Bulk mail transport, Industrial investments; Major Tridee advertiser; sponsors of several populat series and com-nets.

Covert Activities/Interests: Rumored to have vested interests in some highly controversial industries, including labor replicant production.

DIVISIONS/BRANCHES

Division/branch Name/Emphasis	Location/Territory	Staff	Prod%
Administration and Marketing (HQ)	Titan	664	—
Devon; Electronics/Molecutronics	Karoline	2233	8%
Kashmere; Starship Systems and Parts	Olympus	4010	6%
Jade-London; Security/Surveillance Systems	Lamaraine	3562	4%
Colos; Raw and refined ores/Alloys	Orpheus	4550	4%

PRODUCTS/SERVICES

Product/Service	Cost	Product/Service	Cost
Travel along route is FREQUENT	x 0.8	Shipping Insurance	*
Travel is REGULAR	x 0.9	* *(available in some areas)*	
(no restricted routes)			
Cargo is perishable	x 2		

BACKGROUND DATA

History: One of the oldest and largest independent shipping firms in the Empire, INTRACOM was founded in PreImp 257 by a group of pre-Imperialist loyalists who united their efforts to serve the growing inter'Provincial' market.

Reputation/Manner: Known throughout the Empire as a dependable and reasonable firm, INTRACOM is also known to run a "tight ship" regarding employee policies.

Allies/Affiliates: No political or corporate affilitations.

Enemies/Competitors: various (mostly smaller) shipping firms.

Security Rating: 7 | **Comp Security Rating**: 6 | **Comp Languages**: CMT Scram, Z Weda

IMPORTANT PERSONS

Name	Postion/Title	Notes
Alsham Thaddeus	Operations Director	Scrupulous Administrator Lvl 12
Zera MacZeod	Jade-London Director	Finances illegal artifact hunts.
Haig Tuvarek	Colos Director	Runs the largest of INTRACOM's Docks.
Li Datoma	Devon Director	Has shown highest profits for 4 years.

ADDITIONAL NOTES

Many more branches exist than those listed.

CORPORATE READOUT

API

Nature of Business: An Imperially-authorized cartel which holds a monopoly on (and the secrets to) the prodction of Andrium — that vital source of Matter/Antimatter reactions. Also distributes M/A fuel techniques and packages.

Market/Clientele: The Empire; All Ports, shipyards and anyone with a M/A drive.

HQ Location: Alpha Centauri V (Jarad) | **Gross Income**: 150 Trillion E./yr

Secondary Interests:Sponsors of many regional and Interprovincial sports events, as well as visual arts exhibits and products Empire-wide.

Covert Activities/Interests: Manipulation of energy-supply markets (including indistrial sabotage) to retain monopoly and control pricing.

DIVISIONS/BRANCHES

Division/branch Name/Emphasis	Location/Territory	Staff	Prod%
Administrative Headquarters	Sol IV (Mars)	1223	—
Central Refining Plant	Pluto/Core Worlds	16,250	32%
Imperial Refining Plant	Luna/Imperial Forces	8950	25%
Provincial Refining Plants/Headquarters	Most Inner Houses	varies	3-9%
Frontier Refining Plants/Headquarters	More Active F-Z's	varies	1-5%

PRODUCTS/SERVICES

Product/Service	Cost	Product/Service	Cost
Corporate Fuel Orders (bulk)	x 0.6	Ship power system design	varies
Provincial Fuel Orders (bulk)	x 0.5	"Breakaway" power nacelles	1000
Company/Group Fuel Orders (bulk)	x 0.8	Colony/Port system design	*
(No Imperially restricted Groups)		* (varies with size of project)	

BACKGROUND DATA

History: Originally a non-partisan group which guarded Andrium closely, API developed the 1st interstellar merchant service. Guaranteed retention of monopoly by the 1st Emperor, and became Andrium Producers of the Imperium.

Reputation/Manner: Confident and overbearing — it is well known that without API, interstellar travel would essentially come to a halt Plants are under very heavy security.

Allies/Affiliates: Protected/monitored by the Emperor; otherwise no real allies.

Enemies/Competitors: Many; none have yet succeeded in obtaining the secret.

Security Rating: 10 | **Comp Security Rating**: 10 | **Comp Languages**: CMT Scram, C3 iv

IMPORTANT PERSONS

Name	Postion/Title	Notes
D. I. Trevayne	Chief Executive	Admin lvl 25 and "Patron of the Arts".
Zylia Dazáni	Director of P.R.	Represents the Firm at social functions.
Elayne Sysla	Director of R & D	Searching for cheaper M/A sources.
Jak T. Lantra	Imperial "liason"	Has palatial estate on Mars.

ADDITIONAL NOTES

CORPORATE READOUT

De BARTON

Nature of Business: An Empire-spanning trade corporation specializing in the importation/exportation of rare and expensive "lux" merchandise; possesses some of the fastest "company ships" in the Empire.

Market/Clientele: Generally the Upper Class: Nobility, aristocrats and celebrities.

HQ Location: Beta Hydri II | **Gross Income**: 26 Trillion E./yr

Secondary Interests:Personal mail service; public relations and advertising (sponsors of several N-Space and H-Space racing events).

Covert Activities/Interests: Unauthorized survey and extraction (including Harbinger Artifacts-?); exploitation of Replicant V's; Documentation falsification.

DIVISIONS/BRANCHES

Division/branch Name/Emphasis	Location/Territory	Staff	Prod%
Administrative Headquarters	Beta Hydri II	260	—
Spinward Frontier	Jym-bob 77 VI	246	21%
AntiSpinward Frontier	Theran	228	19%
Kubischev-Lloyd Province	Urkusk	48	15%
Jade-London Province	Lamaraine	82	14%

PRODUCTS/SERVICES

Product/Service	Cost	Product/Service	Cost
Shipping/Handling Service	x 1.5-3	DeBarton boasts that, given the time (and	
Personal Mail Delivery	varies	money), they are capable of obtaining any	
(Low Sentient xeno-slave	100k E.)	item that their client desires	
(False Identity (disc, card, face)	500k E.)		

BACKGROUND DATA

History: Built single-handedly into a massive trade corporation by Velmir DeBarton, an eccentric Baron and distant cousin of the Imperial Family. Passed into the hands of his ward Olaf Kaine-DeBarton after his death in Imp 466.

Reputation/Manner: Under the impressive guise of 'class', DeBarton is a ruthless capitalist who buys the silence of all those who would expose him.

Allies/Affiliates: Many friends in high places (aristocrats, etc.)

Enemies/Competitors: The GCH and VegaPol have tried for years to pin charges on DeBarton.

Security Rating: 9 | **Comp Security Rating**: 10 | **Comp Languages**: Tablet, C3 iv, NAV 20

IMPORTANT PERSONS

Name	Postion/Title	Notes
Olaf DeBarton	Chairman/Owner	Rumored to deal in artifacts.
Zázne Virrisáen	VP of Administration	Pompous Administrator (Lvl 18).
Hamilan Drazz	Antispinward Director	A violent opportunist, Admin lvl 15.
Jargas Farr	AntiSpin. Lead Shipper	Pilot lvl 20; ex-Saber Starmada.

ADDITIONAL NOTES

Other offices and illegal activities than these exist — a very busy firm.

CORPORATE READOUT

Nature of Business:	
Market/Clientele:	
HQ Location:	**Gross Income:**
Secondary Interests:	
Covert Activities/Interests:	

DIVISIONS/BRANCHES

Division/branch Name/Emphasis	Location/Territory	Staff	Prod%

PRODUCTS/SERVICES

Product/Service	Cost	Product/Service	Cost

BACKGROUND DATA

History:		
Reputation/Manner:		
Allies/Affiliates:		
Enemies/Competitors:		
Security Rating:	**Comp Security Rating:**	**Comp Languages:**

IMPORTANT PERSONS

Name	Postion/Title	Notes

ADDITIONAL NOTES

15.0
STAR CHARTS

This expanded version of the star map on pages 68 and 69 includes some (but by no means all) stars in the "nearby" **Frontier Zone** regions. Those stars are listed below with their exact coordinates. On the lower half of the page is a travel distance matrix showing some common travel route distances. Other distances can be calculated using the Pythagorean theorem, taking a triangle of sides a, b and c (c being the hypotenuse), where $a^2 \times b^2 = c^2$. The operation will have to be performed twice unless the starting point and destination fall along one of the three axes of each other.

OUTWARD AND ANTISPINWARD
Athys [21,165,41]
Enos [52,138,3]
Flerias [24,127,52]
Jodien [42.5,106.5,-5]
Sta'az [58,81,-97]
Gamma Arietis [71,59,113]
Epsilon Arietis [12.5,148,164]
Iota Arietis [71,59,113]
Tau Arietis [111,95,126]
Omega Arietis [88.5,25,93]
Beta Lupi [48,91.5,-211]
Delta Lupi.[38,87,-188]
Theta Lupi [5,135,-233]
33 Lupi [4,135,-233]
Pi Lupi [74.5,116,-203]
Pitarh [82,178,22]
Isbarb [14,141.5,124]
Egano [61,64,-206]
Willow [8,179,-145]
Heaven 7 [63,121.5,13]
Otessa Outstation [57,129,20]
Nihle Outstation [61.5,84,-56]

COREWARD AND ANTISPINWARD
Cera [-52,54,201]
Extra 2 [-114.5,45,205]
Hoen [-39,73,193]
Kailis [-80.5,50,-91]
Teria [-61,62,-111]
Alpha Delphini [-48,184.5,250]
Beta Delphini [Zeta Delphini [-15,179,175]
6606 Delphini [-105.5,62,188]
Dauphine Delphini [-18,163,251]
Beta Apus [-8.5,126.5,-40]
Mu Apus [-34.5,114,-66]
Omicron Apus [-58.5,79,—79]
Rho Apus [-31,86.5,-39]
Psi Apus [-112,70,-85]
Alpha Scuti [-65,178,153]
Beta Scuti [-108,112,89]
Gamma Scuti [-112,99,149]
Zeta Scuti [-15,179,97]
Promo Scuti [-26,119,131]
Angeli Outstation [-48,168,203]
De Villa Outstation [-45,69,-122]

COREWARD AND SPINWARD
Chee [-98.5,-7,-196]
Firma 4 [-42,-172,13]
Kwib [-59.5,-55.5,131]
Oran [-81.5,-10,2]
Ryt 7 [-110,-80,-150]
Alpha Circini [-103,-30,99]
Zeta Circini [-118.5,-192,112]
Theta Circini [-39,-121,14]
Kappa Circini [-47,-56,55]
Circa Circini [-199,-11.5,53]
Beta Cancri [-56,-83,-44]
Delta Cancri [-2,-116,-117]
Iota Cancri [-88.5,-33,-147]
67 Cancri [-101.5,-76,-67]
888 Lancri [-51,-177,-81]
Alpha Muscae [-62,-98,112]
Epsilon Muscae [-21.5,-128,-24]
Eta Muscae [-58.5,-181,37]
Mu Muscae [-74,-153,-28]
Rho Muscae [-117,-112,7]
Creastos Outstation [-32.5,-149,7]
Rhude Oustation [-96.5,-41.5,-187]
Gori Outstation [-92,-19,83]

OUTWARD AND SPINWARD
Grea [81,-12,150]
Irpul [73,-30,-121]
Matay [100,-38,0]
Quarae [108,-137,10]
Ronom [36,-190,-25]
Alpha Camelopadi [99,-130,161]
Beta Camelopadi [59.75,-43,100]
Kappa Camelopadi [118,71.5,76]
Pi Camelopadi [116.5,-143,65]
Camelopadi 2 [42,-194,112]
Alpha Doradus [105.5,-77,-111]
Gamma Doradus [3,-73,-122]
Zeta Doradus [107,-32,-44]
Iota doradus [54,-171.5,-21]
Doradus 8 [70,-186,-7]
Beta Sextanis [28.5,-64,10]
Delta Sextanis [18,-160,25]
Epsilon Sextanis [114.5,-15,7]
Lambda Sextanis [8.5,-155,-22]
Sextanis 6 [81.5,-187,-44]
Antimony Outstation [93,-120,152]
Darhks Outstation [98,-187,-77]
Weyes Outstation [104.5,-20,24]

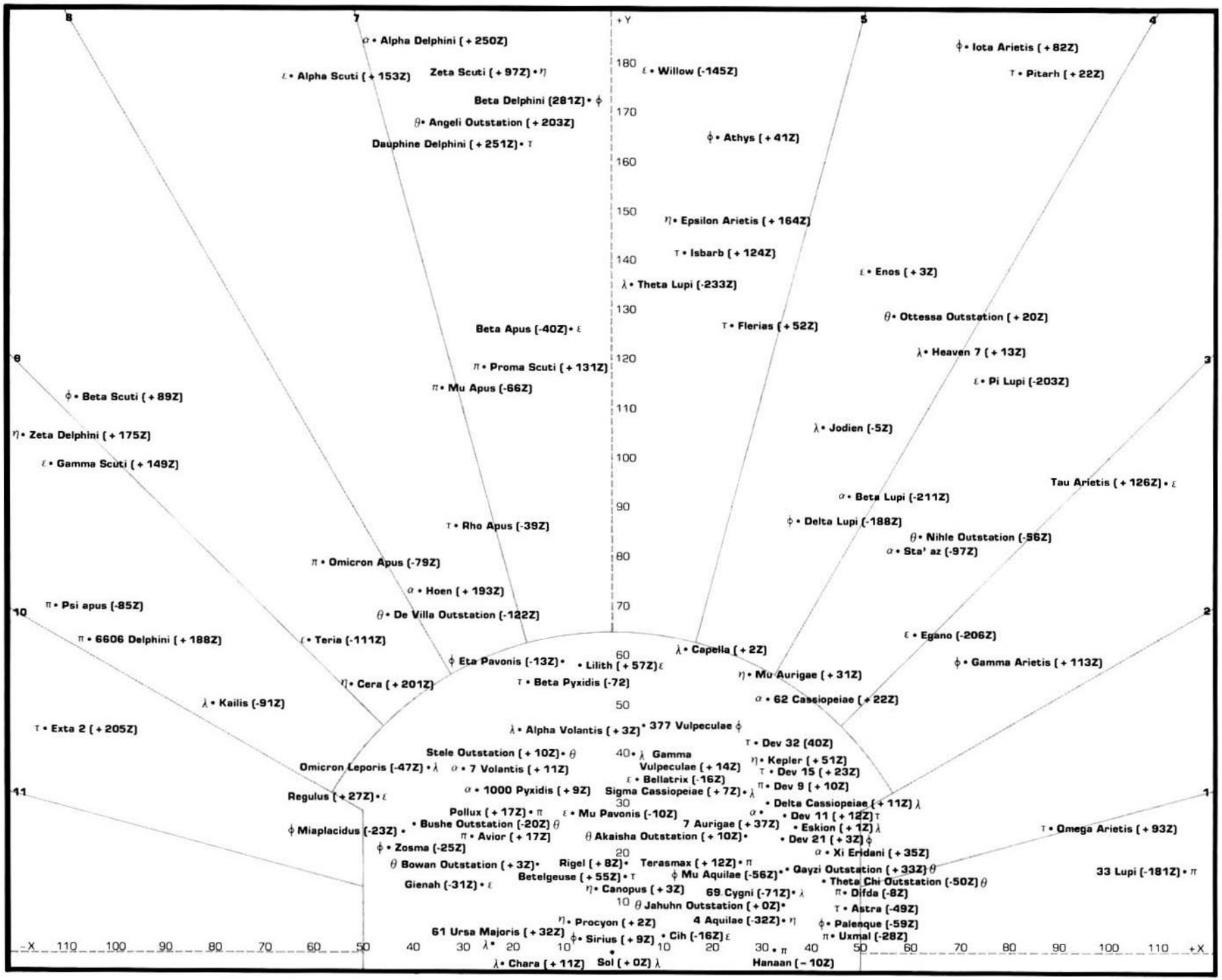
		Sol	Tau Ceti	Omega Piscium	Ceril	Dev 7	Bellatrix	Iota Ceti	Epsilon Eridani	Xi Volantis	Ankaa	Beta Aquilae	Naos	Epsilon Pyxidis	Atr 112	Pi Leporis	61 Ursa Majoris	Pollux	Mu Pavonis	Alpha Volantis	Phecda	Lambda Pavonis	Alpha Centauri	BD 33	Mu Herculis	Zeta Bootis	Tau Arae	Xi Octavis	Phi Iupetus	Theta Arae	Arcturus	Gama Ophiuchi	Sigma Draconis	Tau Eridani	Phi Cygni	Gamma Hydri	Fifi 3	Zeta Draconis	Iota Indi	Rho Draconis	Mu Lacerate	Beta Hydri
Beta Hydri	(4,-1,12)	13	19	41	78	38	45	55	49	52	45	82	29	37	44	80	35	36	39	52	53	64	6	54	28	47	36	68	92	50	33	36	9	31	37	25	63	43	37	28	62
Mu Lacerate	(29,-45,47)	71	78	90	73	87	104	88	59	95	67	134	85	95	84	140	72	91	100	111	98	121	65	94	46	85	72	94	119	79	71	61	54	45	54	43	28	73	31	63	
Rho Draconis	(21,-13,-7)	26	28	29	94	41	50	74	72	59	35	76	29	55	69	84	61	60	51	71	79	85	31	42	37	47	45	51	81	60	50	39	33	34	20	44	73	25	50		
Iota Indi	(7,-25,40)	48	55	74	66	69	81	68	52	78	61	120	63	67	64	116	42	62	75	83	67	92	39	78	15	64	49	84	47	56	44	42	28	35	51	17	27	63			
Zeta Draconis	(24,-29,-21)	43	47	39	113	61	66	95	91	79	50	85	42	66	86	90	78	79	67	89	95	101	49	36	47	47	51	38	68	64	60	43	51	51	17	61	82				
Fifi 3	(3,-46,56)	73	81	84	77	96	108	90	54	104	84	143	87	89	84	138	60	86	101	108	84	114	65	96	42	80	65	97	118	67	60	56	54	94	69	41					
Gamma Hydri	(9,-9,35)	37	43	63	60	54	67	52	30	62	51	103	54	58	54	104	35	48	61	69	60	79	28	74	28	63	48	84	109	59	42	45	16	63	50						
Phi Cygni	(10,-29,-11)	33	40	43	106	61	63	89	80	78	54	91	35	54	73	86	63	69	61	81	80	91	37	32	31	34	35	36	65	47	43	26	39	47							
Tau Eridani	(32,-6,24)	40	41	52	61	36	63	53	47	51	26	90	53	68	70	107	57	59	63	75	79	90	37	74	41	71	61	83	112	75	58	55	29								
Sigma Draconis	(3,-6,20)	21	28	50	73	41	54	55	42	57	48	91	34	43	45	88	31	39	47	58	53	69	12	59	23	49	36	71	96	49	31	35									
Gama Ophiuchi	(-11,-33, +3)	35	46	60	104	65	71	90	72	87	70	106	42	47	61	86	47	63	63	78	65	84	34	35	18	20	15	45	66	24	21										
Arcturus	(-25,-17,11)	32	43	64	99	64	65	80	63	82	76	105	41	32	40	80	28	46	53	63	42	65	28	31	26	11	12	61	77	19											
Theta Arae	(-35,-31,3)	47	58	74	116	80	79	99	80	99	91	116	51	43	55	84	45	64	67	78	54	77	45	44	36	19	15	54	64												
Phi Iupetus	(-29,-53,-57)	83	90	87	168	107	102	145	137	132	115	122	74	81	107	89	105	110	97	115	110	117	89	43	84	49	66	31													
Xi Octantis	(-5,-42,-41)	59	65	61	142	80	81	121	113	105	85	101	52	66	92	83	87	92	78	98	98	105	66	21	61	34	49														
Tau Arae	(-22,-23, + 1)	33	43	60	106	65	65	87	72	85	76	102	37	34	49	78	40	54	55	68	53	69	31	38	27	18															
Zeta Bootis	(-23,-26,-17)	39	48	57	122	69	66	99	89	92	81	99	36	38	61	70	56	64	57	74	65	77	42	25	41																
Mu Herculis	(-2,-28,18)	34	44	61	87	58	71	77	56	79	61	107	46	51	58	93	48	58	64	76	62	84	28	55																	
BD33	(-8,-22,-36)	43	48	45	131	64	61	194	102	89	75	84	33	47	75	64	74	73	57	78	82	85	51																		
Alpha Centauri	(-2,-1,10)	10	18	42	82	37	44	58	51	55	51	83	26	32	39	76	31	33	37	50	19	60																			
Lambda Pavonis	(-39,46,4)	61	57	75	109	71	50	69	81	70	96	83	60	39	30	54	54	32	38	20	37																				
Phecda	(-44,17,27)	55	58	83	95	76	67	69	61	81	95	109	61	38	14	79	25	32	53	45																					
Alpha Volantis	(-19,45,3)	50	43	60	97	46	33	62	72	51	78	68	49	37	33	55	52	22	23																						
Mu Pavonis	(-8,29,-10)	32	24	37	100	37	15	60	74	46	63	56	27	27	40	47	52	28																							
Pollux	(-16,28,17)	37	34	58	81	47	40	45	52	50	69	80	44	31	19	69	31																								
61 Ursa Majoris	(-24,2,32)	40	46	72	78	63	65	60	41	72	77	106	53	39	24	88																									
Pi Leporis	(-34,35,-49)	70	65	65	147	79	51	106	119	88	103	67	56	50	70																										
Atr 112	(-33,21,20)	45	46	71	91	64	54	60	57	68	84	95	51	29																											
Epsilon Pyxidis	(-27,10,-6)	30	32	51	106	55	41	74	74	69	76	81	28																												
Naos	(-2,3,-16)	16	16	84	104	36	32	73	77	58	55	66																													
Beta Aquilae	(30.53,-44)	76	64	48	128	55	42	87	116	55	72																														
Ankaa	(48.5.6)	49	44	41	77	26	56	59	68	42																															
Xi Volantis	(31,43,10)	55	44	48	74	27	38	34	66																																
Epsilon Eridani	(6,8,60)	61	63	85	37	65	80	38																																	
Iota Ceti	(19,42,42)	63	57	73	47	49	60																																		
Bellatrix	(5.34,-16)	38	27	49	102	31																																			
Dev 7	(27,19,-1)	33	24	25	81																																				
Ceril	(35,20,80)	90	89	105																																					
Omega Piscium	(21,10,-24)	34	26																																						
Tau Ceti	(5,10,-3)	12																																							
Sol	(0,0,0)																																								

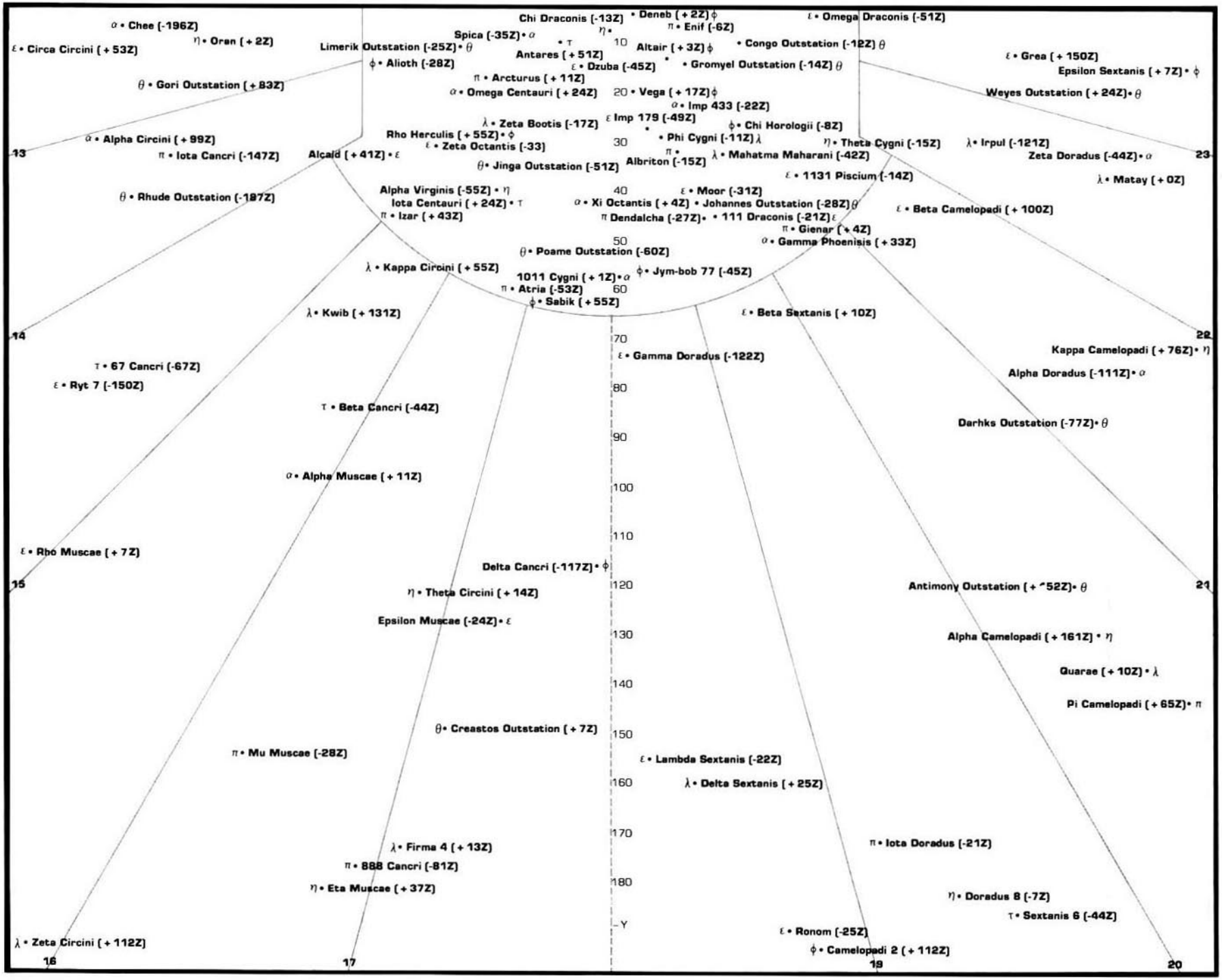
STAR SYMBOL NOTATION

location z-coordinate
type code λ •Ceril(+80Z)
name

COLOR CODE

α Type 0 Star
ε Type B Star
Φ Type A star
η Type F star
λ Type G star
π Type K star
τ Type M star
ø Outstation


8
7
+Y
5
4
α • Alpha Delphini (+ 250Z)
ε • Alpha Scuti (+ 153Z)
Zeta Scuti (+ 97Z) • η
Beta Delphini (281Z) • ϕ
θ • Angeli Outstation (+ 203Z)
Dauphine Delphini (+ 251Z) • τ
180
ε • Willow (-145Z)
ϕ • Athys (+ 41Z)
ϕ • Iota Arietis (+ 82Z)
τ • Pitarh (+ 22Z)
170
160
150
η • Epsilon Arietis (+ 164Z)
τ • Isbarb (+ 124Z)
140
λ • Theta Lupi (-233Z)
ε • Enos (+ 3Z)
130
Beta Apus (-40Z) • ε
τ • Flerias (+ 52Z)
θ • Ottessa Outstation (+ 20Z)
9
π • Proma Scuti (+ 131Z)
π • Mu Apus (-66Z)
120
λ • Heaven 7 (+ 13Z)
3
ϕ • Beta Scuti (+ 89Z)
ε • Pi Lupi (-203Z)
110
η • Zeta Delphini (+ 175Z)
λ • Jodien (-5Z)
ε • Gamma Scuti (+ 149Z)
100
Tau Arietis (+ 126Z) • ε
α • Beta Lupi (-211Z)
90
τ • Rho Apus (-39Z)
ϕ • Delta Lupi (-188Z)
θ • Nihle Outstation (-56Z)
π • Omicron Apus (-79Z)
80
α • Sta' az (-97Z)
α • Hoen (+ 193Z)
π • Psi apus (-85Z)
10
70
θ • De Villa Outstation (-122Z)
2
π • 6606 Delphini (+ 188Z)
ε • Teria (-111Z)
ε • Egano (-206Z)
60
λ • Capella (+ 2Z)
ϕ • Eta Pavonis (-13Z) •
• Lilith (+ 57Z) ε
ϕ • Gamma Arietis (+ 113Z)
η • Mu Aurigae (+ 31Z)
η • Cera (+ 201Z)
τ • Beta Pyxidis (-72)
α • 62 Cassiopeiae (+ 22Z)
50
λ • Kailis (-91Z)
τ • Exta 2 (+ 205Z)
λ • Alpha Volantis (+ 3Z) • 377 Vulpeculae ϕ
τ • Dev 32 (40Z)
Stele Outstation (+ 10Z) • θ
40 • λ Gamma Vulpeculae (+ 14Z)
η • Kepler (+ 51Z)
Omicron Leporis (-47Z) • λ
α • 7 Volantis (+ 11Z)
τ • Dev 15 (+ 23Z)
ε • Bellatrix (-16Z)
11
1
α • 1000 Pyxidis (+ 9Z)
Sigma Cassiopeiae (+ 7Z) • λ
π • Dev 9 (+ 10Z)
Regulus (+ 27Z) • ε
30
• Delta Cassiopeiae (+ 11Z) λ
Pollux (+ 17Z) • π
ε • Mu Pavonis (-10Z)
α •
• Dev 11 (+ 12Z) τ
τ • Omega Arietis (+ 93Z)
7 Aurigae (+ 37Z)
• Eskion (+ 1Z) λ
ϕ Miaplacidus (-23Z) •
• Bushe Outstation (-20Z) θ
π • Avior (+ 17Z)
θ Akaisha Outstation (+ 10Z) •
• Dev 21 (+ 3Z) ϕ
ϕ • Zosma (-25Z)
α • Xi Eridani (+ 35Z)
20
θ Bowan Outstation (+ 3Z) •
Rigel (+ 8Z) •
Terasmax (+ 12Z) • π
• Qayzi Outstation (+ 33Z) θ
33 Lupi (-181Z) • π
Betelgeuse (+ 55Z) • τ
ϕ Mu Aquilae (-56Z) •
• Theta Chi Outstation (-50Z) θ
Gienah (-31Z) • ε
η • Canopus (+ 3Z)
69 Cygni (-71Z) • λ
π • Difda (-8Z)
10
θ Jahuhn Outstation (+ 0Z) •
τ • Astra (-49Z)
η • Procyon (+ 2Z)
4 Aquilae (-32Z) • η
ϕ • Palenque (-59Z)
61 Ursa Majoris (+ 32Z)
ϕ • Sirius (+ 9Z)
• Cih (-16Z) ε
π • Uxmal (-28Z)
-X 110 100 90 80 70 60 50 40 30 λ 20 10
10 20 30 • π 40 50 60 70 80 90 100 110 +X
λ • Chara (+ 11Z)
Sol (+ 0Z) λ
Hanaan (– 10Z)


α • Chee (-196Z)
η • Oran (+ 2Z)
ε • Circa Circini (+ 53Z)
Limerik Outstation [-25Z] • θ
Spica (-35Z) • α
Chi Draconis (-13Z)
η •
• Deneb (+ 2Z) ϕ
π • Enif (-6Z)
ε • Omega Draconis (-51Z)
• τ
Antares (+ 51Z)
10
Altair (+ 3Z) ϕ
• Congo Outstation (-12Z) θ
ε • Grea (+ 150Z)
Epsilon Sextanis (+ 7Z) • ϕ
ϕ • Alioth (-28Z)
ε • Dzuba (-45Z)
• Gromyel Outstation (-14Z) θ
θ • Gori Outstation (+ 83Z)
π • Arcturus (+ 11Z)
α • Omega Centauri (+ 24Z)
20 • Vega (+ 17Z) ϕ
Weyes Outstation (+ 24Z) • θ
α • Imp 433 (-22Z)
λ • Zeta Bootis (-17Z)
ε Imp 179 (-49Z)
ϕ • Chi Horologii (-8Z)
Rho Herculis (+ 55Z) • ϕ
• Phi Cygni (-11Z) λ
α • Alpha Circini (+ 99Z)
ε • Zeta Octantis (-33)
30
η • Theta Cygni (-15Z)
λ • Irpul (-121Z)
13
π • Iota Cancri (-147Z)
Alcaid (+ 41Z) • ε
π •
Albriton (-15Z)
λ • Mahatma Maharani (-42Z)
Zeta Doradus (-44Z) • α
23
θ • Jinga Outstation (-51Z)
ε • 1131 Piscium (-14Z)
λ • Matay (+ 0Z)
θ • Rhude Outstation (-187Z)
Alpha Virginis (-55Z) • η
40
ε • Moor (-31Z)
Iota Centauri (+ 24Z) • τ
α • Xi Octantis (+ 4Z)
• Johannes Outstation (-28Z) θ
ε • Beta Camelopadi (+ 100Z)
π • Izar (+ 43Z)
π Dendalcha (-27Z) •
• 111 Draconis (-21Z) ε
π • Gienar (+ 4Z)
50
α • Gamma Phoenisis (+ 33Z)
θ • Poame Outstation (-60Z)
λ • Kappa Circini (+ 55Z)
1011 Cygni (+ 1Z) • α
ϕ • Jym-bob 77 (-45Z)
π • Atria (-53Z)
60
ϕ • Sabik (+ 55Z)
λ • Kwib (+ 131Z)
ε • Beta Sextanis (+ 10Z)
14
22
70
ε • Gamma Doradus (-122Z)
Kappa Camelopadi (+ 76Z) • η
τ • 67 Cancri (-67Z)
Alpha Doradus (-111Z) • α
ε • Ryt 7 (-150Z)
80
τ • Beta Cancri (-44Z)
Darhks Outstation (-77Z) • θ
90
α • Alpha Muscae (+ 11Z)
100
110
ε • Rho Muscae (+ 7Z)
Delta Cancri (-117Z) • ϕ
15
120
Antimony Outstation (+ 52Z) • θ
21
η • Theta Circini (+ 14Z)
Epsilon Muscae (-24Z) • ε
130
Alpha Camelopadi (+ 161Z) • η
Quarae (+ 10Z) • λ
140
Pi Camelopadi (+ 65Z) • π
θ • Creastos Outstation (+ 7Z)
150
π • Mu Muscae (-28Z)
ε • Lambda Sextanis (-22Z)
160
λ • Delta Sextanis (+ 25Z)
170
π • Iota Doradus (-21Z)
λ • Firma 4 (+ 13Z)
π • 888 Cancri (-81Z)
180
η • Eta Muscae (+ 37Z)
η • Doradus 8 (-7Z)
τ • Sextanis 6 (-44Z)
Y
ε • Ronom (-25Z)
λ • Zeta Circini (+ 112Z)
ϕ • Camelopadi 2 (+ 112Z)
16
17
19
20

G • 69

PART III: ADVENTURE

Following is a brief adventure designed for beginning ***Space Master*** Characters. It introduces the players to the intrigue of the Terran Empire, as well as to a little interstellar space flight, some skulking about, and perhaps even some combat.

16.0 INTRODUCTION

The backdrop for this adventure is the conflict between two of the Empire's Inner Provinces. To be specific, the Royal Family of Jade-London is about to economically devastate the Colosian province, primarily for personal economic gain and as a favor to one of their Minor Clan supporters.

16.1 THE COLOSIAN SCHEME

The Colosians, being underhanded and cruel, are in the process of purging the Minor Clan of Nitio-Jairus, of the Rho Perclarae system, so that the resource installations there may be subsequently claimed (it is hoped) in the name of Lord Kibakee Colos I. The Thain ("ruler") of Nitio-Jairus has become aware of his impending doom and has approached his friends at the Jade-London court for assistance. Ever seeking an excuse to foil Colosian plans, Jade-London intelligence teams have immediately begun forming plans to defeat the Colosian coup.

Both Nitio-Jairus and Jade-London are aware that the Colosians will be implementing their heinous scheme via Tachyon Beam Dictor transmissions to one of their MERLOGH agents (Their plot must involve a fair amount of economic manipulation.) in concert with some sly and covert activities directly affecting Nitio-Jairus. To foil the Colosians, Jade-London has planned subtle parrying maneuvers to utterly embarrass Lord Colos, exposing his criminal activities for all to observe. The Jade-London plan is grandiose in its logistic immensity, but it involves the active participation of relatively few men, none of whom are Jade-London citizens or soldiery. The plan requires several synchronized operations involving sabotage.

The successful execution of the Jadist plan will invariably lead to a weakened Colosian performance in MERLOGH circles, so the Jadists have planned a secondary (but infinitely more satisfying) aspect to their operation. After the Colosian design has been exposed, the value of their Monit should plummet. In anticipation of this event, the Jadists have set-up innumerable third-party brokers to buy up Colosian Monits when their value bottoms out. In turn, Jade-London then plans to absolve the Colosians of the Nitio-Jairus takeover bid by setting-up yet another Family (a Minor Clan would suffice) to be the patsy for the whole sordid scheme. This could be pulled off because the Colosians will be vehemently denying their embroilment in the whole affair, after its failure. Ergo, the Colosian Monit will rise to its former level and the Jadists will turn a handsome profit as they sell-off their now inflated Colosian Monit reserves. (They are so sneaky.)

16.2 A COUNTERPLOT

This particular sample adventure covers one aspect of the initial Jadist plan to prevent the Colosian bid to usurp Nitio-Jairus. As mentioned previously, Jade-London is aware that Colos' operation will begin with Tachyon Beam Dictor (TBD) transmissions to the MERLOGH organization. The sheer distances intrinsic to such communiques preclude the possibility of direct transmission, so relay bases must be employed. Therefore, the first part of the Jadist plan involves the infiltration of the initial line of TBD relay bases likely to receive the transmissions. (Colos is one of the few provinces which insists on operating its own TBD net in defiance of the Dia Khovaria.) If this segment of the Jadist plot can be pulled off, the Colosian transmissions could be 're-routed', and falsified MERLOGH confirmations and reports could be sent back to the Colosian court. Confident that their preliminary takeover moves had succeeded, Lord Colos would invoke the execution of the rest of his plan for Nitio-Jairus. At this point, supplementary Jadist maneuvers could expose the Colosians, red-faced, in the act of purging a Minor Clan in a terribly illegal fashion.

Fortunately for Jade-London, each of the four likely initial TBD relay bases are staffed by Colosians, so personal liquidations will not directly affect or infuriate the Imperium or innocent bystanding territories. Plans call for the supplanting of the resident technicians, at the various candidate relay bases, with stand-ins capable of operating the base equipment and manipulating the TBD transmissions. Failing that, the receiving, interpretive, and transmissive efficacy of the given base should be sabotaged so that the Colosians would require an alternative route for their transmissions (hopefully to an infiltrated base). Failing that, and as an absolutely last resort, the base in question would have to be demolished.

Not wanting to use their own troops in the operation, the Jadists have approached other families seeking revenge upon the Colosians (they are not a popular group), offering exorbitant monetary benefits to execute various portions of the master plan. For the purposes of this scenario, the Provincial Family acting as the Jadist's middle-man functionary is the Major Family of Devon. Devon is an ideal functionary from the Jadist point of view because the Devon/Colos rivalry has been long and bloody, so the Devonians would stop at nothing to gain an upper hand in their feud.

Wishing to maintain his superficial appearance as an upstanding citizen of the Empire's power structure, Lord Yama Pythagor III Devon has chosen to wash his hands of his involvement in the Jade-London conspiracy by delegating the execution of the sub-plots to the Free Traders (read "Smugglers") of Hyperion. Hyperion is presently an independent world which happens to fall within the operating jurisdiction of Devon Province. Being free of an occupational administrative garrison, Hyperion has become one of the gravitating points for the flotsam and jetsam of the Empire's society. Hyperion is also the home for several of the Empire's more prolific privateersmen. Its proximity to the Devonian Homeworld of Karoline is more of a boon than a threat to the Devonian court because of the influx of high security information which smugglers and crimelords intrinsically bring with them. Lord Yama Pythagor III Devon has charged two of his Hyperion contacts with arranging and performing three of the assigned relay base infiltrations to coincide with the Jadist's timetable.

17.0 CHARACTERS

Following is a list of the key personalities in the adventure, including some example player-characters, and the non-player-characters.

17.1 THE PLAYERS

This scenario is well-suited for the leading edge of adventuring characters: Armsmen, Pilots, Explorers, and Techs. However, the GM should not feel intimidated by players who want to start with a character of a different profession. Below are listed the various character classes along with some sample background and motivation options, so that any class may find a purpose within the context of this sample adventure.

The characters begin this scenario on Hyperion, either contacted by the privateersmen organizing the operation, or as Devonian agents along for a secondary purpose. The GM may also wish to allow characters who have ulterior motives with respect to the mission. Spies, enemy agents, or even an alien being could be thrown into the character mix.

Armsman: i) A pure mercenary, selling his services to the highest bidder. ii) A fugitive from the Devonian Forces requiring Monits to pay off smugglers who would get him out of Devonian space. iii) An escapee from Spherinx seeking a new life so that one day he may return and raze the Temples of the priests to the ground.

Pilot: i) Born on Hyperion, the son of a successful privateersman out on his first mission. ii) An amazon from the Minor Clan of Baburnica, acting as a back-up on the Tach 20c. iii) An agent planted by the Devon court to insure that the Jadist plans are carried out as ordered.

Explorer: i) In a galaxy of structures and rules, this character is a true independent with the entrepreneurial spirit. ii) A new privateering recruit who has shown a lot of promise. iii) An Minor Clan scout, between assignments, looking for some extra cash.

Systems Technician: i) A mechanic with a independent trader looking for a more challenging assignment. ii) An ex-convict just released from a Devonian detention center, unable to claim his old job.

Electrical Technician: i) A specialist seeking practical experience in his area of study. ii) A member of a technical working pool often utilized on Hyperion by the privateersmen.

Arms Technician: i) Sent by the organizers to coordinate any demolition or sabotage operations required on the mission. ii) A character who received specialist training in the armed forces ranks and left them after an uneventful short tour of duty.

Criminologist: i) Hired by the privateersmen in the likely event that security systems at the relay base will have to be defeated. ii) A character sought by the Devonian security forces for his involvement in a rash of wily and clever crimes on the Devonian Homeworld.

Medic: i) A Hyperion native employed by the privateersmen to join high risk missions in order to save as many of their valued employees as possible in the likely event of debilitating injuries. ii) One of the amazons sent in the Tach 20c to care for the crewmembers.

Planetologist: i) Hired to accompany the mission so that any unforeseen COL 72 Prime II atmospheric effects may be interpreted and compensated for when the team arrives at the moon. ii) A Devonian agent sent with the others to the moon to obtain a geological analysis.

Researcher: A scientist escaping persecution because of his radical ideas takes on piece work with the privateers to make a living until he can publish his ideas.

Physician: A cyborg specialist hired by the Jadists to insure that their TBD specialist android is in perfect condition to take over the duties of the technicians which the players are to 'remove' at the Colosian base.

Engineer: i) A prospective privateer who wishes to garner any secret Colosian technology which might be present at the base.

17.2 THE NPCs

The non-player characters are those personalities who will be involved within the context of the scenario but will not have players controlling their actions. Therefore, it is up to the referee of the game to communicate for them and tell the players what the non-player characters are doing. In most cases, NPCs will be the tools of the GM. Through the NPCs the



GM will be able to manipulate the player's actions, either giving them information, or confronting them with problems.

Below are described several NPCs with whom the players may interact within the context of this adventure. Before beginning play, the GM is encouraged to develop as many extra non-player characters as he thinks he can handle during a game session. An easy way to develop the personalities of these NPCs (and keep track of them because there might be several) is to pretend that they are the future manifestations of personal acquaintances, characters out of novels, or historical figures that one is familiar with. When a particular NPC gets into a situation where the GM must adjudicate a direction of action, a mere extrapolation of the given personality is necessary. Treating one's NPCs as if they were alive and real is the best method for portraying a sincere characterization.

ORGANIZATION OF THE NPC LISTING: The NPCs of this sample adventure are grouped into three categories for each major activity location in the scenario. The categories are Allies, Neutrals, and Foes.

Allies are the NPCs who are favorably disposed towards the well-being of the player characters, as far as this particular adventure is concerned. Neutrals are people (or creatures) who the characters will inevitably interact with on a peaceful basis, although their cooperation in any endeavor will have to be purchased in some way or another. Foes supply the conflict (not necessarily violent) that makes a player's life so interesting to portray. Never forget that even NPCs are entitled to a little decent respect once in a while and should not always be treated as cannon fodder.

Allies

Emerich Rach: Emerich is one of the Hyperion "free traders" who were approached by the Devonian court to execute the Jadist plans. He is one of five main privateering kingpins on this independent world. Like all other successful businessmen of Hyperion, Emerich sells manpower services to the Devonian court for dirty jobs in which the Devonians would rather not be directly implicated. Emerich is shrewd, but not as much of a cut-throat as other crime-lords on Hyperion tend to be. He is a Terran human without family or inheritance, having managed to assemble his vast private operating army in only fifteen years of operations. He also won most of his extensive military hardware reserves through gambling set-ups on other independent worlds. Because of this, there are quite a few gutter rats of the underworld who would prefer to see Emerich in vacuum.

His operatives are carefully chosen by his first officer of operations, Jewel Coz, who uses her telepathic powers to determine the sincerity of allegiance pledging privateers. Those admitted into Emerich's ranks tend to look up to him as a father figure. He is stern, fair, and has given the more promising drop-outs of Devonian society a place to call home.

Since many of Emerich's activities are covertly sanctioned by the Devonian court of nobles, his ships, although often boarded, are usually granted free passage by Devonian security forces. Emerich never, well... only occasionally, abuses the quasi-trust that has been granted to him by the court out of the necessity to have non-Devonian forces at their disposal. Emerich likes the position that he holds because he receives exorbitant fees for his performance of covert operations. He would never like to find himself in a situation were he could get cut off from the Devonian slush fund. For this reason, Emerich gladly accepted the assignment to send a team to COL 72 Prime II to sabotage the TBD relay base there.

The majority, if not all, of the player characters will be offered a position on the sabotage team by Emerich. He will supply them with the specialized equipment they will require (and he will want it back) and he has arranged for transportation to COL 72 Prime II and back. He has a total of 30,000 monits with which to pay the players for the successful completion of the operation (and he might not want to offer all of it).

The GM may wish to alter this total, and he should feel free to do so.

Emerich has arranged for the players to be transported by amazons of the Minor Clan of Baburnica, described below.

As a parting note, Emerich will not tolerate poor performances. If the players resort to the outright demolition of the installation, he has ordered the amazons to strand the saboteurs on the planetoid (the players will be unaware of this possibility). There they will die as their respiratory aids run down on the otherwise deserted moon.

Tamora Makusik: Tamora is an Electrical Tech with the specialty field of TBD receptions, interpretations, and transmissions. She will accompany the team. If they are successful in removing the resident technicians at the base, she can take control of the equipment and manipulate the Colosian transmissions should they be relayed through COL 72 Prime II.

Tamora also happens to be an android supplied by the Jade-London intelligence corps. Although her special condition will not be readily apparent to the players, certain personality quirks might tip them off. For example, Tamora will radiate a cold and brittle personality. She will be single-minded in her sense of purpose, and she will disregard her comrade's cries for help if they are expendable.

Neutrals

Safra Smelngay: Safra is the amazon pilot of the Tach 20c hired by Emerich for the mission. Although there are many factions of amazons within the Minor Clan of Baburnica, Safra happens to belong to an extremist orthodox bloc. To her, male humans are the epitome of everything evil or malicious in the universe. She can tolerate their presence when her job calls for it, but she will not converse with them except on the most cursory of levels. If the player group is predominantly male, or worse still, has a 'soft' female constituent, Safra will grope for any excuse to strand the lot of them on COL 72 Prime II.

Jesien Xaviour Bekess: The amazon Tach 20c systems technologist. She is exceedingly vain and narcissistic. Although she is competent at what she does, she is not above letting personal quarrels get in the way of her assigned tasks.

MIKE 140 Chi: The relay station's resident mech interface bot. MIKE is listed in the neutrals section because his programming does not allow him to differentiate between allies and enemies. In ignorant electronic bliss, MIKE follows the commands of whoever happens to be programming him at the time. MIKE cannot presently commit offensive actions.

Foes

"Faber": A Colosian secret agent residing on Hyperion. He has been alerted that a counterplot to the Nitio-Jairus takeover is in the works. The GM may therefore introduce a blocking action against the characters even before they leave Hyperion. Although Faber has access to limited resources, he may be able to foil some of the players' plans, or report back to his superiors if he gains access to secret information. The amount of damage that Faber can inflict should be proportional to the amount of time that the players waste in implementing their plans.

Cilest Vaae: One of the relay station technicians. He is abnormally dedicated to the Colosian cause. It is too bad that he will not be missed, as the players' plans call for his personal liquidation.

Slaig Shlagal: The second tech on COL 72 Prime II. He is a slippery character who would readily barter away his allegiance to the Colosians in order to save his own life (and he would just as likely send an alert the Colos TBD control center while he is negotiating).

KURT 40 Xi: KURT is an old combat unit that the Techs keep around for kicks because they like to tinker with him in their spare time. Unfortunately for KURT, Cilest and Slaig are relatively unskilled at Robotics, so the GM should increase the probability of KURT malfunctioning at any given time. Heaven forbid that poor KURT should actually get into a fight.

18.0
THE SETTINGS

18.1 HYPERION

PLANET: Hyperion IX
CIRCUMFERENCE: 1.05 x 10^5 km
NATURAL SATELLITES: 1
MEAN ORBIT: 6.97 x 10^4 LS
DAY: 23.4 hours
PRODUCTION EMPHASIS:
-Self sustaining agriculture
-No exports
PROVINCE: Devon
STATUS: Independent world
POPULATION: Hyperians: unknown
Spheranxe : >1,000 M
PRODUCTIVITY%: 0% of Devon Prov.

ENVIRONMENT

Hyperion IX (often called Hyperion) is an ocean world with two major continental land masses and a myriad of sub-continental island archipelago. The atmospheric components fall within the tolerance levels of most hominoid races, and the climate is temperate and moderated. The indigenous life forms are marine in nature, but are incompatible with Terran physiologies. That is, the natural life forms may not be consumed by any Terran stock, and most hominids in general. The land plantlife has been introduced through the colonization process, but few species are compatible with the chemical make-up of the ecosphere. Gravity is weak but not totally alien to Terrans.

HISTORY

Hyperion was settled during the infancy of translight exploration. In Prelmp 1174 the first colony ships owned and operated by a now long-forgotten religious cult began arriving to settle this newly discovered world. The Spheranxe were escaping religious persecution, and subsequently became secretive and xenophobic. During the Integration period, the Spheranxe were able to maintain their independence through tenuous bribes and threatened assassinations. Since that time the Spheranxe leaders have instituted a sinister plot to avoid outside control. By decree, all new Spheranxe citizens are cybernized with a neural stimulation devise implanted at the base of the spine. Ultimately, manipulation of the device is quite capable of killing the subject. With such control, the Spheranxe leaders now threaten to commit mass genocide if an outside governing body should ever move to administer the Spheranxe territory. The Devonians, unable to justify the possible loss of life with the headache of controlling such a hard-line group, have never bothered to usurp the Spheranxe leaders.

The Spheranxe only hold sway over one land mass, and calling their government totalitarian would be an understatement. All travel (never off-world), production, consumption, recreation, and procreation are controlled by massive computer centers located in the major settlements. These facilities are administered by the old line of cult priests who lead exemplary, ascetic lifestyles. They also run the country's policing forces. Citizens are often found trying to escape across the seas to "free" lands, but precious few make it. Those that have managed to escape Spherinx have adopted pastoral lifestyles, content with the knowledge that they may now live out their lives in freedom. A few of the refugee settlements have sprouted up into sizable towns, but the technology level is invariably low as the inhabitants continue to shun the ways of outsiders.

Hyperion is still an independent world to this day, and thus has attracted a sizable criminal off-world population (who know better than to interfere with the Spheranxe). Surprisingly, the Devonians are overjoyed with this, because the Hyperians are an excellent source of classified interprovincial information. The Devonians have also discovered that the Hyperians will do anything for the right price, and are disposed towards secrecy when interprovincial missions are involved.

OPERATIONS

The independent lands of Hyperion are generally recognized as being controlled by five powerful organized crime rings (they tend to front as free traders). The privateers (as they like to be called) are rarely in conflict with one another, and even cooperate in joint ventures. They all have vast intelligence networks and caches of military equipment, but often buy the services of other powers to move them from planet to planet. Needless to say, these crimelords deal mostly in information, although the traditional realms of illicit drugs, prostitution, racketeering, and slavery are not below them.

The criminals and mercenaries which constitute the Hyperian population have adopted the refugee Spheranxe lifestyles, living in relatively quiet communities until a challenging assignment comes along. It has been agreed that each of the Privateers has access to the manpower resources of a given number of these isolated communities. Local rosters are kept of the talent available at any given time.

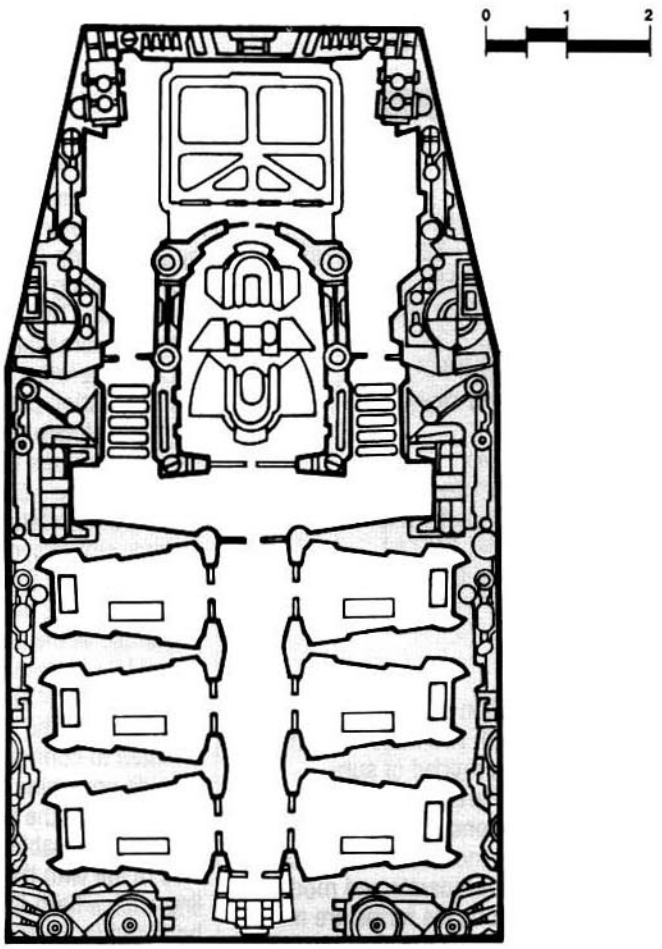


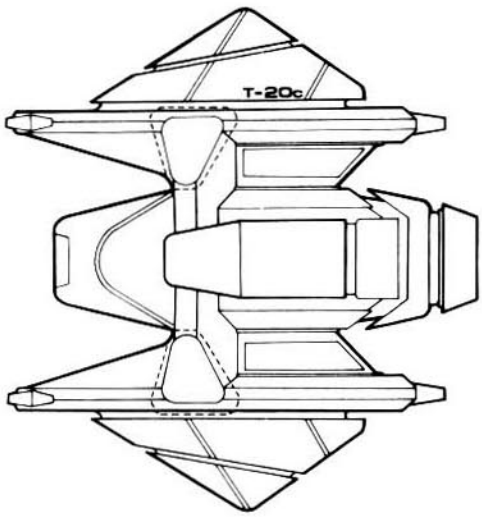
18.2
THE HYPERSHUTTLE

TACH 20c (ROSETTA COLLOSSI)
PRODUCER: Arc Gotha
ORIGIN/OWNER: Minor Clan Baburnica
CLASS: Hypershuttle
TONNAGE/HITS: 300
COMP. SIZE: 20
ARMOR TYPE: 22 (-140 total DB; -90 EW, -50)
CREW: Astro:1 Tech:1
PASSENGER CAPACITY: 6
MAX SUBLIGHT ACCELERATION: Rating 4 = 40 km/second^2
TRANSLIGHT DISPLACEMENT: Rating 12 = 11 LY/day
OPERATING RANGE: About 50 LY
GUNS: Unarmed

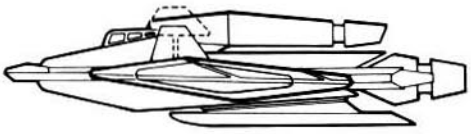
The Tach 20c is a special stealth version of comparable hypershuttles. This particular one is owned by the amazons of the Minor Clan of Baburnica, whose Homeworld is Alexie Prime. The amazons frequently hire out the services of this shuttle and others like it to people like Emerich who have need of secret and swift interstellar travel. In fact, the Minor Clan of Baburnica makes a great deal of Elmonits by offering these types of services, and so they constitute a fair portion of the Clan's gross revenues.

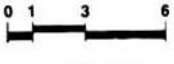
It will require a little more than 50 hours to reach the Colosian relay base once the shuttle hypershunts, as the distance between Hyperion and COL 72 is but 22 LY. Once the hypershuttle arrives at the moon, the amazohs will set down at an appropriate landing sight, confident in the knowledge that their tremendous electronic warfare capability will prevent the ship from being detected by the Colosian base. The amazons will then wait with the shuttle for the return of the players (if they did not blow up the place) and make good their escape from Prime II, leaving behind Tamora to operate the station (or decompose in a smoldering heap).











18.3
COL 72 PRIME II

MOON: COL 72 Prime II
CIRCUMFERENCE: 4.76 x 10^3 km
NATURAL SATELLITES: 0
MEAN ORBIT: 2.10 LS from COL 72 Prime
DAY: —
YEAR: —
PROVINCE: Colos
STATUS: TBD station / Uninhabited
POPULATION: 0 / Technical staff
PRODUCTIVITY %: 0%
PRODUCTION EMPHASIS: —

ENVIRONMENT

The moon of COL 72 Prime II is basically a dead planetoid. However, it does have a thin atmosphere which would allow non-environmentally protected personnel to be exposed to the elements for up to 5 hours before suffering detrimental effects from the low pressure. The atmosphere is not breathable for hominids, so respiration devices are an absolute necessity during direct exposure. The surface of this moon also is bombarded by a fair amount of ultraviolet (and other forms of) radiation. It is recommended that some form of radiation shielding be used by exposed personnel for protection from electromagnetic surges which accompany the primary's frequent solar flares. The most interesting fact about this moon is that its rotation causes its relative facing, as perceived from outside of the COL 72 system, to never change. This makes it an ideal TBD station because the location of any point on its surface is more easily predicted by TBD alignment computers.

HISTORY

COL 72 Prime II has long been used by the Colosians as a Tachyon Beam Dictor relay station. It is the perfect natural platform and the COL 72 system lies between the Colosian Homeworld and the heart of the Imperium. The Colosians have maintained many bases on the planetoid over time, and the present operating base is one of the most sophisticated available to the Colosians.

OPERATIONS

Presently, there is one operational Tachyon Dictor base on Prime II. It is staffed by two technicians and a mech interface bot. This base frequently receives priority messages of economic importance, as it relays directly to the Colosian Homeworld and other stations in a long series of relays which pick their way through the Imperium. This base rarely deals in interprovincial communiques.

The technical crew is replaced and resupplied once every three months (or so). The Lander Field on the perimeter of the base is capable of handling craft up to 1000 tons, but the shuttles that handle the technical crews rarely mass-in at over 100 tons. There is a small 5-man shuttle bus which moves personnel between the Lander field and the base station proper.

18.4
COL 72 TBD RELAY BASE

The installation itself consists of a Lander field, the control base and a vast array of TBD receptor and transmission panels. Due to the very nature of TBD transmission technology, the TBD panel array must be built in a dish configuration with the area of the dish determining the effective range of the transmissive capability. The COL 72 relay base has been constructed in an impact crater of approximately five km diameter. This area allows utilization of Tachyon Beam Dictors out to their present maximum effective range, about 50 light years.

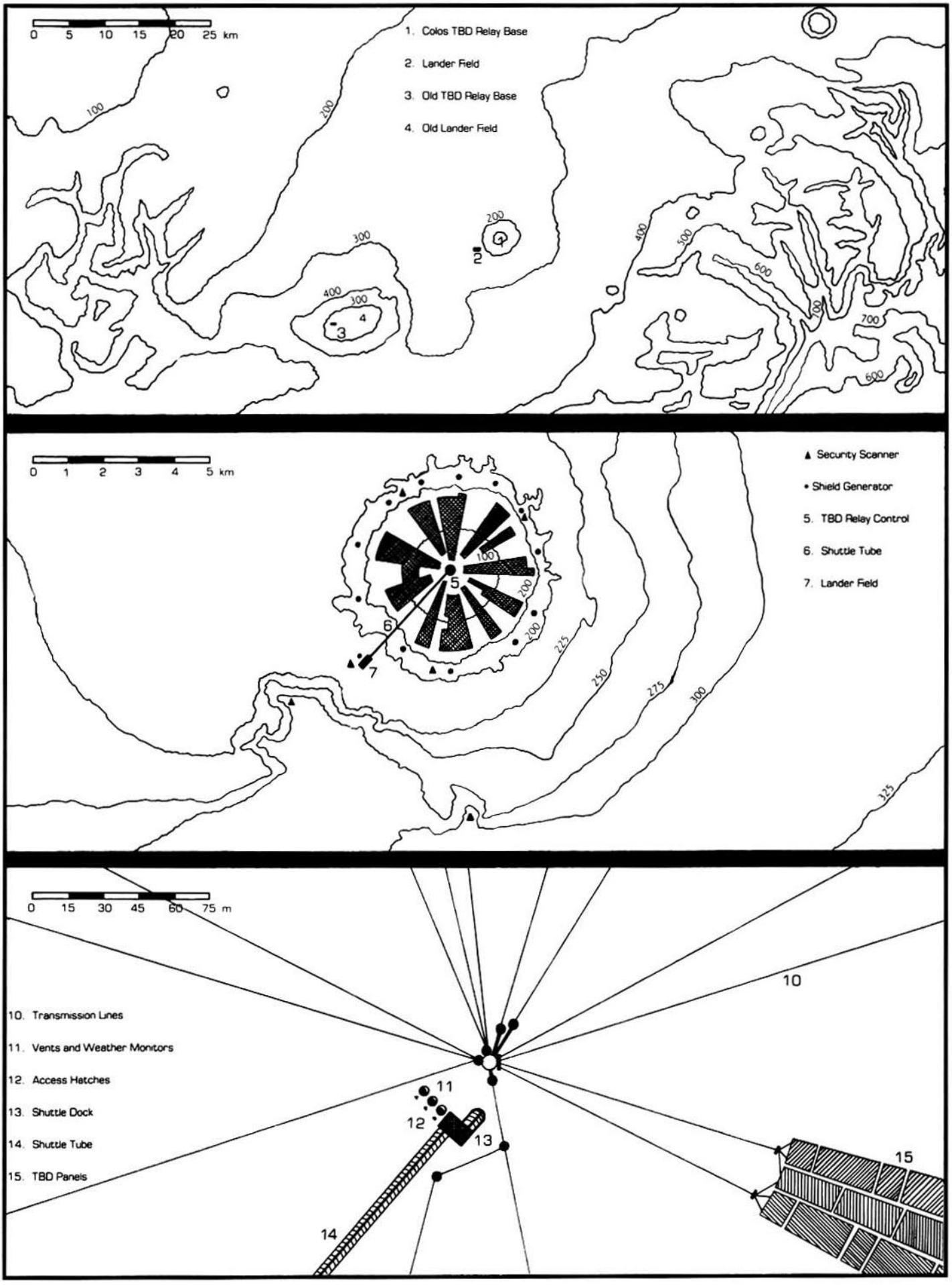
NPC SUMMARY SHEET

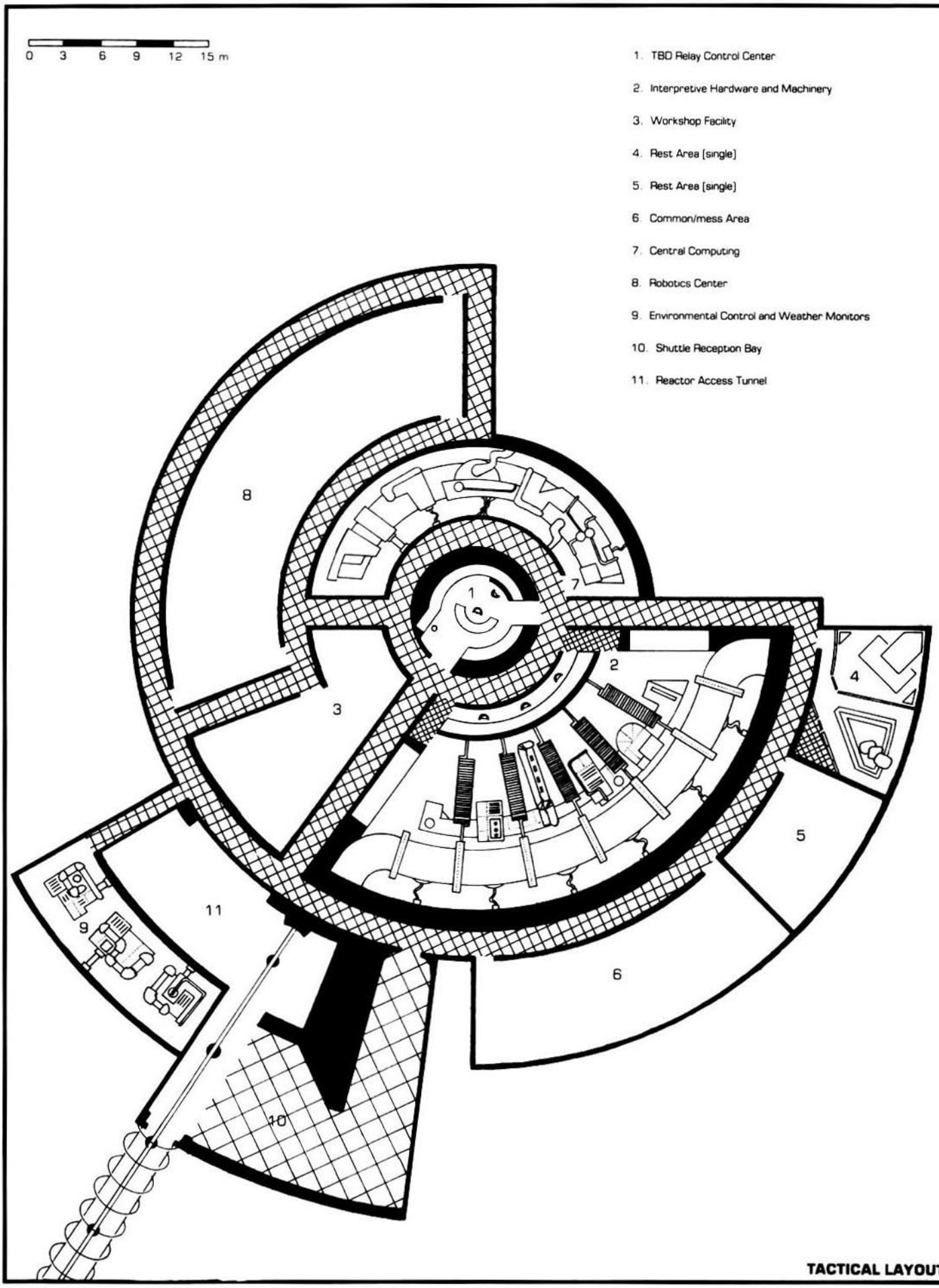
Name	Class	Lvl	Hits	AT(DB)	Skill A bonus	Skill B bonus	Weapon bonus	Notes
Emerich Rach	P	13	105	1(5)****	ha/ 99	hp/ 98	Stun p / 72	Hyperion privateer
Tamora Makusic	E	10	160	4(30)	el/ 70	cpt/ 65	Laser p/ 50	Android
Safra Smeingay	P	7	65	1(5)**	hp/ 78	ha/ 76	Blast r/ 65	Amazon shuttle pilot
J.X. Bekess	ST	6	63	15(30)**	mt/ 70	pst/ 66	Blast p/ 52	Amazon shuttle tech
"Faber"	C	6	57	5(40)**	s&h/ 71	crt/ 65	Stun p / 70	Colosian agent
Cilest Vaae	ET	5	55	1(0)**	el/ 67	hep/ 25	Laser p/ 30	TBD tech
Slaig Shlagal	ET	5	50	1(10)**	el/ 65	cpt/ 65	Laser p/ 32	TBD tech
THE ROBOTS:								
MIKE 140 Chi			70	14(20)	c/ 20	pst/ 20	none	TBD Mech Interface robot
KURT 40 Xi			100	22(20)	Blast Mk5/ 40	Blast Mk5/ 40	Stun Mk5/ 40	Poorly maintenanced Combat Unit

Codes: Class: Ar — armsman, Pi— pilot, Ex — explorer, ST — systems technician, ET — electrician, AT — arms technician, Re — researcher, Ph — physician, En — engineer, Cr — criminologist, Me — medical technician, Pl — planetologist, T — true telepath, xx/T — semi telepath of class xx.

Skills: c — climbing, s — swimming, r — riding, dt — disarm traps, pl — pick locks, s&h — stalk & hide, p — perception, d — driving, ap — atmospheric pilot, mp — marine pilot, a — ambush, l — linguistics, am — adrenal moves, ad — adrenal defence, ma — martial arts, f — forgery, cf — counterfeiting, s/x survival in x, fa — first aid, sa — scanner analysis, aa — airborne assault, cp — combat pilot, ac — AFV crewmember, ae — alien environments, ma — missile artillery, hep — heavy energy projectors, mwa — mounted weapons ambush, op — orbital pilot, nsp — N-space pilot, hp — hyper pilot, nsa — N-space astrogation, ha — hyper astrogation, sea — sensor analysis, ew — electronic warfare, comm — communications, mt — mechanical technics, wt — weapon technics, et — electronic technics, cpt — computer technics, pst, power system technics, crt — crime technics, mdt — medical technics, cyt — cybernetic technics, gnt — genetic technics.

Armor type/defensive bonus: The defensive bonus includes intrinsic armor quality and quickness bonus but not a shield bonus. * - velocity shield, ** - deflector shield, *** - absorption shield, **** — barrier shield.


0 5 10 15 20 25 km
1. Colos TBD Relay Base
2. Lander Field
3. Old TBD Relay Base
4. Old Lander Field
100
200
300
400
500
600
700
0 1 2 3 4 5 km
▲ Security Scanner
• Shield Generator
5. TBD Relay Control
6. Shuttle Tube
7. Lander Field
225
250
275
300
325
0 15 30 45 60 75 m
10. Transmission Lines
11. Vents and Weather Monitors
12. Access Hatches
13. Shuttle Dock
14. Shuttle Tube
15. TBD Panels



TACTICAL LAYOUT

ABOVE GROUND KEY:

1. Security Scanners. These beacons are old style multiscanner detection devices with an effective detection range of about five km to spot a living man-sized target. This particular outdated security system model can be defeated if personal EW generators are worn, and no personal shields are activated. If these counter measures are employed, the system's automatic warning safeguards would be rendered ineffective, and 100 would be subtracted from any perception roll made by a tech in the base at the security console. Each scanner also has a built-in Mk.20 laser cannon which can be fired upon the intruders. The OB for the attack would be determined by the security Tech's Heavy Energy Projector skill bonus.

2. Shield Generators. These are small installations which maintain a +55 defensive shield over the Lander Field, the TBD collector panels, and the base proper. Each generator knocked out reduces the shielding value by 10. Passing through the base shield with an activated personal shield will create a power surge significant enough to trigger warning systems in the base's command center.

3. Lander Field and Shuttle Tube. The Lander Field is capable of receiving craft of up to 1000 tons. However, it has no service or refueling capabilities. There is an access dock to a shuttle bus which runs down to a similar dock at the bottom of the crater where the central control facility is located. Presently, the bus is down at the base, and its access tube, at this end, is closed off.

Security devices can be (and currently are) activated in the shuttle bus dock area. There are three close range optical detectors directing three separate Mk.5 blasters on wall mounts in the docking area. They are now set to fire on any intruders automatically with an OB of +20. If directed from the security console in the command center, (and unless the characters have already made their presence known, there will only be a 5% probability of personal fire control) they may fire with a +45 OB.

KEY TO THE UNDERGROUND BASE COMPLEX

General Note: *All corridors and rooms in the complex, along with much of the immediate outside vicinity, can be observed from the command center with the aid of a complex net of visual scanners. However, the holographic monitors which display these views are often (90% of the time) turned off or display other information. Therefore there may be no visual monitoring of the base from the command center unless one of the Techs spotted the group with one of the security scanners. Other warning devices (at portals and maintenance ducts), unless defeated with a successful disarm attempt, will alert the base personnel to the group's presence.*

All access locks at the base are electronic with no mechanical moving parts. They must therefore be defeated with specialized electronic equipment (not a set of 'keys').

1. Command Control Center: All base activities, including: TBD transmissions, interpretations, recording, retransmissions, as well as security and environmental control are monitored and manipulated from this room. It is usually (70% chance) only staffed by MIKE 140 Chi (see section on non-player characters), who is a mech interface robot capable of running all secondary base functions on his own. The Techs are only present when scheduled TBD transmissions are pending. The two entrances to this room may be locked from the inside with ease. When locked, these doors are **Sheer Folly** to "pick".

2. Interpretive Hardware: This is the location of the machinery responsible for the decoding of incoming transmissions and the alignment of the TBD panels on the surface. This is also the location of the base's auxiliary control.

3. Workshop: Repair facilities for the base's portable machinery.

4. Rest Area: Cilest's quarters. The lock is **Easy (+20)** to "pick".

5. Rest Area: Slaig's quarters. The lock is **Easy (+20)** to "pick".

6. Common Mess and Recreation Area: Food preparation and recreational area. A variety of games and hologlass plates are strewn about the room.

7. Computing: The main computer used at the base seems to occupy a large space for its mark number of 70, but ground installations usually have the room to hold large volume computers which cost less than smaller units of the same operating capacity. The access door to this room is kept locked (**Extremely Hard (-30)** to pick). The base computer and the Mk. 30 back-up computer communicates in the main Colosian computer dialect 'C3 iv'.

8. Robotics Center: Construction of this area has not been completed yet. The Colosians plan to eventually automate the entire station, at which time robotic control will be located here. In the meantime, the technicians use this area to work on KURT (see non-player characters). If KURT has to be brought into action by the Techs, he will be activated from this location.

9. Environmental Control and Atmospheric Monitors: This area is accessible from three hatches on the surface. These hatches are locked (**Medium, +0**) and are trapped. If not disarmed, anyone passing through the portal will be caught in an active electric field. (The character receives 1-10 'E' electricity criticals.) The electric field is **Hard (-10)** to disarm and if an unsuccessful attempt is made, the disarmer takes an 'A' electricity critical and the central command center is warned that intruders are present.

From this underground location, characters should be able to find a suitable location to introduce their biotoxins (supplied by Emerich; see the section on special equipment) into the ventilation system.

10. Shuttle Bus Reception: This area is a continuation of the ramp which leads down from the surface shuttle bus dock. It is heavily monitored, and if intruders are detected there are two Mk.5 blaster turrets at the end of the ramp to deal with them. Undirected from central control, these blasters have a +20 OB. With direction from a tech at the security board the OB rises to +45. The portal to the central complex can be locked, **Very Hard (-20)** to pick.

11. Access Tunnel to Fusion Power Reactor: A maintenance portal leads from the shuttle bus depot to the fuel bay of the base's main reactor. This tunnel allows repair and refueling access for the technicians, and it is heavily used because of the equipment's poor state of repair. The tunnel is well monitored for intruders. The mere presence of a saboteur here will trigger alarms in central control because of the many visual and sonic detection devises lining the corridor. By manipulating hatches and vents, a tech in the control center will be able to put any person in this tunnel into hard vacuum in one round (one "E" vacuum critical per round until death). At the end of the tunnel one will find the fuel bay and the main reactor. There are also microbattery power reserve units which can operate life support and emergency TBD transmissions for up to one month.



19.0 GM REFERENCE

19.1 RANDOM EVENTS

GMs may wish to introduce variable factors into their game. Below is a table to randomize special events which have not been elaborated upon in the sample adventure that has been presented here. Caution is advised when using this table because the GM will be required to perform much more preparatory work in many cases.

1 -10 'Faber' is able to infiltrate Emerich's inventory controllers and sabotage some or all of the filter masks that will be used by the party members.

11-20 One of the EW generation backpacks will malfunction at an inopportune moment.

21-30 KURT will be out patrolling the crater as the players approach.

31-40 Any given defense mechanism may fail to function 10% of the time due to a bad state of repair.

41-50 The amazons are really in the pay of the Colosians and will attempt to do away with the party when they are vulnerable.

51-60 A Colosian hypershuttle is found to be on the Lander field just outside of the crater.

61-65 A Colosian hypershuttle can be found occupying the Lander field of the deserted TBD base. Several Techs are retrieving old equipment from the base there.

66 The Colosians have found out about the Jadist coup and have set up a surprise welcome for the players.

67-80 The Techs at the base will be experimenting with recreational stimulants when the characters arrive on the scene. They will by quite unable to respond coherently to their dilemma.

81-90 One of the Techs will be out in the crater inspecting the some TBD panels; so some of the defense mechanisms will be shut down.

91-99 The TBD relay base will be inoperative due to malfunction when the players arrive. They will probably have no way of knowing this until they have an opportunity to manipulate the central controls themselves.

100 Imperial/Dia Khovaria forces have taken over the base because the Colosians defaulted on maintenance requirements. Again, the players will be unaware of this interesting tidbit of information. Although the Colosian transmission will be just as likely to pass through this station, the defensive measures will be much more thorough under Imperial administration.

19.2 SPECIAL EQUIPMENT

In order for the players to have a chance of successfully completing this difficult mission, Emerich will supply the group with expensive and powerful equipment from his extensive stores. If the characters survive to return back to Hyperion, Emerich will expect the return of all loaned equipment regardless of condition.

Stealth Coveralls: These are personal EW suits capable of foiling many out-dated scanner security systems. The coveralls themselves are unencumbering, but the mini EW generator which powers the suit is a large back-slung affair which masses in at about 20 kilograms. Perception from within the coveralls is at - 20 because of the completeness of the covering. The suit is an unassuming neutral blue-grey color.

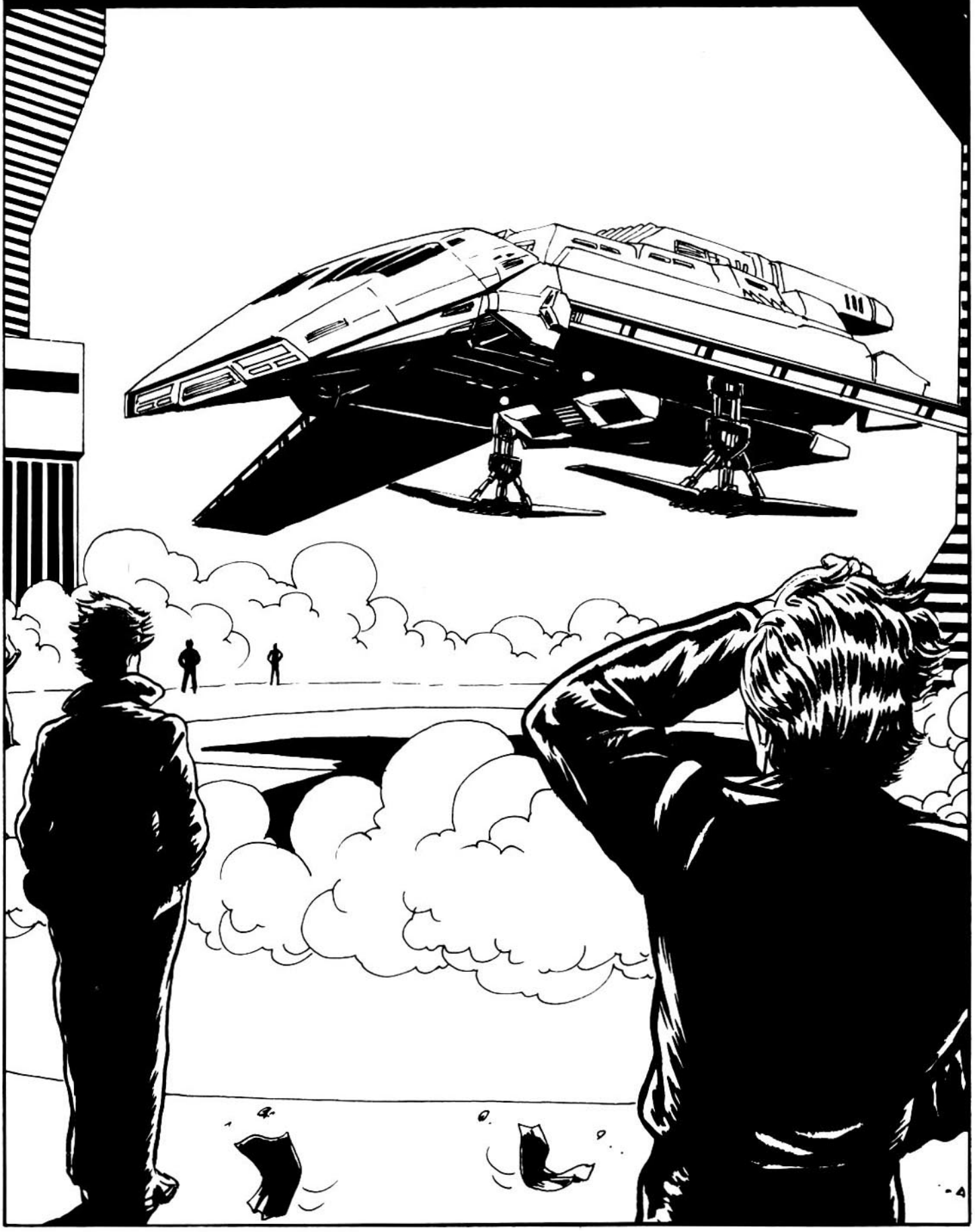
Respirators: The COL 72 Prime II atmosphere is incapable of sustaining human-like lifeforms, so the respirators are a necessity for the players who venture out onto the landscape. The microbial filters will protect characters inside the base who have unleashed the microbial poison Duranaid Complex Theta to neutralize the resident technicians. This unit is fairly unencumbering, only covering the lower face.

Duranaid Complex Theta: The ultimate goal of the mission is to replace the Colosian technicians at the base with Tamora the Android. The cleanest way to do this without alerting the Colosian authorities is to poison the environment while the techs are away from the command stations. Introducing Duranaid Complex Theta into their ventilation system is the specific method suggested by Emerich. The microbial poison, Dur Comp T, can be transported in a small metallic capsule and released at the appropriate environmental control area inside the base. Duranaid Complex Theta has no incubation delay period, attacks at level 15, with the maximum effect indicating that the micro-organism digests the victims lung tissue and alveoli. Death will occur 10 - 20 rounds after inhalation, as the lungs fill with blood and transpiration becomes impossible. If the victim makes his RR, this indicates that his lung tissue has been badly scarred. He takes 10 - 100 hits, and is out for 1 - 10 hours after the micro- organism insinuates itself into the victim's system.

Metallic Lattice Acid 09b: An alternate plan for the sabotage of the station is the neutralization of its TBD relay capability. By placing the acid on the transmission cables on the surface of the crater, just outside of the base, the command center will be unable to receive or transmit Tachyon Dictor beams. If the Colosian authorities are not alerted to the sabotage aspect of the transmitting malfunction they may be inclined to believe that the base is suffering technical difficulties and just use another relay base for their MERLOGH transmissions. Metallic Lattice Acid is transported in ceramisynth containers, each massing 1 kg. About 10 will be required for an efficient sabotage attempt on all of the outside transmission cables.

Demotherm Explosives: The blunt way of going about the job. Demotherm is the state of the art in chemical explosives. The 5 kgs supplied to the players (with timers and detonators) will be enough to uproot the whole complex and destroy most of the TBD panels in the crater.

THE PLAYER BOOK



PART I: CHARACTER GENERATION RULES

1.0 INTRODUCTION

Within the **Player Book** is a complete set of rules and guidelines for generating, maintaining, and detailing the capabilities of characters to be used in a Science Fiction Role Playing (SFRP) game. It is important to note here that ***Space Master*** is complete within itself as a Science Fiction Role Playing system, although it is fully integrated with the rest of ***Rolemaster*** to unite Science Fiction with Fantasy. The basic philosophies of combat, Psions (Telepathic 'Spells') and Character development are the same in ***Space Master*** as in ***Rolemaster***.

Space Master is designed to provide both the GM and the player with tremendous flexibility. Characters playing under this system are able to advance in skill areas according to their desire and cost-effectiveness; restrictions are few. The many professions are designed to indicate a mental state and life style which was molded by a player's early life. These classes dictate the ease with which a particular skill is developed, but they do not generally act to prohibit development in any given category. Thus, a player is allowed to enhance his power in certain skill areas which would not be accessible to his profession under other systems. Only the "cost" in time and lost opportunities in "easily developed" skill categories act to bias the selection process.

Space Master's unique approach to experience allows characters to select the Psion lists and skills they wish to improve before embarking on a new level. A player must make choices and plan ahead.Under ***Space Master***, wise budgeting of skill development becomes another important aspect of the SFRP game.

Space Master also provides a unique approach to stats. Players familiar with ***Rolemaster*** will soon recognize the system. Under these guidelines each Stat is quite important, and no one or two stats clearly dominate. Rarely will a character be without flaws. A character must choose his strengths and weaknesses. There are 10 stats used in ***Space Master***. They provide detail and flavor and remain relatively simple to work with. By dividing them into two 5 Stat groupings — development stats and primary stats — a GM or player needs to work with fewer characteristics at any given time. The former grouping is used during level advancement; the latter is emphasized during day to day adventure.

1.1 FEATURES OF *SPACE MASTER* CHARACTER GENERATION

Personal Characteristics — As in most SFRP systems, each character's physical and mental capabilities are described by a set of characteristics called "stats." In ***Space Master*** there are 10 stats, each represented by a number between 1 and 100 (1-100), with 1 being the worst and 100 being the best (certain rare circumstances could result in a Stat above 100). The stats include 4 physical characteristics: *Strength, Constitution, Quickness,* and *Agility*. They also include 4 mental characteristics: *Intuition, Empathy, Memory,* and *Reasoning*. Finally, there are two stats included that represent characteristics partially mental and partially physical: *Presence* and *Self Discipline*. These stats are described in detail in Section 2.0

Each Stat may affect the ability of the character to perform specific actions. How stats affect abilities is discussed in Section 2.4.

Each Stat has two values (1-100). The "ultimate" (called *potential*) value reflects the highest value (genetically) that the character's Stat can obtain. The "temporary" value represents the value of the characteristic's current level. The temporary stats can rise (due to character advancement and other factors) and fall (due to injury, old age, etc.). However, the potentials rarely change. Of course, the temporary Stat for a particular Stat can never be higher than the potential for the same Stat. For example, a character could have a strength of 80 (temporary) and a potential of 92; and the 80 would be his effective strength for combat purposes (circumstances could raise or lower the 80 but never above 92). This feature is described in detail in Section 10.0.

Experience levels — While adventuring, each character will reach stages of development called experience levels (or just "levels"). As each new level is reached, the character will become more powerful and skillful in his chosen areas of expertise. Ideally for realism, the character would develop after each activity or experience. However, this is sometimes difficult to arrange in practice. It necessitates stopping action in the game, performing bookkeeping, calculating how valuable the experience was, and determining what the character learned. Thus, we limit these factors by allowing a character to develop only at discrete intervals called levels (this factor is common to many SFRP systems). Levels are discussed further in Section 5.0.

Skills and skill ranks — As a character advances in levels, he trains in and develops certain abilities called skills. His capability in each skill affects his chances of accomplishing certain actions and activities (e.g., fighting, maneuvering Psion casting, etc.). The key features of skills in this system are:

1) Any character may develop any skill regardless of profession (see Sections 4.0, and 10.0). However, depending upon the specific character's training in early life, certain skills require more or less effort relative to other characters. How much effort is required to develop a skill is dependent upon the profession chosen by the player.

2) Depending upon the values of certain stats (Sections 2.3, and 10.0), each character has a total amount of "effort" to devote to skill development on each level.

3) Each character has complete freedom in how to allocate his "effort" among the various skills he decides to develop. Trait costs will be the same for characters of the same class and will tend to reduce the degree of variation. Yet, this "cost effectiveness" will direct development only along vaguely similar lines.

The *Character Development Chart (pp 8-9)* provides a list of skills and how much "effort" each one takes to develop for each of the professions. These skills are the basic ones required by normal play, and a GM can easily add more if his specific game requires others. Skills are further discussed in detail in Section 3.0.

Professions — each character has a profession ("character class") which reflects what his training and inclinations were in early life. Each profession requires different "efforts" to develop each individual skill. For example, in order to gain a certain expertise in using a blaster, an Armsman might only have to expend 20% of the effort that a Planetologist might have to: this is because an Armsman is trained in physical activities (fighting in particular), while a Planetologist has spent much of his early life studying environmental sciences. However, the effort required for the same Armsman to learn to understand meteorological trends on alien planets might be 20 times that required of a planetologist, and he would never be very effective at it. Section 4.0 discusses the details of professions.

Individualizing characters — It is often desirable to provide each character with certain factors that make him (or her) unique. This system already does this to a certain extent: 22 professions and complete freedom in skill development. We also provide a variety of other suggestions, including: equipment, non-human races, detailed personal backgrounds, special abilities, special items, and hobbies. These suggestions are discussed in Sections 7.0 and 10.6.

Optional rules — The features mentioned above are those of the basic ***Space Master*** Role Playing system. These basic rules will guide the development and evolution of SFRP characters. However, for a more "realistic"game a group of more complicated rules are included. These optional rules work within the framework of the basic rules to provide more flexibility and detail. The GM should examine these rules and determine which ones are appropriate for the pace, flavor and detail he wishes to inject into his game.

1.2 DEFINITIONS

The majority of unique terms found in ***Space Master*** are not described below; rather they are usually described when encountered in the text. The terms defined below are frequently used or they are very important for using and understanding ***Space Master.***

Action: An action is the activity which a character may perform during a round (10 seconds).

Campaign: An ongoing Science Fiction Role Playing game which takes place as a series of connected adventures, with respect to both time and circumstance.

Chance: Often in ***Space Master*** an action or activity has a "chance" of succeeding or occurring, and this chance is usually given in the form of #%. This means that if a roll (1-100) is made and the result is less than #, then the action or activity succeeds (or occurs); otherwise it fails.

Critical Strike (Crit): Damage other than just hits which result from an attack.

Defensive bonus (DB): The total subtraction from the combat roll due to the defender's advantages, including bonuses for the defender's quickness, shield, superior armor, and position.

Dice Roll: See Roll.

Fumble: An especially ineffective attack which yields a result that is disadvantageous to the attacker.

GM: The Gamesmaster, judge, referee, dungeonmaster, (even *Gamemaster!*) etc. The person responsible for giving life to a SFRP game by creating the setting, world events and other key ingredients. He interprets situations and rules, controls non-player characters, and resolves conflicts.

Group: A collection of player characters.

Hits (Concussion Hits): Accumulated pain and bleeding, that can lead to shock and unconsciousness. Each character can take a certain number of hits before he passes out (determined by his Body Development).

Level: A Character's level is a measure of his current stage of skill development, and usually is representative of his capabilities and power.

Maneuver: An action performed by a character that requires unusual concentration, or risk (e.g., climbing a rope, balancing on a ledge, picking a lock, etc.). Maneuvers requiring movement are "Moving Maneuvers", and other maneuvers are called "Static Maneuvers". Research is also considered a "maneuver" for the purpose of ***Space Master.***

Melee: Hand-to-hand combat (i.e. combat not using projectiles, Psions, or missile weapons).

Non-Player Character (NPC): A being in a Science Fiction Role Playing game whose actions are not controlled by a player, but instead are controlled by the GM.

Offensive Bonus (OB): The total addition to the combat roll due to the attacker's advantages — including bonuses for the attacker's stats, superior weapon, skill, etc.

Orientation Roll: A *roll* representing a character's degree of control following an unusual action or surprise.

Parry: The use of part of a character's offensive capability to affect one opponent's attack.

Player: A participant in a Role Playing game who controls one character: his player character

Player Character (PC):A character whose actions and activities are controlled by a player (as opposed to the GM).

Power Points: A number which indicates how many Psions (Telepathic exertions) a character may intrinsically cast each day (i.e., between periods of rest). Note that most Psions require more than one Power Point.

Profession (Character Class): A character's profession is a reflection of his training and thought patterns; in game terms, it affects how much effort is required to develop skill in various areas of expertise.

Resistance Roll: A dice roll which determines whether or not a character successfully resists the effect of a Psion, poison, disease, or some form of adversity.

Roll: In ***Space Master*** two different colored 20-sided dice are used to resolve any activity requiring a "Roll"; such dice are available in most hobby and toy stores. Each of these dice has two sets of the numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. These dice can be used to obtain a variety of results. These results are described after the definitions under "Dice Rolling Conventions".

Round: The time (10 seconds) required to perform one action.

Session: A single sitting of game adventure. A number of sessions form a campaign.

Skill: Training in an area which influences how effectively a character is able to perform a particular action or activity. "Skill Rank" is a measure of the effectiveness of a specific skill.

Psion List: A collection of related Psions which are organized according to level. A character who has "learned" a Psion list is able to cast a Psion from that list if its level is less than or equal to his own experience level.

Stat (Characteristic): One of 10 physical and mental attributes which are considered most important to an adventurer in a SFRP game. Stats dictate how well a character develops his skills, moves, fights, takes damage, absorbs information, etc.

Static Action (Static Maneuver): An action performed by a character which requires unusual concentration, or thought under pressure, and does not involve pronounced physical movement.

Dice Rolling Conventions

As mentioned under the"Roll" definition, each die used in ***Space Master*** is a 20-sided dice which gives a result between 0 and 9. If two of these dice are used, a variety of results can be obtained

1-100 Roll — Most rolls in ***Space Master*** are "1-100" rolls (also called "D100" rolls). When both dice are rolled together and one die is treated as the "ten's" die and the other as the "one's" die, a random result between 01 and 00 is achieved ("00" is used as 100, **not** 0).

Open-ended Roll — Most "1-100" rolls are "open-ended". Most of the time open-ended rolls yield a result between 01 and 100, but sometimes they yield results that are less than 01 or greater than 100. If a roll is open-ended:

A 1-100 roll over 95 calls for a second 1-100 roll to be made and added to the first.

A 1-100 roll under 6 calls for a second 1-100 roll to be made and subtracted from the first.

1-10 Roll — In instances when a result (roll) between 1 and 10 is required, only one die is rolled. this gives a result between 0 and 9, but the 0 is treated as a 10. Such a roll is referred to as "1-10" or "D10".

1-5 Roll — Roll one die, divide by 2 and round up ("D5").

Other rolls — Any other rolls are variants of the above.

1.3 HOW TO USE *SPACE MASTER*

In a Science Fiction Role Playing (SFRP) game, each participant except for the GM is a "player" and assumes the persona of one of the individual characters; these characters are the player characters (PCs). All other characters are controlled by the GM and are called nonplayer characters (NPCs). There are a variety of factors that control what each character is capable of in a Fantasy Role Playing environment (e.g., mental attributes, physical attributes, background, physical appearance, skills, bonuses, etc.). These factors are discussed and described in Sections 2.0-9.0.

The GM should first skim the rules to get an overall view of the system, then read all the rules thoroughly. If a section is not understood immediately, the GM should mark it and return to it after reading all the rules. Examples are included to aid in absorbing the various rules concepts. The GM need not memorize or fully analyze the significance of all of the rules at first; they are organized in such a fashion that many situations can be handled by referring to specific rules sections when they first arise. The GM should also read the optional rules to determine if he wishes to use any of them in his game.

The players should first skim Sections 1.0 through 9.0 and read any optional rules that the GM has decided to use. Then they should each generate a character by following the procedure and examples outlined in detail in Section 10.0, referring to parts of the earlier sections for explanations of the various aspects of a character.

2.0 MENTAL AND PHYSICAL CHARACTERISTICS (STATS)

The base mental and physical attributes of a character are represented by 10 statistics called stats: 5 "primary" stats and 5 "development" stats. Each character has two numerical values on a scale of 1 to 100 for each of his stats (see Section 2.1). The value of a Stat indicates how it rates relative to the same Stat of other characters. The lower the value of a Stat, the weaker it is relative to the same Stat of other characters. Relatively high stats give bonuses (see page 45) which apply to attempts to accomplish certain activities and actions.

An individual's stats represent his prowess in various areas in comparison to the average man. Joe Average the urban planet-dweller might have stats which are all 50's. Adventurers, however, are likely to be superior to the general population. Adventurers are presumed to start with no Stat below 20, although the rigors they face may reduce their stats below this level. This is to reflect the fact that weak characters are unlikely to leave the safety of their homes and go out in the galaxy to seek their fortunes. (See Section 10.0, *Creating the Character*.)



2.1 TEMPORARY AND POTENTIAL STATS

Each Stat has two values (1-100): a potential value and a temporary value. The potential value reflects the highest value (genetically) that the character's Stat can obtain. The temporary value represents the stat's current value. Thus each character has a set of "temporary" stats and a set of "potentials". During play, the temporary stats can rise due to character advancement and other factors and fall due to injury, old age, etc. However, potentials rarely change. Of course, the temporary value for a given Stat may never be higher than its potential. Note that a character's stats do not always increase beyond their starting level: two months of adventuring does not necessarily accomplish what 18 years of youthful exuberance failed to do.

2.2 DEVELOPMENT STATS

Some stats aid in character development. Constitution, Agility, Reasoning, Memory and Self Discipline are relevant in determining how many skills a character can learn. An average individual has 25 development points. The exact amount that each of these stats contributes to the total amount of development points is given on the *Stat Bonus Chart*, pg.45. This total may be adjusted up or down by high or low Development Stats. Note that the 5 stats above will often be referred to as Development Stats. In game terms, other characteristics do not aid in the acquisition of skills in any way.

Constitution (Co) — The general health and well-being of the character, his resistance to disease and his ability to absorb more damage, are all reflected in his Constitution.

Agility (Ag) — Manual Dexterity and litheness are the prime components of this characteristic.

Self Discipline (SD) — The control of your mind over your body, the ability to push yourself harder in pursuit of some goal, or to draw upon the inner reserves of strength inherent in any individual.

Memory (Me) — The ability to retain what you have previously encountered and learned. Note, in many instances it may be necessary for the character to rely on the player's memory, since that tends to be used whenever it is advantageous anyway. Memory provides a good basis for determining how much is retained of the pre-adult period that GM doesn't have time to devise and describe in great detail to each player.

Reasoning(Re) — Close to intelligence, the ability to absorb, comprehend and categorize data for future use. It also reflects the ability to take available information and draw logical conclusions.

2.3 PRIMARY STATS

The following characteristics have a vast influence on direct play, but do not aid in character development.

Strength (St) — Not brute musculature, but the ability to use your existing muscles to their greatest advantage; thus racial and sexual adjustments should be kept to a minimum (if used at all).

Quickness (Qu) — Essentially a measure of reflexes and conscious reaction time, this Stat is often lumped with several other as dexterity.

Presence (Pr) — Control of one's own mind, Courage, Bearing, Self Esteem, Charisma, Outward Appearance and the ability to use these to affect and control others are the principal elements of a character's presence.

Intuition (In) — A combination of luck, genius, insight, and the favor of the gods in embodied in this Stat.

Empathy (Em) — The relationship of the character to the all-pervading force that is common to all things natural and is the basis of most things supernatural.

2.4 STAT BONUSES

Certain bonuses and penalties may apply to a character's skills and activities if his stats are high enough or low enough. These Stat bonuses are given in the *Stat Bonus Chart*, pg.45. Often a combination of stats is indicated: to attain the correct bonus, average the actual *stats* involved. The averaged Stat is then cross-referenced on the Stat Bonus Table to ascertain the appropriate bonus. Some unusual uses for Stat bonuses are given below:

General Moving Maneuvers

If there is no skill which is specifically applicable to a given moving maneuver, then the character's Agility bonus should be used to modify that maneuver roll.

Total hit points (Hits)

The hit point total used during play is the base hit point total (see Section 3.44) **plus** the base hit point total multiplied by the Constitution Stat bonus divided by 100 (i.e., the Con Stat bonus is used as a percentage figure).

Summary for Determining the Total Hit Points:

1) Start with a base hit point total equal to Constitution/10.
2) Each time the Body development skill rank is increased by one, add a "roll" appropriate to character's race (e.g., D8, D10, D12).
3) The actual hit point total = BHPT + (BHPT x Con Bonus / 100).

Example: *Sky Cloudd has a Constitution of 90 and a base hit point total of 14. His Constitution bonus (from the Stat Bonus Chart, pg 45) is + 10 or + 10% of 14, which is 1.4. We round to 1, and so young Sky can take 15 (14 + 1) total hit points, although his base hit points remains 14. Sky goes up an experience level and rolls 2 more eight-sided dice (D8) for hits and gets 2 + 8 additional hit points. He adds these to his base hit points (14) for new base hit points of 24, before modifying again for Constitution. He can now take 24 + 10% of 24 = 24 + 2 = 26 total hit points. Note that is is necessary to keep track of both the total and base number to date, to calculate hit points anew whenever a change results. Note also that a change in Constitution may change the hit point total of the character by changing or eliminating the bonus (or even prompting a penalty!).*

Defensive Bonus (DB)

A character benefits defensively from his quickness. Regardless of wether or not a character has any self-defensive skills, he may add his Qu bonus to his defensive bonus provided his not completely static (e.g. sleeping, knocked out, stunned and unable to parry, etc.). Note the 4th column on the *Armor Chart*, pg.62. These points are subtracted from the Qu bonus if the character is wearing the appropriate type of armor (and thus the quickness points are not subtracted from incoming attacks). This column cannot reduce a quickness bonus below 0.

Example: *Our example, Sky, (Quickness 98, yielding a bonus of +20) is unarmored. His armor type (AT) is 1 with a DB 20: 1(20). Attacks against him are resolved on the 1 column after subtracting 20. He puts on a pliable breastplate and greaves which has a Quickness penalty of 5. These 5 are subtracted from his 20 Quickness bonus, leaving 15 to be subtracted from incoming attacks. Those attacks are now resolved on the AT 10 column with a DB of 15: 10(15).*



Resistance Rolls (RR)

Resistance Rolls against spells and poison or disease are affected by various Stat bonuses depending on the type of attack.

RRs versus poisons, drugs and diseases are subject to the Stat bonus for Con-stitution. Resistance Rolls are resolved by assigning a level (potency for the poison) and resolving the RR.

Example: *For instance, Virtulis (a drug) is a level (potency adjustment) 15 drug which — if not resisted — causes the victim to truthfully answer all questions put to him. Sky has been captured by unpleasant entities who administer the drug to him. Assume Sky has a 90 Constitution and has a +10 bonus for that Stat; he is now 6th level. Sky must roll on the* Resistance Roll Chart *, pg.95. If his roll exceeded 62 on a D100 he would resist the poison, for he needs a 72+ on the table and his bonus is +10. Should he roll, say, a 51, the drug would take effect... 51 + 10 = 61 and does not exceed 72. Good luck, Sky.*

3.0
SKILLS AND SKILL RANKS

As a character advances in levels he develops and trains in certain abilities called skills. His capability in each skill affects his chances of accomplishing certain actions and activities (e.g., fighting, maneuvering, repairs, etc.). As he develops and improves a skill his "skill rank" with that skill will increase, indicating a corresponding increase in abilities and bonuses with that skill.

The skills fall into 11 different areas: Maneuvering in Armor, Weapon Skills, General Skills, Special Skills, Combat Skills, Astronautic Skills, Technic Skills, Scientific Skills, Engineering Skills, Telepathic Skills, and Secondary Skills. The skills in each of these areas are described in Sections 3.4 — 3.5.

3.1 SKILL RANK BONUSES

Most skills have a skill rank bonus, which is generally included as part of a total skill bonus. Different skills use this bonus in different ways as described in the skill descriptions and Section 3.3. In general, skill ranks modify a character's chance of succeeding in certain actions.

The standard skill rank bonus is given in the *Skill Rank Bonus Chart*, pg.38. Basically the table follows a standard progression. The bonus is -25 if the rank is 0 and +5 if the rank is 1. The bonus increases by 5 for each of ranks 2 to 10, 2 for each of ranks 11-20, 1 for each of ranks 21-30, and 1/2 for each rank above 30. Certain skills do not use this normal skill rank bonus, as specified in the skill descriptions.

3.2 SKILL RANK DEVELOPMENT

Skills are presumed to derive from study and experience. Under the ***Space Master*** character development guidelines, at each level of development each character has a certain number of development points which he may expend as he wishes to begin learning or improving skills. It is assumed that he continues the process of learning throughout his adventures and he therefore receives those skills and the benefits derived from them when he reaches the next level of experience.

Development Points — Development points are derived from one's characteristics. Each character has 5 Development Stats (Constitution, Agility, Self Discipline, Reasoning, and Memory) which affect his ability to learn things. (A higher Constitution lets you endure more rigorous training or study longer hours, etc...) Each of these stats (temporary values, not potentials) gives the character a number of development points (see The *Stat Bonus Chart*, pg.45) which are totaled and may be expended in acquiring skills.

Development points are received at each character level. Each time he advances level of development, a character receives a number of development points (determined by his stats as outlined above). These points must be expended immediately to begin the acquisition or improvement of skills. A character may not accumulate development points from level to level, nor may they be transferred from one character to another. (The expenditure of development points represents the effort that the character is putting into attaining that skill, the amount of time spent on it, etc.) Further they must be allocated immediately upon their acquisition — it is a basic premise of the system that the character spends his entire next level of development practicing and studying to attain these skills. He does not obtain these skills or skill improvement until the next level.

Skill Development Cost — The cost of a skill is determined by preadolescent training. The best reflection of this is profession: an Armsman is taught in his youth some of the basic principles behind weapons, either through a formal apprenticeship or through watching combats with the keen interest of one who wants to follow that profession. Similarly Telepaths begin at an early to attune their minds to to the acquisition of their chosen realm of Power. His early training is reflected in the *Character Development Chart* pg.8-9, where the costs of acquiring various skills are listed.

It is a basic premise of ***Space Master*** that these early years in which learning patterns are formed, prejudices established, and attitudes molded are more important than a few years of study and adventuring; thus a character's skill rank in an area never affects the cost of improving that skill. An Engineer who has become a near expert with a Plasma Repeater Rifle is still an Engineer, with an Engineer's thought patterns and study methods, and must pay more to increase his skill with a Repeater Rifle than a beginning Armsman.

Certain environments of youth may lead to differences from the standard training received by each profession (character class). This will make some skills easier to acquire while at the same time necessarily making the mind less attuned to other skills.

Normal Skill Development — Generally a character expends the points called for on the character development chart and improves his skill in that area one rank. A character is born with rank 0 ability in all skills (getting to skill rank one may be termed either "acquiring" or improving it) and is generally allowed to develop at any skill he wishes at a rate of one skill rank during each experience level at the the cost (in development points) given for his chosen profession and after having studied it while attaining another experience level. A character may generally not, at any cost,develop a skill at a rate faster than one skill rank per character level (however, see below).

Rapid Skill Development — Preadolescent training may allow some skills to be developed at a faster rate than normal, Armsmen and weapons being a good example of such an area. If this is the case, slash "/" will appear in the cost space of the character development chart. If a skill is to be raised on rank during an experience level, the cost before the slash is paid in development points. If a skill is to be raised two ranks, the cost before the slash is paid fo the first and the cost after the slash is paid for the second. Both skill ranks are received at the same time — when the character attains the next experience level. Some skills have three numbers separated by slashes. One may pick three skill ranks in one level in this case.

Example: *A Pilot with Skill Rank 2 in Orbital Piloting wants to increase it to Skill Rank 4. The cost listed is 1/2, indicating he expends 1 development point to progress to Skill Rank 3 and 2 more (total 3) for skill Rank 4. He still pilots in orbital situations at at Skill Rank 2, but upon attaining the next experience level, he will have a Skill Rank 4 Orbital Piloting ability.*

If the slash is followed by an * instead of a number, that area may be developed as much as desired during any experience level and each rank of development has the same cost (the cost before the slash). These skills are often of a different nature than those that must be acquired at a slower rate. See the descriptions of individual skills for further description.

CHARACTER DEVELOPMENT CHART

		Armsman	Pilot	Explorer	Systems Tech	Electrical Tech	Arms Tech	Researcher	Physician	Engineer	Criminologist	Medic	Planetologist	Administrator	Entertainer	Theologist	True Telepath	Semi-Telepath
Maneuvering in Armor																		
Light Body Armor (AT5-8)	(Ag/St)	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*
Armored Body Suit (AT9-16)	(Ag/St)	1/*	1/*	1/*	2/*	2/*	2/*	3/*	3/*	2/*	2/*	2/*	2/*	3/*	2/*	3/*	2/*	2/*
Arm. Exoskeleton (AT17-20)	(Ag/St)	2/*	2/*	2/*	3/*	3/*	3/*	3	3	3	3	3	3	3/*	3/*	3/*	3/*	3/*
Powered Armor	(Ag/St)	2/*	4	4/*	4/*	4/*	4/*	11	11	4	11	11	11	11	7	11	11	11
Weapon Skills																		
Category #1 **	(Varies ¥)	1/5	2/5	2/5	2/7	2/7	2/7	2/7	3/9	2/7	2/4	2/7	2/5	2/6	2/5	2/7†	2/5	2/5
Category #2 **	(Varies ¥)	2/4	2/7	2/5	2/7	3/9	3/9	6	6	2/7	2/5	3/9	2/7	2/7	2/5	6	3/9	3/9
Category #3 **	(Varies ¥)	2/7	3/9	3/9	4	5	5	7	7	4	2/7	5	3/9	7	3/8	6	4	4
Category #4 **	(Varies ¥)	2/7	4	3/9	4	5	5	9	7	4	2/7	8	4	9	9	7	7	4
Category #5 **	(Varies ¥)	2/7	4	3/9	4	5	5	9	7	6	5	8	4	9	9	9	8	6
Category #6 **	(Varies ¥)	5	4	5	6	7	7	9	15	8	5	15	15	20	20	20	15	8
Other Categories **	(Varies ¥)	10	12	12	12	15	15	15	15	15	12	20	15	20	20	20	20	15
Targeting **	(—)	Must be developed separately for each weapon at the Normal Weapon Skill cost for that weapon.																
General Skills																		
Climbing	(Ag)	3/7	3	3/7	3/7	3/7	3/7	5	5	5	3/7	3/7	3/7	5	3/7	5	3	3
Swimming	(Ag)	2/6	3	2/5	2/6	2/6	2/6	3	3	3	2/6	2/6	2/6	3	2/6	3	3	3
Riding **	(Em/Ag)	2/6	3	2/5	2/6	2/6	2/6	3	3	3	2/6	2/6	2/6	3	2/5	2/6	2	2
Disarm Traps	(In/Ag)	4/8	4	2/5	2/5	4/8	4/8	7	7	4/8	2/5	5	2/5	4/8	7	7	5	4
Pick Locks	(In/Re/Ag)	4/8	4	3/6	2/5	4/8	4/8	7	7	4	1/4	5	4	3/6	6	7	5	4
Stalking & Hiding	(Ag/SD&SD)	2/5	3	1/4	3/6	3/6	3/6	6	6	5	1/4	5	3/6	3/6	2/5	6	3	3
Perception	(In/In/Re)	2/5	2/4	1/4	2/5	2/5	2/5	3	3	3	1/3	2/5	1/4	1/4	2/5	2/5	2	2
Driving **	(Ag/Qu)	1/6	1/3	1/6	1/5	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1	1/6
Atmospheric Pilot **	(Ag/Qu)	3/6	1/5	3/6	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	5	4
Marine Pilot **	(Ag/Qu)	3/7	1/4	2/5	2/5	3/7	3/7	3/7	3/7	3/7	3/7	3/7	2/5	3/7	3/7	3/7	3	3
Special Skills																		
Adrenal Defense	(—)	20	20	20	20	20	20	20	20	20	20	20	20	20	15	20†	7	15
Adrenal Moves **	(Pr/SD)	5	5	5	6	6	6	6	6	6	5	6	5	6	5	6	5	5
Martial Arts **	(Varies ¥)	1/5	3/7	3/7	3/7	3/7	3/7	3/8	3/8	3/8	2/7	3/7	2/7	3/8	2/7	3/8†	2/7	3/7
Ambush	(—)	3/8	3	2/5	5	5	5	9	9	9	2/5	5	3	9	3/9	9	3	3
Sniping	(—)	1/5	3/8	2/5	5	5	5	9	9	9	2/5	5	3	9	3/9	9	3	3
Linguistics	(—)	3/*	2/*	3/*	3/*	3/*	3/*	1/*	1/*	1/*	2/*	2/*	1/*	1/*	1/*	1/*	2/*	2/*
Body Development	(Co)	2/5	2/7	2/7	3/8	3/9	3/9	6	3	3	3/8	3/9	3/8	6	2/6	6†	5	5
Forgery	(Ag/Re)	5	5	5	5	5	5	5	5	4	2/5	5	5	2/5	5	5	5	5
Counterfeiting	(Ag/Re)	5	5	5	3	5	5	5	5	5	2/5	5	5	4	5	5	5	5
Survival **	(Co/Re)	1/3	1/3	1/2/2	1/4	1/4	1/4	2/4	1/4	1/4	1/4	1/4	1/3	2/4	1/4	2/4	1/4	1/4
Scanner Analysis **	(In/Re)	1/3	1/3	1/2	1/3	1/3	1/3	2/5	1/3	1/3	1/2	1/2	1/2	2/4	2/5	2/5	3	2
First Aid	(Em/Me)	1/3	1/3	1/3	1/4	1/3	1/4	2/4	1/2	1/4	1/4	1/2/2	1/4	2/4	2/4	1/4†	1/4	1/4
Communications	(In/Re)	2/4	1/2	2/4	4	2/4	4	8	8	5	2/5	4	2/5	2/5	8	8	7	6
Combat Skills																		
Combat Pilot	(In/Ag)	2/4	1/2	2/4	4	4	4	10	10	4	8	8	8	10	8	10	10	10
AFV Driver	(In/Ag)	1/3	1/2	3	1	3	3	10	10	4	4	4	4	7	10	10	10	10
Alien Environments	(Ag/SD)	1/2	1/2	1/2	2	2	2	4	4	4	4	4	1/3	4	4	4	4	4
Missiles	(In/Re)	2	2	2	2	2	1	10	10	4	8	8	8	10	10	10	10	10
Projectile Gunnery	(In/Ag)	2	2	3	3	3	1	10	10	4	8	8	8	10	10	10	10	10
Hvy. Energy Projectors	(In/Ag)	2	2	3	3	3	1	10	10	4	8	8	8	10	10	10	10	10
Mount. Wp. Ambush	(In/SD)	2/5	3/7	3/8	5	5	2/5	9	9	9	3	5	3	9	9	9	10	10
Electronic Warfare (EW)	(In/Re)	2/4	1/2	2/4	4	2/4	4	8	8	5	2/5	4	2/5	2/5	8	8	7	6
Astronautic Skills																		
Orbital Pilot	(Ag/Qu)	3	1/2	1	3	4	3	5	5	3	5	5	5	5	5	5	5	5
N-Space Pilot	(Ag/Me)	3	1/2	1	3	4	3	5	5	3	5	5	5	5	5	5	5	5
Hyperspace Pilot	(In/Re)	4	1/2	1	3	4	4	5	5	4	5	5	5	6	6	5	5	5
N-Space Astro.	(Re/Re/In)	4	1/2	1	4	4	5	5	5	4	5	5	5	6	7	5	5	5
Hyperspace Astro.	(Re/In/In)	4	1/2	1	5	5	4	5	5	5	6	6	6	6	7	5	6	5
Sensor Analysis	(In/Re)	3	1/2	1/2	4	4	4	3	3	3	4	4	1/2	4	5	5	6	5

CHARACTER DEVELOPMENT CHART

		Armsman	Pilot	Explorer	Systems Tech	Electrical Tech	Arms Tech	Researcher	Physician	Engineer	Criminologist	Medic	Planetologist	Administrator	Entertainer	Theologist	TrueTelepath	Semi-Telepath
Technics Skills																		
Mechanical Technics	(Ag/Me)	3	2	3	1/2/2	1/3	1/3	2	4	1/2	1/3	2	2	4	5	5	4	3
Weapon Technics	(Ag/Me)	2	2	3	1/2	1/3	1/2/2	2	4	1/2	1/2	2	2	5	5	5	3	3
Electronics Technics	(Re/Me)	3	1	3	1/2	1/2/2	1/2	2	4	1/2	1/3	2	2	4	5	5	3	3
Computer Technics	(Re/Me)	3	2	3	1/2	1/2/2	1/3	2	4	1/2	2/4	2	2	4	5	5	3	3
Power System Technics	(Ag/Me)	4	2	3	1/2	1/3	1/2	2	5	1/2	2/4	4	2	5	6	6	4	4
Crime Technics	(Ag/In)	4	4	3	2	2	2	2	6	1/2	1/2/2	4	4	2/4	2/5	6	4	4
Medical Technics	(Em/Me)	4	4	3	2	2	2	2	1/2/2	4	2	1/2/2	2	5	5	5	4	4
Cybernetic Technics	(Ag/Me)	3	3	2	1/2	1/2	1/2	2	1/2	1/2	2	1/2	3	5	6	6	4	4
Genetic Technics	(In/Me)	5	5	5	5	5	5	2	1/2/2	1/2	5	2/4	5	6	6	5	10	10
Scientific Skills																		
General Physics	(Me/Re)	1	1	1/2	1/*	1/*	1/2	1/*	1/2	1/*	1	1/2	1/2	1	2	1	1	1
Advanced Math	(Me/Re)	1	1	1/2	1/*	1/*	1/2	1/*	1/2	1/*	1	1/2	1/2	1/*	2	2	1	1
Chemistry	(In/Re)	2	2	2	2	2	2	1/2	1/2	1/2	2	1	1/2	2	3	3	2	2
Planetology	(In/Re)	2	2/4	1/4	2	2	2	1/2	2	1/2	2	2	1/2/2	2/4	3	2	2	2
Astronomy	(In/Re)	2	2/*	1	2	2	2	1/2	2	2	2	2	1/2	1/2	2	1/2	2	2
Metallurgy	(In/Re)	3	3	2	3	3	3	1/2	3	2	3	3	1/2	3	4	4	3	3
Tachyon Physics	(In/Re)	3	3	3	3	3	3	1/2	3	2	3	3	2	3	4	3	4	4
Medical Practice	(Ag/Em)	8	8	8	8	8	8	6	1/2	8	8	6	7	8	8	7†	8	8
Genetics	(In/Re)	5	5	5	4	4	4	1/2	1/2	3	4	2	5	4	5	1/4	10	8
Cybernetics	(In/Re)	6	5	5	3	2	4	1/2	1/2	1/2	3	2	4	6	7	7	10	8
General Biochemistry	(Em/Re)	2	2	1	2	2	2	1/2	1/2	2	2	1	2	2	2	1/2	2	2
Psychology [Xeno] **	(In/Em)	3	3	2	3	3	3	1/2	2	2	2	2	1	1/3	3/*	1/2	3	2
Medical Diag. [Xeno] **	(In/Em)	8	8	8	8	8	8	5	1/2	8	8	5	4	8	8	7†	10	8
Botany [Xeno] **	(Em/Re)	2	2	1	2	2	2	1/2	1/2	2	2	1	1	2	2	1/2	2	2
Zoology [Xeno] **	(Em/Re)	2	2	1	2	2	2	1/2	1/2	2	2	1	1	2	2	1/2	2	2
History [Xeno] **	(Re/Me)	3	3	2	3	3	3	1/2	2	2	2	2	1	1/2	2	1/2	3	2
Anthropology [Xeno] **	(In/Em)	3	3	2	3	3	3	1/2	2	2	2	2	1	1/3	1/2	1/3	3	2
Engineering Skills																		
Mechanical Engineering	(In/Re)	5	5	5	1	5	5	1	5	1/2	5	6	6	6	7	7	6	5
Weapon Design	(In/Re)	4	5	5	3	5	2	1	5	1/2	5	6	6	6	7	7	6	5
Electronics	(In/Re)	5	5	5	5	2	5	1	5	1/2	4	6	6	5	6	6	6	5
Computers	(In/Re)	6	6	6	6	2	6	1	6	1/2	5	6	6	5	6	6	7	6
Power System Theory	(In/Re)	7	6	7	4	6	3	1	7	1/2	6	7	7	7	8	8	10	7
Psion Lists																		
Base Psion Field	(Varies ¥)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	1/*	2/*
Second Psion Field	(Varies ¥)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2/*	5/*
Third Psion Field	(Varies ¥)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3/*	—
Fourth Psion Field	(Varies ¥)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4/*	—

Notes:

Stunned Maneuvers use SD for an additional stat modifier.

** — Each of these skill areas include several skills that must be developed independently of one another.

† — If the weapon or training is sanctioned, cost is 1/5 (medical costs are 3/5).

¥ — The stats for these skills are:

Ag/St .....for Projectile Firearms,
Ag .....for Energy Firearms,
Ag/St/St .....for Melee Weapons,
Ag/St .....for Thrown Weapons,
Ag/Ag/St .....for Bow Weapons,
Ag/St/St .....for Striking Martial Arts,
Ag/Ag/St .....for Sweeps & Throws Martial Arts,
SD .....for True Telepaths,
In .....for Semi Telepaths (Base Field of Visions)
Em .....for Semi Telepaths (Base Field of Alterations)
Pr .....for Semi Telepaths (Base Field of Control)
SD .....for Semi Telepaths (Base Field of Self-Mastery)

3.3 RESOLVING ACTIONS AFFECTED BY SKILLS

Each skill is classified as being applicable to a moving maneuver (MM), a static maneuver (SM), a Vehicular Maneuver (VM), an attack (using an offensive bonus: OB), or a special purpose(SP). This section describes how these types of bonuses are used to resolve actions.

Maneuvers — Maneuvers are actions (other than attacks and Psion casting) which under normal circumstances have a chance of failing and usually entail an element of risk. Thus normal movement and activities (e.g., walking, climbing stairs, drawing a weapon, etc.) are not maneuvers, while unusual activities (swimming, climbing a rope, running up or down stairs, driving a vehicle, piloting a ship) and activities performed under stress (running, dodging, stalking, hiding, etc.) are maneuvers and require rolls. the GM is the final judge as to what is a maneuver and requires a roll, and what is normal activity and doesn't require a roll. Maneuvers are further classified as being Moving Maneuvers, Vehicular Maneuvers or Static Maneuvers. Each class of maneuvers is resolved differently.

Moving Maneuver Bonuses (MM) — Moving Maneuvers include climbing, swimming, riding, stalking, and any complex or unusual movement (acrobatics, dodging, tumbling, diving, etc.). If a character decides to make a Moving Maneuver as his action for a turn, the GM should assign it a difficulty: routine, easy, light, medium, hard, very hard, extremely hard, sheer folly, or absurd. The maneuver must still be within the physical capabilities of the character, and is limited to covering a distance no more than half of the character's normal (not running) movement. The GM may also assign an additional modification to the maneuver roll (e.g., an unassisted running leap across a 40' chasm for a human might be given a difficulty of "Absurd -70" since the Galactic record is only around 30'). Assigning difficulty requires a familiarity with the *Personal Maneuver Chart (18.4)* and a subjective decision by the GM (practice and experience will help).

After the difficulty is assigned, the character may then decide not to attempt the maneuver (i.e., he reconsiders and decides not to do it). In this case, he cancels his action and may perform some other limited action as described below (under "Canceling Action").

If the character decides to proceed with the maneuver, he makes an open-ended roll and adds his appropriate bonus along with any other applicable modifications. The resulting total is cross-indexed with the difficulty on the *Personal Maneuver Chart (18.4)* to obtain the maneuver result.

To summarize:

1) The character states the nature of his maneuver.
2) The GM assigns a difficulty and any special modifications to the maneuver.
3) The character decides whether or not to perform the maneuver.
4) If he decides to perform the maneuver, an open-ended roll is made.
5) All applicable modifications are made to the roll.
6) The total is applied to the *Personal Maneuver Chart (18.4)*.

Vehicular Maneuvers (VM) — Vehicular maneuvers include driving, spaceship piloting (both normally and while in combat, and each type requires a different skill) as well as piloting any air or water craft.

Static Maneuvers (SM) — Static Maneuvers include tracking, hiding, picking locks, astrogation, repairs, perception, influencing other characters, and any other complex or unusual activity not involving significant movement. If a character chooses a Static Maneuver as his action for a round, the GM must assign any applicable modifications from the *Static Action Chart (18.3)* and then the character must decide whether or not to actually perform the maneuver (see below for the effects of "Canceling an Action"). The GM may require more than one round for maneuvers which he decides are very difficult or complex. He may also allow a character to decrease the difficulty of appropriate maneuvers by using multiple rounds.

If the character decides to proceed with the maneuver, he makes an open-ended roll and adds his appropriate bonus along with any other applicable modifications. If the modified roll is greater than 100, the action is successful. If not, the action fails.

To summarize:

1) The character states the nature of his maneuver.
2) The GM assigns a difficulty to the maneuver.
3) The character decides whether or not perform the maneuver.
4) If he decides to perform the maneuver, an open-ended roll is made.
5) All applicable modifications are made to the roll.
6) Success: if the modified roll is over 100; Failure: otherwise.

Offensive Bonuses (OB) — Offensive bonuses are added to certain attack rolls.



Special Purpose Bonuses (SP) — Skills which are not applicable to moving maneuvers, vehicular maneuvers, static maneuvers or attacks are classified as "Special Purpose" skills. The effects of bonuses varies for each of these skills.

Canceling Action — During a round an action may be canceled before it would otherwise be resolved. A character who has canceled his action may perform one of the following alternative actions: melee with half his normal Offensive Bonus OR move half his normal (not running) movement OR make a maneuver modified by -30. The alternative action chosen **must** be performed when the other actions of that type are normally resolved.

***Note**: Use Self Discipline stat bonus for stunned maneuvers.*

3.4 SKILLS AND SKILL DESCRIPTIONS

"What do you mean you don't have any piloting skill? You've been flying the ship for weeks!"

3.41 MANEUVERING IN ARMOR SKILLS

This is one of the areas that does not conform to the general skill bonus pattern. Each Armor Type (AT) has a maneuver penalty associated with it for untrained individuals (See *Armor Chart*, pg.62). This penalty modifies Moving Maneuver rolls. Note that any type of heavy, restricting covering will constitute an Armor Type other than AT 1, which implies no encumbrance.

Each skill rank of maneuvering in a group of armor types reduces the penalty for maneuver by 5 (even for skill ranks over 10) until the minimum maneuver penalty is reached. (This limit represents the fact that the weight and constriction of the armor will always hinder the character to some extent.)

The basic armor groups are explained below.

Light Body Armor: Usually made up of lightweight alloysor balistic cloths such as Kevlar or ablative synthetics. These coverings provide limited torso protection.

Armored Body Suit: Heavier than a standard vacuum suit, this armor incorporates layers of Kevlar material and light alloy reinforcement which is then covered with either pliable armor plates or a light mesh. Armored body suits usually include a helmet so that the wearer can be sealed from the environment.

Armored Exoskeleton: True armor, the exoskeletons offer full-body coverage, the amount of rigid plating varying with subtype. Like the bodysuits, this armor can be sealed and is equipped with environmental controls.

Power Armor: The ultimate space armor, this group embraces full-body reinforced, rigid armor, maneuverable only with the help of servo-mechanisms, and even then great skill is required to operate it. Some types are capable of atmospheric and even interplanetary travel, in addition to being frequently equipped with a variety of weapons. Powered Armor is closer to an armored vehicle than personal protection, and will be covered thoroughly in the upcoming game ***Space Master: Armored Assault.*** It is mentioned here mainly for completeness.

Notes on the Advantages of Armor Types: Armor types are designed to reflect the protective capability of one's covering. Heavier covering (e.g., AT 20) is usually much more cumbersome than light armor or mere clothing. It is easier to make contact with (i.e., hit) but resists penetration better than lower armor types. Therefore, fewer and lower severity critical strikes will be achieved against higher armor types; frequent but low hit results will also occur. These coverings make the target easy to hit but hard to damage.

Lower armor types have the advantage of providing the wearer with mobility. Fewer attacks will make contact because the agile defender will literally evade the attacker. When an attack does make contact, however, the result is more severe than that found with higher armor types: more concussion hits and frequent, severe criticals are the rule.

3.42 WEAPONS SKILLS

These skills determine how effective a character is when using weapons in combat (as opposed to Telepathic attacks). These skills must be developed separately for each weapon. The skill bonus for each weapon is part of the character's Offensive Bonus with that weapon. The total Offensive Bonus is usually added to any "attack rolls" made with that weapon.

There are seven skill costs for weapons listed on the Character Development Chart (pp 8-9). There are twelve categories of weapons which these costs must be assigned to.

1-handed Projectile
2-handed Projectile
Support Projectile
1-handed Energy
2-handed Energy
Support Energy
Portable Launchers
1-handed Edged Weapons
1-handed Crushing Weapons
2-handed Weapons
Bows
Thrown Weapons
Pole Arms

It should be noted that there are more categories than skill costs listed. The cost in parenthesis must be assigned to each of the 6 categories that are not assigned one of the other 6 costs. Armsmen should assign a cost of 10 to all excess categories; Explorers and Pilots should assign 15's; all others should assign a cost of 20.

Note that the last five categories are taken from **Arms Law** for completeness and will not be dealt with in detail in ***Space Master***. Some weapons fit into more than one category — an assault weapon (two-handed energy) could also be used one-handed, and skills should be developed with both methods of using it separately.

During the preadolescent period, characters will develop an interest in a weapon (and category), making the type of weapon in that area easier to develop skill in. Thus each character may take the six skill costs listed for his profession in this area and assign them to the six weapon categories as he sees fit. An Armsman, for example, may have 1 category that is easy to develop (cost: 1/5), one that is a bit harder (2/4) three more that are still harder (2/7), and the rest at costs of 5 or 10. Once assigned, these skill costs may not be switched around later.

Note that because skills with different weapons are considered separate, one can develop two weapons simultaneously without penalty, provided that the development cost of each is paid.

Targeting: (OB) — Bonus is added to an attack roll with given weapon that targeting skill has been developed for. However, the bonus can only be added when the target is unaware of the impending attack, and is either stationary or moving slowly in a predictable manner. The development point cost is the same as the cost for developing *normal* weapon skill with that weapon, but a character's targeting skill rank for a given weapon may *never* exceed his normal weapon skill with the same weapon. Also, the Targeting bonus can be added to a static action maneuver roll when the firer attempts to hit an inanimate object.

3.43 GENERAL SKILLS

These skills are principally a measure of the character's ability to cope with his physical environment. Psion users concentrating on things of the Telepathic realm find such skills more difficult to acquire.

Climbing: (MM) — This could range from the ability to climb sheer faces (absurd), through mountain climbing (very hard) , to climbing a ladder (easy). This ability includes skill in going up and down ropes, rappelling, using handholds properly, etc. (use the difficulty chart).

The normal climbing rate for walls with adequate handholds is 10'/round as a "medium" moving maneuver.

Swimming: (MM) — Skill level 1 will prevent the character from drowning in water over his head. Further skill levels will enable the character to make headway against a current, to stay afloat for longer periods of time without touching the ground, to swim longer distances, to move faster in the water, and to make maneuvers in the water. For this skill armor penalties are *tripled*. Factors such as treacherous water might increase the difficulty.

Riding: (MM) — A skill rank is nec-essary to keep from constantly falling off the animal being ridden. Higher skill ranks enhance the chance of retaining control of the animal when it is startled or hostile, or gaining control of an unfamiliar animal (of the type you have skill with). Like Driving, skill ranks in Riding must be developed separately for each animal type.

Disarming Traps: (SM) This skill enables a character to disarm a trap. Traps of more than moderate difficulty may be represented by subtractions from this total (to be assigned by the GM).

Picking Locks: (SM) As in Disarming Traps, this skill adds to a character's ability to pick a lock. Again, extremely complex locks can be represented by having the GM assign difficulty subtractions to all attempts to pick them.

Stalking (MM) **& Hiding** (SM)**:** (maneuver) Stalking is the ability to move using camouflage and shadows to conceal your presence, while Hiding reflects the skill in using camouflage, darkness, shadows, etc., to remain absolutely hidden while immobile.

Perception:(SM) This skill is the ability to notice the right things, to find *carelessly hidden objects*, the concealed microphone, the electronic eye triggering the alarm system, the nearly invisible seam around the secret panel. These are the things that the GM cannot mention to the PCs without calling attention to them. A bonus to the perception roll should be given to PCs who look in the correct area, or are seeking the correct *type* of thing.

Driving: (VM) Like Riding, skill ranks in Driving must be developed separately for different types of vehicles. One skill rank allows basic understanding of the controls; subsequent ranks reflect increased ability, and quickness in maneuvers. This skill is useful only with regard to land vehicles (though this includes ground effect craft and antigrav vehicles which cannot rise above hover level).

Atmospheric Pilot:(VM) This skill is in principle identical to Driving, but applies to all vehicles whose principle mode of travel is through the air. Again, like Driving, skill ranks in Atmospheric Pilot must be developed separately for different types of vehicles.

Marine Pilot:(VM) This skill applies to controlling all craft which operate on or below the water, including all boats, hydrofoils, and submersibles. (Craft hovering over the water still fall under Driving.) Like Driving, skill ranks in Marine Pilot must be developed separately for different types of vehicles.

3.44 SPECIAL SKILLS

Adrenal Defense: (SP) By using this skill, attacks may be dodged or deflected (wholly or partially). The skill rank bonus of the Defender is added to his Defensive Bonus versus melee attacks. Against missile attacks the skill rank is halved (round up) before the bonus is calculated and added to the Defensive bonus. Against Energy and Projectile fire the skill rank is *quartered* (round up). To use Adrenal Defense you must be aware of the fact that you are under attack. In addition, the character must not be wearing any armor with a maneuver penalty and cannot have a shield or other large object in his hands.

Note: *Members of certain religious orders and ultra-elite, highly trained military units are reputedly able to utilize their full Adrenal Defense bonus against missiles, projectiles and energy weapons while using a power sword weapons kata. This ability should be only very rarely (if ever) allowed to a player character.*

Adrenal Moves: (varies). These skills relate to the development of the art of superhuman effort. Through concentration and Self Discipline, the character skilled in Adrenal Moves must be prepared in the round before it takes effect. This is accomplished by taking a 20% penalty on action in the round of preparation. Adrenal moves may not be attempted in consecutive rounds, nor may more than one be attempted at any one time. Skill ranks in each Adrenal move must be developed separately. Each Adrenal Move counts as a separate area for development purposes.

- **Strength** (SM). This ability gives a character a +10 bonus on his offensive bonus (with a hand-wielded contact weapon) and doubles the number of concussion hits that he delivers. At the end of the preparation round, the character rolls D100, then adds the bonus for his skill rank in Strength Adrenal Move. A roll of 101+ indicates success and the above bonuses apply for the next round. Failure means no bonuses are obtained for the next round.
- **Speed** (SM). This allows a character to move at twice normal speed (as if hasted) and thus increase his activity for one round as described in the Psion of the same name. Speed is prepared just as Strength and success is determined in the same way.
- **Balance** (MM). This skill enhances the ability of the character to main-tain his balance in one maneuver (requiring balance). The skill bonus is added to any maneuver roll required for the action (even if it takes several rounds).
- **Leaping** (MM). This allows the character to automatically increase the distance he can successfully leap from either a standing or a running start. The *Personal Maneuver Chart (18.4)* can be used, with the skill rank bonus being added. 100% would indicate a normal leap and results above that a longer leap.
- **Landing** (MM). A character may automatically decrease the severity of a fall by his skill rank bonus times .5 meters. For example, if a character's skill rank bonus was 50, a 40 meter fall would be treated as a 15 meter fall. The severity of a fall can never be reduced below that of a 5 meter fall. For this adrenal move the penalty of -20% for a preparation round is applied the round after the fall (assuming he's alive and conscious). This is the recuperation round.

Martial Arts: (OB) In ***Space Master***, the martial arts rules have been designed to maximize playability while maintaining as many facets of real martial arts as possible. Combat capabilities are described in terms of 2 attack tables and 2 critical tables devoted to martial arts.

We suggest that any player character wishing to run a martial artist be allowed to choose (or be assigned) one fo the forms given, "striking" or "sweeps and throws."

Martial Arts skills affect the Offensive Bonuses for unarmed combat. MA skills consists of 8 different skills in MA attacks. Each of these skills must be developed separately and is considered a separate area for development purposes:

MA Striking Rank 1
MA Striking Rank 2
MA Striking Rank 3
MA Striking Rank 4
MA Sweeps & Throws Rank 1
MA Sweeps & Throws Rank 2
MA Sweeps & Throws Rank 3
MA Sweeps & Throws Rank 4

These "Ranks" should not be confused with "Skill Ranks", MA Ranks represent the complexity and effectiveness of the different Martial Arts Attacks. Rank 1 is the simplest (and the least effective), while rank 4 is the most complex (and the deadliest). The skills are further classified according to the "type" as being "striking" (roughly comparable to Karate and boxing), or "sweeps & throws" (similar to Judo or wrestling).

- **Effect of Martial Arts Skill**: The skill rank bonus for a particular MA Rank is part of the Offensive Bonus used when a Martial Arts attack is made utilizing that MA rank. Normally, a character may choose which MA Rank he wishes to use in an attack.
- **Effect of MA Type and Rank:** Only one MA Rank and type may be used to attack in a given round. The MA rank determines the maximum possible result that an attack can obtain, while the MA type (striking or sweeps & throws) determines which attack (and critical) table is used.
- **Limitations and Skill Development:** Skill in a Martial Arts Rank can not be developed to a skill rank higher than the existing skill ranks of the lower MA Ranks of the same type (i.e., either striking or sweeps & throws). In other words, MA Striking Rank 4 can never have a higher skill rank than MA striking Rank 3, 2, or 1.
- **Engaging Multiple Foes:** Martial Artists can engage multiple foes in the same round of combat, without using special abilities or aid from spells (e.g., "Speed," "Haste," etc.). If a Martial Artist has at least a 40 offensive bonus in the Martial Arts (MA)Rank which he is using, he can engage 2 or more foes within a 90 degree combat arc of one another. If his offensive bonus is at least 60 in the Rank being used, the foes engaged can be separated by any arc. The Martial Artist must be using martial arts (unarmed combat) and he must subtract 20 from his OB for each additional foe engaged. He must also allocate his remaining OB between attack and parry in the same manner against all foes engaged.

  Example: *Irol has a +65 OB in Rank 1 and is fighting two foes. He can attack one with his full +65 OB or both with a + 45 OB against each (65 -20). Since he has better than a +60 OB he can attack within any arc (e.g., even against one frontal and one rear attacker).*
- **Multiple Attacks against the Same Foe:** Certain Martial artists may make two attacks against the same foe in one round (if "Speeded" or "Hasted" a Martial Artist can make 4 attacks). If a Martial Artist has at least an 80 offensive bonus in the Rank with which he will fight, he may make 2 attacks against the same Foe in the same round with 30 subtracted from his OB. He must split his OB between attack and parry the same way for both attacks and must be using Martial Arts.

  Example: *Irol has a +85 OB with MA Striking Rank 2 attacks and chooses to attack Rucley twice in one round. Because he is striking twice in the same round, he subtracts 30 from the OB applied to each attack (i.e. he makes two +55 MA Striking Rank 2 attacks). Of course, he may use part of his OB parry, and he still has the option of only attacking once at +85.*
- **Weapon Kata:** Only Martial Artists may use weapon kata. A weapon kata is the use of a weapon in combination with unarmed combat techniques. With an OB of 50 or more in the MA Rank being used, a knife kata can be used with MA Striking or stick kata with MA Sweeps & Throws. With an OB of 90 or better other weapons may be used.
- **Effect of Weapon Kata:** Certain martial artists use weapons as part of their kata (Kata are patterns of attack and defense that form the basis for the various forms of martial arts). Weapon kata may be used if a -20 modification is made to the OB of the particular rank being used.

  Most physical weapons are considered barbaric and useless in the ***Space Master*** universe, however some have effectively combined the use of the Power Sword with martial arts techniques.

  A weapon kata attack is resolved in the following manner:

1) A normal attack is conducted on the appropriate martial arts attack table (striking or sweeps and throws). The OB modification of -20 is applied (any weapon bonus is also added).

2) The weapon being used may be fumbled as specified. However, the fumble range is decreased by 1 for each increment of 10 that the OB is over 50 (round down and the range can never be reduced below 2).

3) The number of concussion hits indicated on the martial arts attack table is increased by: the difference between the maximum number of hits the weapon can give [to the armor type (AT) being attacked] and the maximum number of hits that can be given to the AT being attacked by the martial arts attack table being used. The result is the actual number of concussions hits inflicted by the weapon kata.

4) In addition to the normal (if any critical strike indicated by the martial arts attack table, a weapon kata also inflects a second critical of one severity level less [e.g. a result of C on the martial arts (m.a.) striking attack table would also inflict a B slash (or puncture or head) if a Power Sword or Forceknife kata were used]. **Important:** Only one die roll is made to resolve both criticals. The type of extra critical is always Unbalancing for sweeps and throw weapon kata; while, the extra critical type can be Slash, Puncture, or Krush for striking weapon kata. If more than one type of critical is appropriate for a given striking weapon kata, the attacker should choose which is to be applied — before the attack roll.

Alternatively, the GM may wish to use the appropriate weapons critical(s) *instead* of the Martial Arts Critical. This might be especially appropriate when using a power sword weapons kata, when slash and burn crits are more applicable.

Summary of Offensive Bonus Modifications (cumulative)

-20 = For each foe over 1 engaged during a given round.
-30 = For using two attacks versus one foe in a given round.
-20 = For using a weapon kata.

Ambush:(SP) This is the ability to strike effectively without first being noticed. To use his ambush skill a character must approach his foe undetected and be able to strike before the latter can react.

If the ambush skill is successfully used, the character gains a 'bonus' on their critical strike roll. This bonus consists of the ability to adjust the critical strike roll by any number up to the ambush *skill rank* (not bonus) of the attacker. This adjustment may be either up or down. This (as well as Sniping, below) is the only adjustment that is ever allowed on a ***Space Master*** critical strike roll. To use this bonus, the attacker must first get a critical strike result on an attack table. If he does, however, this ability greatly increases the chance of a killing blow.

Ambush is only allowed to be used by combatants using a melee (handheld) one-handed weapon. It should be allowed for combatants using contact stunners under the above circumstances. Ambush is not allowed against targets who are aware of their attacker, and can only be used at half value aginst someone already involved in combat. If using Large or Super Large Critical tables (available in ***Arms Law & Claw Law***), the Ambush modifier only *adds* to the critical roll (if desired).

Sniping: (SP) Similar to Ambush, Sniping allows an attacker using a single-shot projectile or a directed energy weapon (e.g., lasers or stunners, but not blasters) to adjust a critical roll against an unaware target. As with Ambush, Sniping is only useable if the target is unaware of the attacker, and the target is basically stationary. The attacker may modify the critical results roll (if a critical is achieved) by a number equal to the sniping skill rank.

Linguistics: (SP) In ***Space Master*** there will of course be many different tongues with many racial origins. Each language must be developed individually in steps from a level at which the language cannot even be recognized to a level of full understanding (in which one comprehends inflection and idiom — and the snide jokes invariably made about off-worlders). See the *Language Skill Chart* on pg 33 for the communication ability conferred by each rank of proficiency in a given language.

Body Development: (SP). Each character starts with the capacity to take a number of hits equal to his constitution Stat divided by 10 (round off). Each skill rank picked in body development entitles the character to roll one hit die of the type used by his race and increase the number of hits the character can take by the amount of the die roll. The sum of the starting hit points and the rolled hit points are the character's base hit points. Thus the maximum number of hits each character may have is determined by his race and Constitution bonus, and is in no way a function of his profession, although fighter-type characters will develop to this maximum faster under normal circumstances.

Forgery: (SM) the ability to reproduce official documents, identity disks, etc. Use the construction table, with appropriate modifiers as determined by the GM.

Counterfeiting: (SM) The ability to reproduce official currency, as well as falsify MERLOGH Bank records, Elmonit Cards and card data, etc.

Survival: (SM) A successful roll indicates that the character has avoided the adverse effects of the environment. One roll is usually made every 25 hours, but frequency and bonus can vary with intensity of environment, number of people in group, and available equipment. Three basic environments must be developed separately: Hot/Moist (Jungle); Hot/Dry (Desert); Cold (Arctic). Skill includes foraging for food as well as utilizing shelter.

Scanner analysis: (SM) A bonus when attempting to interpret information provided by portable scanning devices (Multiscanners, Medscanners, Repair Scanners). Skill must be picked in one of the three types specifically. This skill rank is useable at half-value when attempting to utilize one of the other two scanner types than it was specifically picked for.

First Aid: (SM) Successful use can reduce bleeding as much as 5 hits/round, or other first aid techniques such as cardio-pulmonary resuscitation and splinting broken bones. Skill in First Aid may also be used (at half of normal bonus, maximum of 25) when attempting to use basic medical equipment.

Communications: (SM) This skill grants a bonus when using any construct communication devices. However, it must be developed as each of three similar skills: TBD (Tachyon Beam Dictor, used for interstellar communication), Microfrequency Modulation and Laser Rig (both for in-system communication). This skill rank is useable at half-value when attempting to utilize one of the other two communication types than it was specifically picked for.

3.45 COMBAT SKILLS

These skills are associated with the environmental and vehicular aspects of combat. Many are included here as a link to the ***Space Master*** games ***Star Strike*** and ***Armored Assault.***

Combat Pilot: (VM, OB/DB) This skill is used — as the name implies — only in Combat situations. It allows the pilot to maneuver in combat and increase his ship's attack OB, and/or the vehicle's DB.

Note *When actually used, the Combat Pilot Skill bonus can not exceed the pilot's Atmospheric, Orbital, or N-Space Piloting, or AFV Driver (whichever is appropriate) skill rank.*

AFV Driver: (VM) This skill bonus is applied to maneuver rolls when driving/piloting Armored Fighting Vehicles. Skill must be developed separately for different types of AFVs. Examples of different types of AFVs are: Tracked Tanks, Hovertanks, GEVs, MIRCs, etc. The GM may classify certain AFVs into similar skill categories for the purposes of this skill.

Alien Environments:(SP) The bonus for this skill is taken as the percent of the character's offensive, defensive, or maneuver bonus under the given condition. Conditions must be developed separately; examples are : Zero-G, Underwater, Extremely powerful gravity, etc.

Missiles: (OB) This skill bonus is the combat OB applied when using missiles and torpedoes.

Projectile Gunnery: (OB) This skill bonus is the combat OB applied when using non-explosive projectiles, autocannons, and ground-based artillery.

Heavy Energy Projectors: (OB) This skill bonus is part of the combat OB applied when utilizing an energy cannon of Mk 6 or greater.

Mounted Weapons Ambush: (SP) Very similar in concept to normal Ambush and Sniping (above), this allows an energy projector or projectile gunner to strike an opponent more precisely than normal, as reflected in manipulation of the critical roll. This is only possible when at least one fo the following conditions applies: (1) the target construct is completely unaware that it is about to be attacked and so not employing evasive tactics; (2) the target construct's "screens" are inoperative and it is immobile or drifting predictably.

Electronic Warfare: (SM) Necessary to actively operate EW/Stealth systems.

3.46 ASTRONAUTIC SKILLS

Orbital Pilot: (VM) This skill bonus is applied to all maneuvers requiring atmospheric and gravity-field proximity flying of spacecraft: touch-down, take-off, docking, atmospheric entry and exit, etc. The *Vehicular Maneuvering Table (22.2)* is used.

N-space Pilot: (VM) This skill is applied when carrying out N-space astrogation plots, as well as any "seat-of-your-pants" interplanetary flying. The *Vehicular Maneuvering Table (22.2)* is used.

Hyperspace Pilot: (VM) Bonus used when programming and carrying out Hyperspace astrogation. The *Vehicular Maneuvering Table (22.2)* is used.

N-space Astrogation: (SP) Bonus is used to ascertain correct course for all N-space journeys (usually interplanetary in nature). The *Vehicular Maneuvering Table (22.2)* is used.

Hyperspace Astrogation: (SP) This skill is applied to program to correct Hyperspace course from computer data. The *Vehicular Maneuvering Table* (*22.2*) is used.

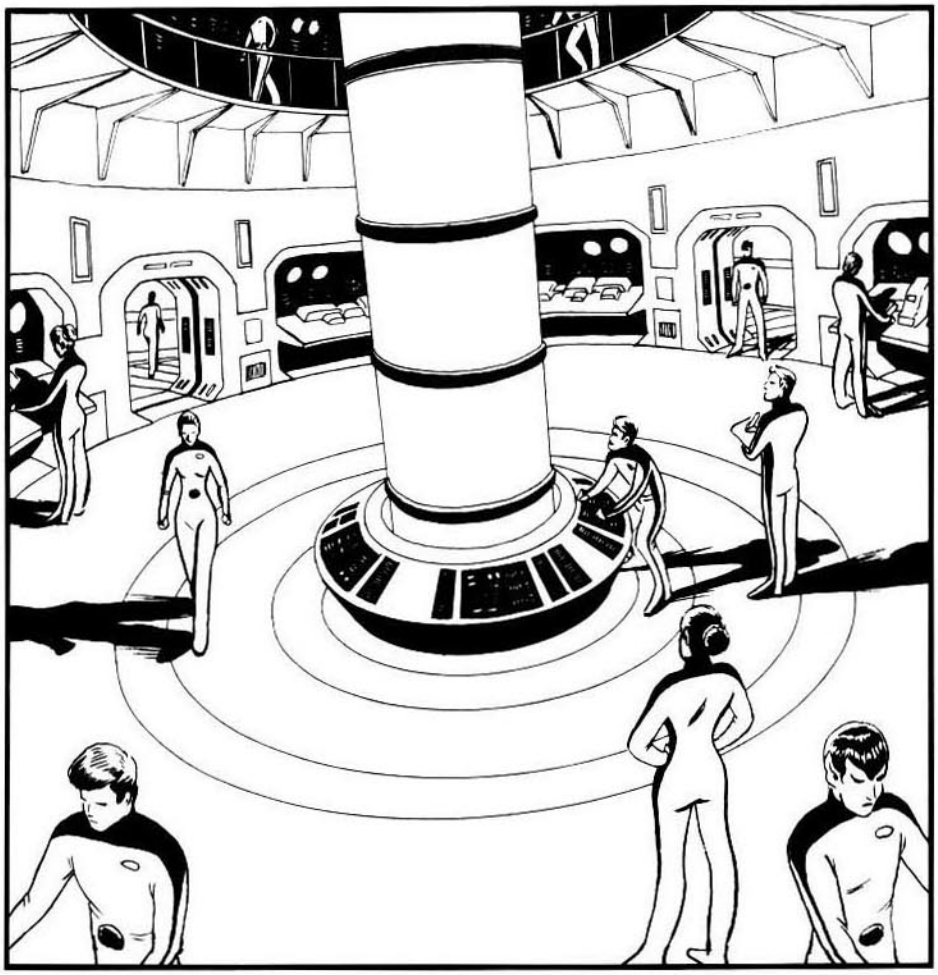
Sensor Analysis:(static) A bonus given when attempting to interpret shipboard sensor displays. Appropriate computer programs may further enhance this ability.

3.47 TECHNIC SKILLS

The following are skills which aid in actual repairs, construction and modification of mechanical, electronic and other physical constructs. The bonuses are applicable to the *Construction and Research Chart* (**Tech Book**) and the *Malfunction/Repair Chart* (**Tech Book**). Possessing these skills does not imply skill with diagnostic devices such as a Repair Scanner. That skill must be developed separately.

Mechanical Technics: (SP) All machines involving moving parts, excluding the specific other skills mentioned below (ship landing gear and doors, for instance, are mechanical systems).

Weapons Technics: (SP) All weapons and weapons systems, including fire control, gunner interfaces, mounted guns, hand energy and projectile weapons. This skill also encompasses shield generators and other defensive systems.



Electronics Technics: (SP) This skill encompasses Electronic, Optronic and simple molecutronic devices which are not specifically computer brains, weapons, cybernetic devices or the other technics mentioned below. Examples are: scanning or communications equipment, EW, control consoles, most personal equipment, vehiculer control systems.

Computer Technics: (SP) Skill related directly to computers and computer systems. Includes programming ability in the following structure: For each skill rank *after* the first rank, the character may choose one programming language with which he is proficient (e.g., a character with ten skill ranks is proficient in nine computer languages). Note that the character must have had access to data related to the language chosen during the period that skill rank is developed. Languages must be chosen as the picks are made.

Power System Technics: (SP) Includes all power generation units from batteries to M/A reactors, various drive systems and engines, including FTL drives.

Crime Technics: (SP) Repair, modification and construction of devices directly related to forgery and counterfeiting, surveillance, security, tracking, etc.

Medical Technics: (SP) Essentially "field medicine" and the use of equipment designed for emergency medical treatment and relatively minor field operations.

Cybernetic Technics: (SP) Embraces the field of Robotics, and includes all aspects of robot and android repair and construction (mechanical, electronic, power and computer).

Genetic Technics: (SP) Involves the actual alteration of existing gene patterns and abilities as opposed to the breeding science, detailed below. This includes the ability to create Replicants and Clones.

3.48 SCIENTIFIC SKILLS

When utilizing the research skills below for design purposes, such as a system or computer program the *Construction and Research Chart* (**Tech Book**) should be used to determine time required and success likelihood.

General Physics: (SP) Force, energy, atomic structure, etc.

Advanced Math: (SP) Calculus, differential equations, basic relativity.

Chemistry: (SP)Elemental composition, reactions, compounds, etc.

Planetology: (SP) A general science embracing the fields of geologic, meteorological and geographic analysis in a planet-wide context, concentrating on sweeping environmental systems.

Astronomy: (SP) Stellar analysis and survey.

Metallurgy: (SP) Elemental structure analysis; alloys, etc.

Tachyon Physics: (SP) Hyperspace, sensor fields, Neutrinos, Photinos, etc.

Medical Practice: (SP) Bonus when attempting to perform operative procedures, including use of any surgical medical equipment. The skill also includes ability to fit cybernetic limbs and organs and operate most cryogenic and similar equipment. The skill rank or bonus *cannot exceed* the character's skill rank or bonus in Medical Diagnosis. Unlike Diagnosis, this skill is 'universal', meaning that surgical skill for one race is essentially as good as skill with any other. A skill rank of + 30 bonus minimum is required to purchase and use medical field equipment and healing drugs. A skill of 50 + is required for certification in surgery and more powerful and/or recreational drugs.

Note: *These skill ranks for certification are recommendations; the GM may wish to raise, lower or abolish them as he sees fit in his game system.*

Genetics: (SP) Advanced understanding of genetic principles. Not simply basic genetic influences, but the ability to construct breeding patterns and match pairs of entities to achieve specific goals, reinforce trends, etc. (Eugenics)

Cybernetics: (SP) The design and development area complementary to the Technic skill of this type described above.

General Biochemistry: (SP) Analysis, basic genetics.

Note: *all of the "Xeno" skills below actually represent a myriad of sub-skills, much like the heading "Adrenal Maneuvers" (see Section 3.44). A character wishing to apply his skill bonus based on knowledge of one planet's botany to the botany of another planet gets half-value of his skill bonus. A character choosing to develop the 'general' sub-skill is at -20 to all research rolls in that area, but would have an equal chance of being able to apply it to any planet/area.*

Psychology [Xeno]: (SP) Analysis of various racial psychologic makeups. As with History, must be either very general, or a specific race/culture must be chosen.

Medical Diagnosis [Xeno]: (SP/SM) Understanding of anatomy and overall physiology of sentient races, as well as diagnostic ability. Bonus with diagnostic medical equipment. As with Xeno skills above, one must pick the skill in either general diagnosis, or diagnosis of a specific race. General diagnosis skill of 30 allows certification for simple medical practice on all races (use of field equipment and healing drugs). Diagnosis skill for a specific race of 30 + is required for surgical certification (and reasonable competence).

Botany [Xeno]: (SP) Plant life; either in-depth of a specific planet or a general education in botanical trends. Must be decided when skill picked. Several different 'botanies' may be developed simultaneously, assuming research materials available.

Zoology [Xeno]: (SP) Animal life; either in-depth of a specific planet or a general education in zoological trends. Must be decided when skill picked. Several different 'zoologies' may be developed simultaneously, assuming research materials available.

History [Xeno]: (SP) Either in-depth of a specific planet/culture or general trends of other cultures' socio-historic backgrounds. Must be decided when skill picked. Several different 'Xeno Histories' may be developed simultaneously, assuming research materials available.

Anthropology [Xeno]: (SP) Linguistics, customs, habits and cultural trends of any known races and cultures. As with History, must either be very general, or a specific planet/culture chosen.

3.49 ENGINEERING SKILLS

Mechanical Engineering: (SP) The design and development area complementary to the Technic skill of this type described above.

Weapon Engineering: (SP) The design and development area complementary to the Technic skill of this type described above.

Electronic Engineering: (SP) The design and development area complementary to the Technic skill of this type described above.

Computer Engineering: (SP) Concentration on program development and facets of software engineering, as well as new logic and memory systems.

Power Systems Engineering: (SP) The design and development area complementary to the Technic skill of this type described above.

3.410 TELEPATHIC SKILLS

The skills available to ***Space Master*** characters are primarily limited to the Psion lists. Concepts such as runes and magic items, commonplace in a fantasy environment, are unheard-of in relation to Telepathic skills. See Part IV of this book for rules for skill acquisition, casting, and lists of Telepathic Powers.



3.5 SECONDARY SKILLS

The Primary Skills dealt with above are by no means the only factors applicable to a realistic SFRP game situation. The GM may discover other skills which have significant bearing on adventures and may wish to permit the PCs to develop them as they would those detailed in Section 3.4.

A sampling of additional skills is included below. These Secondary skills are more specialized than the basic Primary skills discussed earlier. They are often tied to, or indicative of a PC's profession or trade. Still, they add considerable detail and flavor to a game. GMs incorporating some or all of these skills can handle them exactly as they would primary Skills, with the cost of developing skill ranks keyed to a PCs profession. alternatively, the GM can assign a profession of the character involved. Secondary skill bonuses follow the same progression as primary skills.

SECONDARY SKILL DEVELOPMENT COST CHART

Skill	Mods	Armsman	Pilot	Explorer	Systems Tech	Electrical Tech	Arms Tech	Researcher	Physician	Engineer	Criminologist	Medic	Planetologist	Administrator	Entertainer	Theologist	True Telepath	Skill
Acrobatics	Ag/Qu	1/3	1/4	1/3	2/5	2/5	2/5	3/6	1/5	2/7	1/5	2/5	2/5	3/6	1/3	3/6	2/7	Acrobatics
Acting	Pr/Em	2/5	1/5	1/4	2/5	3/6	3/5	3	1/5	2/7	1/4	2/5	2/6	1/5	1/3	1/5	2/7	Acting
Advertising	In/Re	7	5	3	4	4	5	2/5	3/6	2/7	1/4	3/6	3/6	1/3	2/5	3/6	2/7	Advertising
Administration	In/Em	5	4	3	4	4	4	1/4	1/5	2	2/5	2/5	1/5	1/3	4	2/4	5	Administration
Animal Healing	Em/Re	4	4	2/5	3/5	5	5	5	1/2	4	1/5	1/2	2/5	5	4	4	5	Animal Healing
Animal Train	En/In	2/7	2/5	1/4	4	5	5	4	2/5	2/5	1/4	2/4	2/5	5	3	3	1/6	Animal Train
Appraisal	In/Re	2/7	2/5	1/4	3/5	3/5	2/7	3/5	2/5	2/6	1/5	3/5	3/5	4	1/5	4	3/6	Appraisal
Athletic Games	Ag/Qu	1/2	1/3	1/2	2/5	2/5	2/5	3/5	1/5	2/5	1/5	1/4	2/5	3/5	2/3	3/5	2/4	Athletic Games
Caving	SD/Re	1/4	2/5	1/2	3	3	3	2/5	4	5	1/4	2/7	2/7	5	5	5	3	Caving
Contortions	Ag/SD	1/3	1/4	1/2	1/5	1/5	1/5	5	3/7	2/6	1/4	3	3	5	1/3	5	2/5	Contortions
Dance	Ag/In	1/4	1/4	1/3	2/5	2/5	2/5	2/7	2/5	2/5	1/4	2/5	1/5	1/4	1/2	1/3	2/5	Dance
Diplomacy	Pr/In	2/5	1/4	1/3	2/5	2/5	2/5	1/4	1/4	1/4	1/2	1/3	1/3	1/2	1/4	2/3	1/3	Diplomacy
Directed Psion	Ag/SD	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1/3	Directed Psion
Disarming	Ag/Qu	1/2	1/4	1/5	2/5	2/5	2/4	3	2/4	3/6	1/4	1/5	2/6	5	1/3	5‡	2/5	Disarming
Diving	SD/Ag	1/3	1/3	1/2	2/4	2/4	2/5	2/6	2/5	2/5	2/4	2/5	2/5	2/6	2/4	2/6	2/4	Diving
Drug Tolerance	Co/Sd	1/3	1/3	1/2	2/5	2/5	2/5	5	2/5	2/6	1/3	2/5	2/6	4	1/4	5	1/2	Drug Tolerance
Falsification	SD/Re	3	2/6	2/5	3	3	2/4	2/6	2/5	2/5	1/2	1/5	2/5	2/5	3	2/6	3	Falsification
Foraging	In/Me	1/3	1/3	1/2	1/4	1/4	1/4	2/4	1/4	1/4	1/4	1/4	1/3	2/5	2/4	2/4	2/4	Foraging
Frenzy	Em/SD	1/4	1/5	1/3	3	3	3	3	2/6	2/5	1/4	2	3	5	3	5‡	1/5	Frenzy
Gambling	Me/Pr	2/4	2/5	1/4	2/5	2/6	2/5	2/6	1/5	2/6	1/3	2/5	2/5	1/4	1/5	2/6	1/5	Gambling
Interrogation	In/Em	2/7	2/5	1/4	3/5	3/5	2/7	3/5	2/5	2/6	1/5	3/5	3/5	3	2	2	3/6	Interrogation
Meditation	Pr/SD	2/5	1/5	1/4	2/5	3/6	3/5	3	1/5	2/7	1/4	2/5	2/6	3	2	1/2	2/7	Meditation
Music	Ag/Em	2/6	2/6	1/5	2/6	2/6	2/6	2/6	2/5	2/6	2/6	2/5	2/6	2/6	1/3	1/5§	2/5	Music
Navigation	Re/In	2/6	1/4	1/5	2/6	2/6	2/6	2/6	2/5	2/5	1/5	2/6	1/4	2/6	2/6	2/5§	2/6	Navigation
Propaganda	In/Em	4	4	2/5	3	3	3	2/6	3	3	1/4	2/5	2/5	1/4	2/5	1/4	2/4	Propaganda
Public speak	Em/Pr	2/6	2/6	2/4	2/6	2/6	2/5	2/6	2/5	2/6	1/5	2/5	2/5	1/4	1/4	1/2	1/4	Public speak
Quick-draw	Qu/Ag	1/2	1/4	1/5	2/5	2/5	2/4	3	2/4	3/6	1/4	1/5	2/6	4	2/4	4‡	2/5	Quick-draw
Sailing	Em/In	2/6	2/6	1/5	2/6	3	3	3	2/7	2/6	2/5	3	3	3	3	3	3	Sailing
Seduction	Em/Pr	2/6	2/5	1/6	2/6	2/5	2/5	4	2/6	2/7	2/4	2/6	2/6	1/5	1/3	2/4	2/4	Seduction
Signaling	Me/SD	1/4	1/3	1/2	2/5	1/5	2/4	1/5	2/5	2/5	1/2	2/6	2/5	1/3	1/2	1/2	1/5	Signaling
Singing	Pr/In	2/6	2/6	2/5	2/6	2/6	2/6	2/6	2/5	2/6	2/6	2/6	2/6	2/6	1/3	1/5§	2/5	Singing
Star-gazing	In/Me	2/6	2/6	1/5	2/5	2/6	2/6	2/6	2/5	2/5	2/5	2/6	2/6	1/5	1/5	1/4§	1/5	Star-gazing
Subduing	Ag/Qu	1/2	1/4	1/5	2/5	2/5	2/4	3	2/4	3/6	1/3	1/5	2/6	3	3	3‡	2/5	Subduing
Tracking	In/Re	2/5	2/5	1/4	3	4	4	5	2/6	3	1/3	3	3	5	5	5	2/6	Tracking
Trading	Re/Em	2/7	2/5	1/4	3/5	3/5	2/7	3/5	2/5	2/6	1/5	3/5	3/5	1/4	1/5	2/5	3/6	Trading
Trickery	Pr/Qu	1/4	1/4	1/3	2/4	2/4	1/5	2/5	2/4	2/5	1/2	2/4	2/4	2/5	1/2	1/3	2/5	Trickery
Tumbling	Ag/SD	1/4	1/5	1/3	3	3	3	3	2/6	2/5	1/4	2	3	3	1/3	3	1/5	Tumbling
Visual Arts	In/Em	3	2	2	2/5	2/5	3	2/5	3/7	3	3	3/7	3	3	2/5	3/7	2/5	Visual Arts
Weather-watch	In/Em	2/7	2/7	1/5	3/7	3/7	3/7	2/7	3	2/5	2	3	1/4	2/6	1/4	1/6	3	Weather-watch

Key ‡ If one weapon (or fighting technique) is sanctioned, cost is 1/2 § If skill is sanctioned, adolescent cost is 1/*

Secondary Skill Descriptions

The skill descriptions are shown in the following format: **Ability** (Related Stats) Applicable Maneuvers

Acrobatics (Ag/Qu) Bonus for in-air maneuvers (e.g., flying or levitation or swinging on objects). Helps reduce the effects of falls.

Acting (Pr/Em) Bonus for impersonating others, devising new identities, etc.

Advertising (In/Re) Bonus for successfully marketing a product or service. Must be developed separately for each culture encountered; otherwise bonus is halved for all but specific culture researched.

Administration (In/Em) Bonus for functioning successfully within any entity where record keeping, personnel interaction, and bureaucracy is present.

Animal Healing (Em/Re) Bonus for administering medical aid to injured animals. Allows one to stabilize or repair light wounds and illnesses. Successful static maneuver can stop (or reduce) up to 3 hits/rd bleeding.

Animal Training (Em/In) Bonus for training a particular type of animal (bird, mammal, or other type).

Appraisal (In/Re) Bonus for determining or estimating the value of an object or goods. It is suggested that the character gain skill in a specific area, such as gems and minerals, Sianetic Harbinger artifacts, jewelry, equipment from various PreImperial periods, etc.

Athletic Games (Ag/Qu) Bonus for playing any one game primarily involving agility, coordination and motor skills.

Caving (SD/Re) Bonus chance of determining natural course and lay of a cave or cavern (passage or chamber). Bonus when attempting an unassisted maneuver in a cave.

Contortions (Ag/SD) Bonus for manipulating one's body in order to move through small openings or absorb sudden crushing impact (other than falls). Helps in escapes from bonds, etc.

Dance (Ag/In) Bonus when attempting to recreate a dance one witnesses, including rituals, etc.

Diplomacy (Pr/In) Bonus for operating successfully in a bureaucratic environment, such as a royal court or any other large governmental or corporate structure. Tact, negotiation, and deceit are all facets of Diplomacy.

Directed Psion (Ag/SD) Bonus for utilizing certain Psions which can be 'aimed'. Skill may be directed separately for each such Psion. Generally skill may be developed only for Psions that are directed against a single target. A character wishing to develop skill with such a Psion must be able to cast it at least once er day (either intrinsically or from an item). This skill is important for it allows certain Telepaths to specialize in particular Psions the same way that Armsmen may specialize in their weapons.

Disarming (Ag/Qu) Bonus for an attempt to remove an object from from an opponent's grasp. If the user rolls 101+ (1-100 open-ended plus skill bonus), then the opponent must make a RR vs the level (# of skill boxes) of disarming skill used. User must be within reach of opponent and (normally) have 'surprise').

Diving (SD/Ag) Bonus for controlled falling maneuvers.

Drug Tolerance (Co/SD) Bonus for resisting the effects of any one type of intoxicant, poison, or other chemical substance. Bonus is applied directly to the RR. Skill must be developed separately for each type of drug (e.g., alcohol, sodium pentathol). One need not be conscious to have the bonus.

Falsification (Re/SD) Bonus for creation of false but believable manual writings or illustrations (e.g., forgery, counterfeiting, etc.).

Foraging (In/Me) Bonus for chance of finding any local source of potable water or edible plants and animals. Includes skill at basic food acquisitions such as gathering or fishing.

Note: *skill only applicable on user's Homeworld or where flora and fauna are identical; otherwise Foraging skill cannot exceed user Xeno Botany or Xeno Zoology bonus for ecology in question. Skill success also assumes availability of food. (All the Foraging skill in the world won't help you on a lifeless asteroid, buddy.)*

Frenzy (Em/SD) Bonus to attempt to go into a state of single-minded, unpredictable rage which results in an additional +30 to OB, the ability to take twice normal concussion damage, deliver twice normal concussion damage when using a melee weapon, and immunity to stuns. (This differs slightly from ***Character Law*** Frenzy). Once in frenzy, however, user has no DB bonus other than armor or energy shield, and cannot parry. Preparation for Frenzy takes one round and occurs with a 101+ roll. Once in a frenzied state, the character may make a static maneuver each round in order to resume a normal state.

Gambling (Me/Pr) Bonus when playing any game with a significant element of luck or bluffing.

Interrogation (In/Em) Bonus for extracting information from an intelligent source. This may or may not include causing discomfort to the target, though a +25 bonus is received if the target is discomforted (mentally or physically). If the target is discomforted, however, and the net Interrogation roll is negative, the target may suffer a major mental or physical injury, or death. In such a case, the target should roll a RR using SD/Co as a modifier to determine the extent of the injury.

Note: *Psionic powers such as Firenerves and Agony are safe and useful for Interrogation purposes.This skill not only applies to torture but also includes the ability to manipulate the target's psyche (i.e., trick him) into revealing information.*

Meditation (Pr/SD) Bonus for entering, leaving, and exploiting meditational trances. Each hour of meditation equals two hours sleep. Once in trance, user is normally oblivious to outside activity. Physical prodding allows one to make a static maneuver to leave trance, as does a painful strike (modify by +25).

Music (Ag/Em) Bonus knowledge of any one instrument, bonus skill in any one written musical language.

Navigation (Re/In) Bonus for determining proper directions and distances when using a map in conjunction with some directional aid, such as a compass, a landmark, or the stars. This includes the concept of orienting, and is applicable on land or water. Skill must be developed separately for each planet on which it is to be used .

Propaganda (In/Em) Influencing others through indirect means, rather than direct speech. Includes such ideas as starting rumors, as well as designing large disinformation campaigns.

Public-speaking (Em/Pr) Bonus for impressing, entertaining, or manipulating large groups. Diplomacy is used to deal with individuals.

Quick-Draw (Qu/Ag) Bonus for drawing or chang-ing weapons. In certain cases a GM might al-low a character whose roll totals 101+ over an opponent's roll to fire an energy or pro-jectile weapon and determine results before oppon-ent can fire ("go ahead, make my decaday...").

Sailing (Em/In) Bonus for sailing maneuvers, and 5% per Skill level knowledge of a particular water-lore (e.g., about bays).

Seduction (Em/Pr) Bonus when attempting to emotionally, sensually, or sexually manipulate someone.

Signaling (Me/SD) Bonus when using any form of signal communication other than language. Signals can be visual (hand motions, flares) or audio.

Singing (Pr/In) Bonus for attempts to mimic tunes and vocalized notes.

Star-gazing (In/Me) Bonus chance of determining dates, directions, and locations when the stars are visible. Provides an ideal complement to one's navigation skill. Must be developed separately for each planet; otherwise bonus is halved for all but specific planet researched.

Subduing (Ag/Qu) Bonus for attempts to immobilize a foe by applying a sharp, hand-delivered blow to precise point on the victim's upper body. An attack roll of 101+ results in a successful attack, although the victim still receives a RR. In order to use this skill, the character must approach the foe undetected and be able to strike before the latter can react. Should the foe be engaged in melee, the subduer's skill bonus is halved. Subduing attacks cannot be made against foes whose armor is rigid and covers the entirety of their body above the legs (e.g., normally AT's 11, 12, 15, 16, 19, and 20).

Tracking (In/Re) Bonus for tracking maneuvers.

Trading (Re/Em) Bonus for transactions involving a bargained exchange of money or goods.

Trickery (Pr/Qu) Bonus for any maneuvers involving sleight of hand: picking pockets, confusing sight tricks, and sleight-of-hand diversions.

Tumbling (Ag/SD) Bonus for horizontal dives, rolling, or vaulting maneuvers, or swinging on stationary objects.

Visual Arts (In/Em) Bonus for creating and comprehending works of art; Creation must be developed separately for each medium.

Weather-watch (In/Em) Bonus chance of determining local weather for next Standard Day.

3.6 SIMILAR SKILLS

Because of their nature, many skills are considered to be *similar* to others, thus allowing a character to in essence have partial skill bonuses for skills similar to those he has picked skill in.

3.61 WEAPON SKILLS FOR SIMILAR WEAPONS

Certain weapons require skills that are very similar to other weapons. For example, the use of a Blast Pistol is very similar to use of a Laser Pistol. In the basic rules, skill in every weapon must be developed separately.

This optional rule allows for skill in one weapon to affect the skill of a character in a "similar" weapon. The skill rank bonus with a particular weapon is the skill rank bonus with that weapon or half the skill rank bonus of any similar weapon — whichever is higher. The *Similar Weapons Chart* in the **Tech Book** shows which classes of weapons are similar to one another. Any weapon not on *The Similar Weapons Chart* can be assigned a class by the GM. The GM might also vary the degree of "similarity" by varying the percentage of the bonus applied to similar weapons.

Example: *Ryk has a + 70 skill rank bonus with a Blaster Rifle and a + 20 bonus with a Laser Rifle. Since they are "similar weapons" and 1/2 of 70 (i.e., 35) is higher than +20, Ryk can use a Laser Rifle with a +35 skill rank bonus.*

Alternatively, a GM may decide to allow weapons to be utilized with half the **skill rank** of a similar weapon, instead of half of the skill rank bonus.

3.62 DRIVING SKILLS FOR SIMILAR VEHICLES

This rule is identical to 3.61, except it allows similarity of driving skills for "similar" vehicles. The GM may indicate the classes of similarity for the vehicles that exist in his world system.

Example: *A group of similar vehicles might include gravitic cars and small gravitic trucks, as well as ground-effect cars.*

4.0 PROFESSIONS

Each character must have a profession, sometimes called a "character class". A character's profession reflects the fact that his early training and apprenticeship have moulded his thought patterns, thereby affecting his ability to develop certain skills and capabilities. A profession does not prohibit the development of skills; it merely makes some skills harder and others easier to develop.

Every profession falls into one of 6 different categories based upon its area of concentration: the realm of Astronautics, the realm of Machine Technology, the realm of Science, the realm of Field Science, the realm of Communications and the realm of Telepathy or combinations of Telepathy and one of the other realms.

For each profession, two out of the ten stats are especially important; these two stats are called the profession's "prime requisites". A character is guaranteed of having at least 90's in each of his prime requisites (see Section 10.2).

Let it first be said that the professions given below are suggestions. In the complex society of ***Space Master***, with so many variable overlapping skills, dozens of 'Professions' suggest themselves. The profession of Researcher is an excellent example of a general concept from which dozens of specific professions can spring. Thus the GM should feel free to create other, custom professions, using these rules as a guide. As always, though, care should be taken to maintain play balance.

4.1 ASTRONAUTS

The following three professions involve the front line of adventuring in ***Space Master***, concentrating on the skills of combat, and operating the myriad weapons and ships available.

Armsman: The arms specialists of ***Space Master***, Armsmen learn most combat related skills more easily than any other character profession. Picks in both hand and mounted weapons are readily accessible, as well as driving and some combat pilot skills. In addition to their skill with weapons, Armsmen receive a bonus of + 3 per level on all conventional and energy weapons attacks, both hand and mounted, up to and including 20th level. Prime Requisites for Armsmen are *Strength and Agility*..

Pilot: As the name suggests, Pilots focus skills relating to the control of vehicles, from land cars to spacecraft. They also pick up many Tech skills with relative ease, as well as shipboard combat abilities. In addition to their skill with weapons, Pilots receive a bonus of + 2 per level on all driving, Piloting, and Astrogation skills, up to and including 20th level. The Prime Requisites for a Pilot are *Intuition* and *Agility*.

Explorer: A fusion of Armsman and Pilot, Explorers can gain some skill in both weapons and piloting. In addition they are often skilled in Survival skills, First Aid, Stalking and Hiding. Explorers receive a bonus of + 2 per level on all Piloting, Astrogation and Survival skills, up to and including 20th level. The Prime Requisites for an Explorer are *Quickness* and *Agility*.

4.2 TECHNICIANS

The following professions use skills relating to the actual repair and construction of mechanical and electrical devices. Although they have access to Research/ Design skills, that is not their specialty.

Systems Tech: This profession specializes in Mechanical and Power systems — including ship drives and reactors — and receives a + 2 per level (up to and including 20th) when engaging in repairs or construction in those areas. Prime Requisites for the systems Tech are *Memory* and *Agility*.

Electrical Tech: Electrical Techs concentrate on Computer systems, all non-weaponry electronics large or small, and all Robotics repair and construction. Eletrical Techs receive a + 2 per level (up to and including 20th) when using Electronics Technics, Computer Technics, and Cybernetic Technics skills. Prime Requisites for the Electrician are *Memory* and *Reasoning*.

Arms Tech: These Technicians have a special aptitude not only for repairing and building hand arms, but mounted weaponry, fire control systems, and associated gunnery equipment. Arms Techs receive a + 2 bonus per level, up to and including 20th, when using Mechanical Technics, Electronics Technics, and of course, Weapons Technics skills. Prime Requisites for the Arms Tech are *Memory* and *Agility*.



4.3 RESEARCH SCIENTISTS

The professions listed below are less adept at field work than research and design skills. They have easiest access to Scientific Skills.

Researcher: The general Academicians, Researchers embrace the full range of physical and social sciences, with the exception of Engineering, Medicine and Computers, which are huge realms in themselves. Researchers gain + 1 per level in all Scientific skills except Psychology, Medicine, Medical Practice, Genetics and Cybernetics. The Prime Requisites for the Researcher are *Intuition* and *Reasoning*.

Physician: The role of the Physician in ***Space Master*** includes more than ever before. They possess an aptitude not only surgical and diagnostic skills, but also Cybernetics and Genetics. Physicians gain + 2 per level in First Aid, Psychology, Medicine, Medical Practice, Cybernetics and Genetics, as well as Medical Technics and Genetic Technics. Prime Requisites for the Physician are *Empathy* and *Reasoning*.

Engineer: While Engineers have access to the Technic skills, their concentration is more able to analyze and understand new and unknown items. Engineers gain + 2 per level in all Engineering skills. Prime Requisites for the Engineer are *Intuition* and *Reasoning*.

4.4 FIELD SCIENTISTS

The next three professions combine the abilities of a research scientist with aptitudes in combat and Astronautic skills.

Criminologist: Those choosing this profession can fall on either side of the Law, being either masters of the technologies of committing crime (devices to forge, infiltrate and pick locks) or to deter and apprehend criminals. Criminologists receive + 2 per level in Crime Technics, Scanner Analysis, Forgery and Counterfeiting, as well as the Secondary skills of Drug Tolerance, Falsification, Seduction and Subduing. The Prime Requisites for a Crime Tech are *Agility* and *Intuition*.

Medic: Combining First Aid skills with those of Medicine, Cybernetics and Genetics, Medics have basic aptitudes in the field of Medicine, though they concentrate more on field medicine (minor surgery, emergency medic treatment, etc.). Medics receive a + 2 per level in Medical Technics, Cybernetic Technics, First Aid, and Medscanner analysis. The Prime requisites for a Med Tech are *Memory* and *Empathy*.

Planetologist: With aptitudes in survival and other field skills as well as Planetology and related sciences, Planetologists often serve with field archaeological teams and Survey parties. Planetologists receive a + 2 bonus per level in Planetology, Scanner Analysis and the Xeno Scientific skills of Biochemistry, Botany, Zoology, History, and Anthropology. The Prime Requisites for a Planetologist are *Reasoning* and *Empathy*.

4.5 COMMUNICATORS

Communicators are a broad category of Presence oriented individuals, ranging from actors to diplomats and politicians. The category includes three professions.

Administrators: are well-versed in managerial, diplomatic, and/or political skills. In addition they are often skilled in various aspects of research science and psychology. They receive a bonus of +3 per level in Administration, Diplomacy, Public Speaking, and Psychology. Their Prime Requisites are *Presence* and *Empathy*.

Entertainers: This profession may specialize in acting, singing, dance, music, or any other performance art form. They receive a bonus of +3 per level in the one art form they choose as their specialty, as well as any two related skills (as determined by the GM). Their Prime Requisites are *Presence* and *Empathy*.

Theologists: These beings are skilled in evangelism (or their own cultural equivalent), counseling, and theological history. They receive a bonus of +3 per level in Religion (their own), +2 per level in History (General and/or their own), Psychology (their own), and Public Speaking, and +1 per level in Seduction (Emotional only, unless the Religion encourages otherwise). Their Prime Requisites are *Presence* and *Intuition*.

4.6 TELEPATHS

Telepaths: A special profession, a Telepathic PC has the option of not only choosing the profession of True Telepath, but being a combined profession, such as Explorer/Telepath. For detailed rules on these professions, refer to Sections 4.1-4.5.

True Telepath: This profession is devoted solely to the powers of the mind those who are True Telepaths have access to all Psion lists. Prime Requisites for True Telepaths are *Self-Discipline* and *Presence*.

Semi-Telepath: When this option is chosen, the Semi-Telepath may replace two categories of Semi-Telepath development point costs *(Maneuvering in Armor Skills, Weapon Skills, General Skills, Special Skills, Combat Skills, Astronautic Skills, Technical Skills, Scientific Skills, Engineering Skills* — or, GM's discretion — *Secondary Skills)* with the development point costs of the other profession, reflecting a better aptitude in those skills. His Prime Requisite is based upon what Field of Telepathy he chooses. Part IV should be carefully read before development of a Telepath or Semi-Telepath is attempted. Note that Semi-Telepaths do *not* receive the per-level skill bonuses that the regular full professions do.

Base Field	Prime Requisites
Visions	Self-Discipline, Intuition
Alteration	Self-Discipline, Empathy
Control	Self-Discipline, Presence
Self-mastery	Self-Discipline, Presence

Note: *Normally Semi-Telepaths use the Secondary Skill costs for True Telepaths.*

5.0
EXPERIENCE AND ADVANCING LEVELS

"No pain, no gain."

Slogan of the Pre-spaceflight
Wellness Philosopher "Soloflex"

Each character in a fantasy role-playing game has a "level" that represents how capable he is. Characters become more powerful and skilled by advancing levels as they gain "experience". Experience is represented in play by *experience points* which the GM awards to characters for certain activities and achievements. Normally, a character starts play as a 1st level character, and his level increases as he acquires experience points; it increases when his experience point total reaches certain totals, as explained in Table 5.2.

5.1 EXPERIENCE GUIDELINES

The rewards derived from role playing are many, and among these, experience point accumulation is probably the most graphic. It is a significant factor under most SFRP systems. Unfortunately, the goal of the adventurer often proves to be the bane of the GM, especially in cases where the computation of points is time-consuming.

These guidelines are aimed at providing a workable, balanced approach which rewards those who have actually derived the most experience from an adventure without creating situations where the GM must make too many or overly subjective decisions.

The suggested experience points awards are guidelines; the GM should feel free to modify them whenever common sense indicates that they are out of line.

The GM may total and reward experience points at any convenient time. This usually occurs at the beginning or end of a session of play.

The Experience Guideline Table — The basic point values for certain experiences are given in Table 5.2. They are the normal rewards and are subject to modification as a result of circumstance. The experience multipliers reflect the "uniqueness" and the learning value of a given event or action and may act to significantly increase or decrease the norm. They should be applied to all standard experience values (where applicable).

To calculate a player's experience points, simply find the number of points he or she receives from each experience point category and then (1) apply the relevant bonuses; (2) use the multipliers to get an adjusted figure in those categories where the experience was unique or routine; and (3) add the adjusted totals to get the experience sum awarded. The GM may wish to install his on categories or bonuses if needed (e.g., "quest points" or "miscellaneous points").

A routine experience is one where the acting character has employed an idea, maneuver, method, etc. of a nature which has become "common" to him or her. this includes situations where the character has frequently traveled a certain route, kills a specific creature on a frequent basis, always uses a Psion in a given fix, or has a given religious experience periodically.

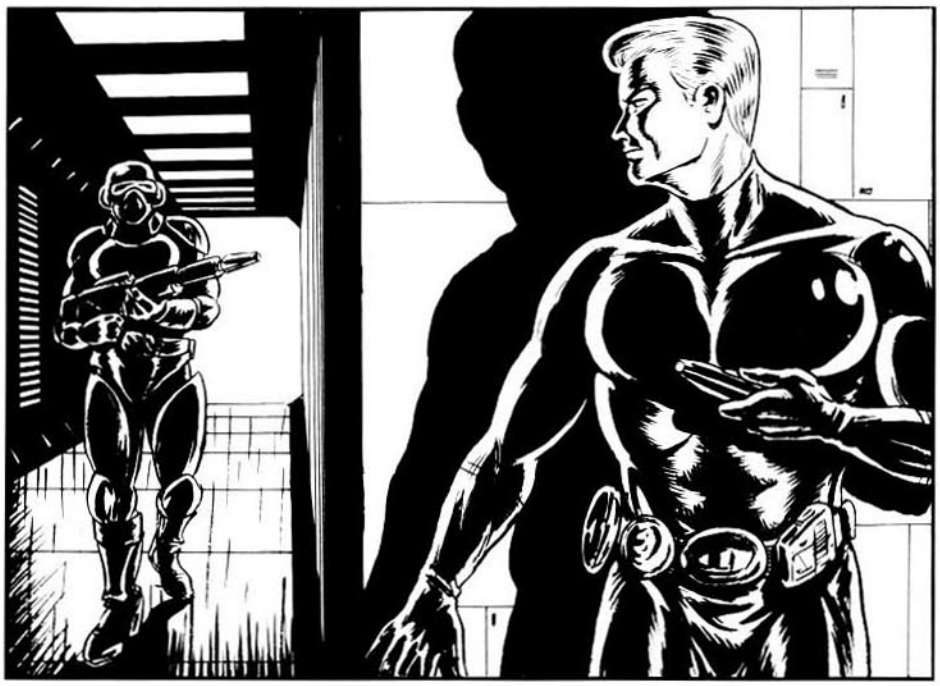
Experience Point Multipliers — All of the experience point guidelines given in Table 5.2 may be multiplied by 5 if the activity has never been performed before by the character, by 2 if the activity has only been performed once before, and by 1/2 if it has become routine.

Negative Experience Points — Negative points can be awarded in the GM feels that the actions of a character demonstrate a regression in the learning process. These cases should be rare, if they exist at all.

In the rare case when negative points awarded bring a character's experience point total below the minimum for his level he loses all benefits earned for that level (Resistance Rolls and combat bonuses), although he retains his acquired skills. Skills currently being learned and stat gains are not acquired until he reaches the *next* level.

Miscellaneous Points — Most of the experience point guidelines concern action in a tactical situation (i.e., a situation involving detailed and precise activity usually under time constraints, such as fighting, maneuvering and exploring). It is more difficult to award experience points for activities and accomplishments in a strategic environment (i.e., less structured than the tactical environment). Travel points reflect the experience gained by traveling through new and stimulating regions. The GM should award miscellaneous experience points for the other strategic activities not involving travel (e.g., figuring out a riddle or clue, planning a successful trip or adventure, etc.).

These points may also be awarded by the GM for events that have special significance to a given character (e.g., having a religious experience, visiting a special place, accomplishing a special mission or goal, casting non-combat Psions, etc.). They are also awarded for any actions or accomplishments that the GM deem worthy of reward.



5.2 EXPERIENCE GUIDELINES TABLE

BASIC EXPERIENCE MULTIPLIERS (relates to specific characters and situations):

1st Time	2nd Time	Subsequent Times	Routine
x5	x2	x1	x1/2

EXPERIENCE VALUES: Exper. Category (and multipliers)	**Value**	**Notes**
1) Kill Points Kill points Kill point bonus for own race Kill point bonus for other races Kill points for non-personnel targets Kill point multipliers: 1/10x - foe is unarmed 1/5x - foe is underarmed 1/5x - foe has no opportunity to respond to the attack 1x - foe has comparable arms 1 1/2x - foe has superior arms	#hits + (20 x lvl) 150 100 - 2000 #hits + (10 x AT) with bonus points determined by the GM if justified.	E.g. A human kills another human who is 10th level and takes 75 hits. The victim is worth 375 Kill Points: 20 x 10(level) + 75(hits) + 100(own race). E.g. A Devonian gunship obliterates an armed 1000 hit exploration vessel in a quick battle. It was AT 23. The gunship gunners would share 1230 Kill Points: 10 x 23(AT) + 1000(hits). Add bonus to standard Kill Point value before applying the multipliers. For vehicular battles, Kill Points are distributed equally to all personnel directly involved in the combat at the time of the kill. For personal combat, Kill Points are awarded to the character delivering the killing blow. While in a vehicular unit, experience for Hit Points received are distributed equally among all command personnel. Experience for hits delivered are distributed directly to the persons responsible.
2) Hit Points 1/2x - You are knocked out 2x - Foe is knocked out	1 experience point for every hit you receive **or** deliver. 1 experience point for every hit the vehicle receives **or** delivers.	
3) Critical Points 1/10x - Foe is unconscious 1/10x - Foe is immobilized or disarmed 1/5x - Foe is stunned 1/5x - Foe vehicle is unshielded/sensor blind 2x - In single combat with foe	A Critical = 5 x lvl B Critical = 10 x lvl C Critical = 15 x lvl D Critical = 20 x lvl E Critical = 25 x lvl	These points are given for any criticals inflicted on a foe, regardless of their effect.
4) Idea Points	50% of sum of the group's total points (other than ideas) where one's plan was the reason for the success. If more than one character conceived of the plan, allot equal portions of the Idea Points to each of them.	Calculate the total number of points the members of the group got as a result of the event or action. Divide figure in half, rounding up. This is the group Idea Point total, and should be awarded to the one or more persons who conceived of the successful plan. Where there was no plan (they succeeded through sheer luck or brute force), no Idea Points can be awarded. E.g. A group gains 4000 experience points during a successful excursion planed by two group members. The Idea Point total equals 2000: 4000 x 1/2. Each planner gets 1000 points provided that each made an equal contribution to the plan.
5) Maneuver Points 1/2x - Routine thru Medium 1x - Hard thru Extremely Hard 2x - Sheer Folly and Absurd (extra 1 1/2x - Damaged)	Value is equal to the number of experience points which were generated as a direct result of the maneuver, even if those resultant points were generated by a character other than the one which performed the maneuver. The GM may also award Maneuver Points for unique or daring moves. In this case the GM can consult the following chart. Routine ..... 0 Easy ..... 5 Light ..... 10 Medium ..... 50 Hard ..... 100 Very Hard ..... 150 Extremely Hard ..... 200 Sheer Folly ..... 300 Absurd 500	Calculate the total number of experience points that resulted from someone's successful, planned maneuver of a truly inspired nature (E.g. Mr. B, the neo-human, is pinned down by hostile laser fire while his commander, Jocko, who is about to be eaten by an ugly carnivore, is in a large pit only 10 meters away. Mr. B sees Jocko's MLA pistol 2 meters in front of him, near some cover. Mr. B braves the fire and tumbles towards the pistol, grabbing and hurling it towards Jocko, while following through with his tumble and getting behind the cover. Jocko catches the pistol and kills the beast at the lastpossible moment. In this case, if Mr. B survived, he would get Maneuver Points equal to the total that Jocko got for killing the ugly carnivore.) If Mr. B's maneuver had allowed him to kill the beast, he would have received the Kill Points, and the Maneuver Points.

5.2 EXPERIENCE GUIDELINES TABLE

6) Near Death Points	One half of your own kill point value.	Calculate the value of the player using the basic Kill Points. Do not use the "own race" bonus. If the player was given a normally mortal wound, but survived, then the player would receive half of his own Kill Point total.
7) Travel Points 2x - Rugged/moderately dangerous terrain 2x - For Astrogator supplying accurate course plot 2x - For Pilot successfully executing all the required maneuvers. 3x - Extremely dangerous terrain/territory	5 experience points for every 10 kms that a character travels while conscious and able to interact with the environment. 1 experience point for every 20 kms of air, sea, or vehicular ground travel. 1 experience point for every 100 LS of N-space travel. 1 experience point for every LY of hyperspace travel. 10 experience points for every successful orbital maneuver.	Calculate a player's travel distance and take great care when applying the multipliers. Do not be concerned with distance accumulated traveling around the house or in a space ship, etc. This value should be a simple approximation based on "travel". Do not award points for travel while asleep, or during induced unconsciousness. Also do not award the points for instantaneous travel like teleportation. Hypershunting can not be modified due to travel through dangerous territory because it occurs in an alternate and impartial universe.
8) Psion Points	1 experience point for every power point used by the player.	E.g. Karlson casts a 5th level psion using 5 power points. On top of any other points he may have received as a result of the psion's effects, he is awarded 5 experience points just for casting it. The psions cast must have some purpose; a telepath gets no points for just using all of his points at the end of the day.
9) Research Points 1/2x - Subsequent attempt at same problem 0x - Routine 1x - Easy 2x - Moderate 5x - Hard 10x - Complex 50x - Very Complex 500x - Absurd (Basic experience multiplier is applicable for the scientific skill type used, not the specific problem encountered.)	Experience points equal the % of the total research accomplished in the attempt.	Experience points for research are distributed equally to all persons on the research team. E.g. 500 Research Points are generated in an atmospheric analysis. Two scientists use their skills in a joint effort, so they get 250 experience points each.
10) Modification/Construction Points 2x - Equipment works under field conditions after the initial modification/construction. 1/2x - Equipment works under field conditions only after a subsequent mod/construct. 0x - Routine 1x - Easy 2x - Moderate 5x - Hard 10x - Complex 50x - Very Complex 500x - Absurd (Basic experience modifier for new mods/constructs, only apply to the relevant technic skill used.)	Experience points awarded equal the unmodified dice result rolled for a successful mod/construct attempt.	Modification/Construction points are awarded after the` character(s) know that their equipment works under field conditions. Points are distributed equally among team members. This category can also be used for awarding points for successful medical operations.
11) Repair Points 1x - Routine 2x - Light 3x - Moderate 4x - Severe 5x - Very Severe 10x - Extremely Severe	Experience points awarded equal the final unmodified dice result rolled for the completed repair. **ALSO** 1 experience point granted for every damage point repaired on any vehicular (robot, ship, aircraft, etc.) unit.	Repair Points are divided equally among the repair team members.

5.3 A CHARACTER'S LEVEL

The level for each character is determined by how many experience points he has accumulated. A character starts at 1st level with 10,000 experience points. Table 5.5 summarizes which experience point totals correspond to which levels.

Levels have no effect whatsoever on skills, maneuvers or any areas except as specifically stated in the Profession listing. Characters of 20th level and above, however, are generally classified as "Masters" and are usually identifiable amongst a collection of lesser beings by their title, rank and the deference shown then to others knowledgeable of their status.

Level Bonuses — Certain professions derive bonuses from their level. In addition to specific weapons skills, characters in certain professions can accumulate extraordinary knowledge that is generally applicable. This bonus due to level does not increase after 20th level.

5.4 ADVANCING A LEVEL

When his character advances (goes up) a level, a player must perform several actions. He must make"stat gain rolls" to determine if his character's temporary stats rise or fall (see below). His skill ranks increase for the skills which he has been learning and developing since he last advanced a level, and he begins the skill development process once again. To develop a skill, he allocates development points to in in order to increase the skill's rank. This process is identical to apprenticeship skill development and is described in Sections 3.2, 10.4, and 10.5. Finally, any skill bonuses whose components have changed must be recalculated.

Stat Gain Rolls — Upon reaching a new experience level, a character is entitled to make stat gain rolls to determine if his temporary stats rise or fall. During his adventures, it is assumed that a character's faculties will be exercised heavily, possibly affecting their value. For each stat, roll D100. A roll of 01-04 results in a decrease in that stat of double the indicated number of points (a temporary regression 2-8 due to over-stress). A roll of 05 or higher on a stat that has not yet reached its potential may result in a stat gain. Consult the *Stat Gain Chart* (pg.44), cross-indexing the roll with the difference between the temporary (real) and potential value of that stat; the result is the increase in the affected temporary stat.

Example: *Teruk's Empathy is a 57, his potential is 71 (a difference of 14). He rolls a 47, which (on the 12-14 column) yields a +7. His empathy is now 64. He proceeds to his Intuition and rolls again.*

Skill Development — Upon reaching a new experience level, a character gains the benefits of skills he has been learning and begins to learn new ones. Provided they have been developing the skills to the satisfaction of the GM, characters are considered to have acquired their skills by the time they reach the next level. At this point they again begin the skill development points they have on the basis of their (possibly) new stats and expend those points to begin to learn skill.

Should a character gain an experience level without having first completed this process (i.e., enough experience points attained to advance two levels), he gains the skills picked at the previous level. For example, if a character gets enough experience to advance 2 levels, he would acquire twice the skill ranks being developed.

Summary — This is a summary of the process usually followed when advancing an experience level.

1) Make stat gain rolls.
2) Receive benefits of skills developed since previous level (if 2 levels advance, double benefits).
3) Receive special level bonuses and modifications; level bonuses; Resis tance Roll modifications due to level.
4) Update Psion lists (if applicable).
5) Expend development points on skills to be developed for next level.

5.5 EXPERIENCE POINT VS. LEVEL TABLE

To begin with, all folk have experience from bygone days. Thus, the "first level" adventurer begins his wanderings and antics having a base of 10,000 experience points. The followingchart Illustrates the progression from this stage on.

Level	Points Required	
1	10,000	
2	20,000	
3	30,000	
4	40,000	
5	50,000	
6	70,000	*
7	90,000	
8	110,000	
9	130,000	
10	150,000	
11	180,000	*
12	210,000	
13	240,000	
14	270,000	
15	300,000	
16	340,000	*
17	380,000	
18	420,000	
19	460,000	
20	500,000	
21	550,000	*

All of the levels after one attains 20th level cost an additional 50,000 experience points.

* All of the asterisked points denote an increase in the required points necessary for progression.



6.0
RACE AND CULTURE

The following section discusses a number of various races from the system point of view. In addition to a variety of humanoids, a few examples of unusual alien races are included.

6.1 SOME HOMINOID RACES AND VARIATIONS

Let us begin this discussion by defining the parameters of the sentient beings that players in the ***Space Master*** universe will likely encounter. The majority of sentients encountered by the players (or used as characters) will ultimately harken back to Terran stock. Because the ***Space Master*** universe is so far in our future (about nine thousand years), the old racial connections to Terra will be blurred, as many cultures will have been separated from their forefathers for millennia. If one accepts the hypothesis that ancient alien beings visited earth during man's infancy and transplanted *Homo sapiens* stock to other planets, (and even performed genetic alterations there), then the presence of the subspecies humans can also be justified. In most cases, players will be interacting with hominoids. Hominoids are defined as any being or machine which resembles the classic hominid form. In ***Space Master***, the most common hominoids are:

1) Terran humans (that's us), xeno-humans (humans of other worlds), humanoids (naturally occurring genetic drift mutations).

2) Transhumans (eugenic improvements on the base human), neo-humans (constituting the next natural evolutionary threshold of humanity in general).

3) Alterant Replicants (beings which are genetically altered in the pre-fetal stages), hominid clones (exact duplications), cybernetic organisms (half-hominid, half-machine beings).

4) Androids (sentient machines in hominid form) and any other sentient beings with hominid configurations having a hydrocarbon based physiology. This latter classification of the hominoid is the source of the most "alien" of creatures that one will find in ***Space Master***, as their evolution and technological development would be incomparable to human standards.

6.11 TERRAN MUTATIONS

This division includes hominoids derived from basic Terran stock races. Minor natural mutations may have occurred due to genetic drift and environmental demands.

Humanoid I: A once-human population which has been influenced by heavy gravity field. This sub-species has therefore developed more bulky and powerful muscles, but their mental abilities, reflexes, and agility have suffered due to other environmental effects. The conquering Terrans have found this type of humanoid appropriate for heavy labor and warrior-related purposes.

Humanoid II: A race which has become quicker and more agile than average, but perhaps not as strong as the stock specimens.

Humanoid III: A highly intelligent hominoid race whose muscle and bone structures have atrophied somewhat. When Humanoid III's are integrated into normal human societies, they excel in the research sciences.

6.12 TRANSHUMANS

Another mutation type is known as Eugenics. This is a controlled program in which parents are paired over multi-generational spans to reinforce positive attributes and suppress inferior ones. It is an artificially accelerated evolution. Keep in mind that the examples given below are just that — examples. Many variations are possible, but the GM must keep in mind at all times the necessity for play balance.

Transhuman I: Bred to be fighters, this type is extremely strong, though not particularly agile, and quite stupid.

Transhuman II: Excellent agility and memory for technical systems; understands machines very well. They make perfect technicians and engineers.

Transhuman III: Highly intelligent Eugenics offspring, Transthrees are adapted for research and information maintenance. Many are trained in *Memory Mode*.

Transhuman IV: These beings possess superb Pure Telepath potential, at the expense of other abilities.



Transhuman V: Billed as the "Ultimate Man" (or woman), this type combines superiority in all abilities. Unfortunately, they almost invariably suffer from a superior ego along with everything else. Fives were used as breeding stock for the Sevens, along with some mental-suppression factors to get the ego-problem in line. They were also useful in the creation of the Twelves, thought to be the true "Ultimate Man", who seem better able to reign in their passions through Self-Discipline.

The first Transfive was a particularly successful individual, Hyatt Kurtez, and is the apparent source of the slang *Hykur* which has since acquired a more vulgar, explicitly sexual meaning.

Transhuman VI: Note the superior abilities across the board, but specific strengths along Telepathic lines, especially Self-Discipline, the mainstay of Telepathic power.

Transhuman VII: These boys (and girls) represent the highest development in muscle and nervous structures. Incredibly strong and yet agile, they are giants among average humanoids. TranSevens easily find employment as bodyguards and mercenaries and are also famous for mindless loyalty. 'Mindless' is the operative word, for though they can think — and so act — quickly given simple parameters, higher thought processes are generally beyond them.

Transhuman VIII: This type possesses a fully functional set of gills in addition to normal humanoid lungs. Strong, permeable tissues allow this type to live comfortably underwater for indefinite periods at a depth of up to 1000 meters (Terran standard sea pressures) and swim to depths of up to 6,000 meters.

Transhuman IX: The TransNines are an improvement on the Transhuman IV's, equipped with more Telepathic flexibility, and no statistic drawbacks. Variant types have superceded the Transthrees.

Transhuman X: Bred to be Technicians, these possess an intuition and agility especially useful when dealing with machines.

Transhuman XI: These are more versatile in their designated field than the 'generic' results (the Transhuman III).

Transhuman XII: The new "Ultimate Man"

6.13 ALTERANT REPLICANTS

Alterant Replicant is the name given to the products of a radical departure from standard breeding techniques, where the pre-fetal organism has its genetic material altered to create a new being. Almost invariably the the resulting Replicant is sterile, though more recent and specialized products are capable of reproduction.

In these latter cases the offspring reflect the genetic alterations. As one can probably surmise from the Alterant Replicant production method, a producer needs a good base stock of genetic material in order to create the best modifications. As a result, there is a bustling Black Market for excellent (and unwary) genetic specimens.

As with the Eugenic mutations, keep in mind that the types below are just general guides; other specialized types are available — but play balance remains an important factor.

Note that while Replicants are in general more resistant to poison and disease, they are highly susceptible to certain viruses.

Type I: Excellent Armsman or Astronaut, though not given to creative thinking. Often equipped with additional physically-related abilities.

Type II: Can be bought complete with data on many systems pre-programmed. Unsurpassed Tech, though not useful when dealing with unfamiliar equipment.

Type III: Often an aide or assistant, this type is usually trained in Memory Mode (see special abilities).

Type IV: Sometimes called the 'basic pleasure model', this type is employed for personal recreation. They are invariably endowed with superior appearance and often specially skilled.

Type V: It is inevitable that any given technological breakthrough that may help mankind will eventually become twisted in the extreme. Such is the case with the Labor model of the Alterant Replicant. This being's creative and intellectual thought processes have been retarded so that he may be used as the ultimate source of inexpensive labor. This model's presence is morally repugnant to many societies.

6.14 ANDROIDS

Inevitably, someone will want to play a character Android, so why not go ahead and nip the problem in the bud? First let us draw the distinction between Android and Robot: an Android is built to resemble closely a humanoid (or other race) being. Androids by the time of ***Space Master*** are so well constructed that a Multiscanner (or similar probe device) is required to tell the difference. Advances in synthetic materials and molec-circuitry allow for such luxuries as heat units to warm the skin, and pseudo-vascules pumping fluids to simulate blood flow, etc. Eyes and mouth are moist; body hair articulated, etc.

Robots, on the other hand, tend to be more specialized, less flexible, and do not resemble living beings in the least. Robots come in a variety of forms, and their only real defining features are that they are usually mobile, and possess manipulative limbs. Player-character Robots are discouraged because of their great differences from most humans.

Android player-characters, if allowed, should be very rare indeed, for a machine capable of independent thought would have to be self-programming and extremely sophisticated. Many cultures would find the concept distasteful or even frightening; they might even be outlawed in some places. Androids would be able to gain experience, but only their mental statistics would have normal Temp and Potential Factors. Physical stats could only be improved by alteration at a service facility. Thus, they might start out ahead of human PCs, but advancement would be minor. The acquisition of funds would allow for better programming and 'parts', however, so the Android could improve itself by leaps with the right facilities. Also, being self- programming, it could 'learn' many skills, such as piloting, weapons, languages, etc. It would suffer critical hit damage on the normal tables, though it may be allowed some protective bonus due to superior structure, etc., at the discretion of the GM.

6.2 SOME ALIENS

While some of these races might superficially resemble *Homo Sapiens*, all are essentially different races from the various subgroups falling under the general distinction of 'human'.

6.21 ALTHA

Racial Origins: Possibly descended from the original Sianetic Harbinger Race known as the Luar. Confirmation of this possibility awaits Imperial analysis.

Favored Ecosystem: Warm, humid to temperate environments. The Altha seem well-suited to hot, rainforest-like ecosystems.

Political Structure: Tribal structure ruled by the eldest male with bi-colored eyes (one blue, the other violet). Females do not seem to inherit this trait, and only one in about 100 males does. The tribe usually numbers between 50 and 300 total in 5-30 "Homes".

Social Structure: A male-dominated culture, in which the males outnumber females by nearly two to one. Curiously, females are respected as equals in all aspects of life (they hunt, farm, etc.) until they become noticeably pregnant. The father's identity is apparently irrelevant (and could, by all indications, usually be one of many candidates). The woman then retires to the home of her mother to a life of domestic chores until the child is born. Children are raised in the Matriarchal home until they reach adolescence, at which time they choose any one of several "Homes" in the tribe (not their own) to live in. They are free to change as often as they please. While in the home they contribute to the well-being of that home-group. Although the homes are Matriarchal in basis, males of the group are most often in charge.

Though their minds seem well-organized and their brains highly evolved, Altha appear to be a simple, emotion-driven people. Friendly and affectionate (unless physically threatened) they lead an almost utopian existence.

Military Structure: Altha tribes never come into conflict, and so have no 'military'.

Currency: Barter is used in the rare case that any trade takes place.

Language: Communication is almost exclusively Telepathic, accompanied by occasional vocalizations for emphasis. Altha males apparently have more than communication skills as well. It has been hypothesized that the bi-colored-eye Altha inherit the most formidable powers, thus the basis for their rule.

Appearance: Unusually homogeneous, the Altha uniformly possess brown skin (similar to descendants of Old Terra's Indian subcontinent, or darkly tanned caucasians) and straight coal-black hair which grows very thickly on the scalp and is usually worn short and fanned straight out from the scalp. Neither sex has any other body or facial hair whatsoever. Eyes are slit-pupiled and deep blue, with the occasional male violet-eye aberration. The violet coloring is quite vibrant and cannot be missed. Altha eyes also possess a thin, transparent inner lid which screens certain ultraviolet radiation as well as dust and impurities. It is barely noticeable when closed. Men average 175 cm and appear slender, though dense bone and muscle structure cause them to mass more than would be expected. Women are slightly smaller. Hands and feet are six-digited, with fingers and toes slightly longer and more slender than humanoid average. Ears are small and more rounded. In general the Altha are very attractive humanoid specimens, all having soft, youthful features and graceful bodies. Illicit slave traders are combing the Frontier for the Althan planet.

Housing: The Altha "Homes" are usually no more than large huts of thatch and woven fronds. In some regions they are actually wood or stone structures, but this is unusual. Areas within the hut are divided by crude, bulky hangings.

Diet: Mainly vegetarian supplemented with small game and fish. The Altha are primarily hunter-gatherers, only making a half-hearted attempt at agriculture.

Worship: The Altha have no recognizable religion, though there are a few mystical aspects of their lives. Data is still scanty, but according to observation and reports, Altha do not age past a post-adolescent stage (about Terran Human age 18-22). However, at age 39 (the number three has significance for the Altha — and they also keep careful track of birthdays) the Altha is given a feast, and must eat a certain fruit which causes swift (and apparently painless) death. They seem not to fear death at all, though they have no concept of 'afterlife'.

One other interesting aspect of Altha mysticism is that they are awaiting the arrival of a 'king' to rule all the tribes. Both of his eyes will be violet.

Altha: System Notes

1. All Altha possess the equivalent of Special Abilities 1, 2, 4, and 8, (pg. 49) with no penalties. See also the *Racial Statistics Chart* (pg.31) for Stat modifiers.
2. Consider all Altha to have unlimited Telepathic communication skills with a range of up to 50 meters. Some have a longer range. Bi-colored eye males also often possess *Voice, Mind's Truth, Mind's Eye*, and *Mind Assault* to as high as 20th level.

6.22 K'TA'VIIR

Although these rare and reclusive humanoids are said to refer to themselves as the K'ta'viiri, the recent discoveries seem to confirm what Sociohistorians have suspected for some time: they are the remnant of the Imperial Race of Luar: the High Old Ones who ruled the galaxy hundreds of centuries ago. Most data listed here for these beings (beyond the obvious) is supposition and conjecture.

Racial Origins: Perhaps these are of the Luar. Careful study would be necessary to determine the truth with any certainty.

Appearance: Identical in every way to the Altha, with two exceptions: height for the males is around 195-200 cm (considerably taller than average) and all possess matching violet slit-pupil eyes. No female K'ta'viiri have ever been seen.

System Notes

1. All K'ta'viiri possess the equivalent of Special Abilities 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, and 15 (pg. 49) with no penalties. See also the Racial Statistics Chart (pg. 31) for Stat modifiers.
2. Consider all K'ta'viiri to have unlimited Telepathic communication skills with a range of up to 50 kilometers. Some have a longer range. They also possess other Psionic skills of undetermined power and scope.

K'ta'viiri player-characters are strongly discouraged, as they are exceptionally rare and abusively powerful individuals. They also are rather mysterious beings of cloudy origins best left somewhat uncertain. However, they might make interesting shady NPC opponents — or even Mentors (of equally mysterious motives).

6.23 IDORIANS

The Idorians, though vaguely humanoid in appearance, scorn all official contact with the Terran Empire, and rarely deal with other humans at all.

One organization which includes a number of Idorians is the League of Merchants. The more sinister League operations frequently have Idorian coordinators.

Racial Origins: In keeping with their suspicious nature, the Idorians guard the location of their Homeworld jealously. Imperial Intelligence places it somewhere in Frontier Zone 10 or 11, but no more is known (publicly). Racially the Idorians are unmistakably Terran in origin, but mutations over hundreds of centuries have created strong variations.

Favored Ecosystem: It is hypothesized that the Idor home star might be a red or white dwarf, providing little visible light, but substantial x-ray radiation. The Idor prefer very dim environments, and remain indoors whenever possible.

Political Structure: The Idorian Empire is reputedly absolute and militaristic in the extreme. A dynastic emperor has ruled Idor for thousands of years and the situation shows no sign of changing. Local government is administrated by noble families, under the supervision of Imperial representatives.

Social Structure: Social standing is heavily dependent upon genetic background. Royal and noble families are supported by a large class of 'commoners'.

Military Structure: Large and well equipped, the Idorian military is theoretically the tool of the Emperor, but individual ships and task forces are controlled by young men of noble families. Because of this they often act independently, prowling the Imperial borders seeking personal glory from unauthorized raids.

Language: Idorian is a guttural language of little subtlety. Most Idorian nobles learn Imperial Standard, with a thick accent.

Appearance: While clearly humanoid, the Idorians have some noteworthy differences. Because of the high concentration of certain metals other than iron in their diet, Idor have a light bluish complexion. They have very little melanin, which also contributes to their intolerance of ultraviolet light and their pale complexion. Idor have light blonde to white hair and pale blue eyes. They are much taller than most Terrans, the males averaging over 195 cm (6'6") and are very slender.

Diet: Omnivores, the Idor indulge in a wide variety of foods. They particularly enjoy a certain native beef-like meat served raw.

Demeanor: Haughty, short-tempered, vain and intolerant of all species but their own, the Idor are a thorn in the Emperor's side and a threat to houses near the Coreward Frontier Zones. They are infamous for their lack of respect for life (including others of their own race) and property.

6.24 SNEE

The Snee are easily the most frighteningly hideous creatures thus far encountered by humankind. Looking like something between insect and lizard, with dark, glistening skin, they are powerful, clever, and absolutely hostile to all humanoids.

The Snee are so alien that "hostile" may not be the right word. They seem to regard humanoids as something between food and and annoying intruder. Details of Snee society and physiology are few and inconclusive. Few Terrans are eager to learn more.

Racial Origins: Somewhere in Frontier Zone 15 lies the Snee Homeworld, shrouded in the Omicron Nebula. The exact nature of the Snee physiology is uncertain, as no specimens have been recovered even reasonably intact. It is believed, however, that these creatures resemble Terran insect forms in many ways.

Favored Ecosystem: Hot, moist environments rich in oxygen seem to be the preference of the Snee (at least, that is the atmosphere of the one recovered Snee craft).

Political Structure: Consistent with the idea that the Snee are an insectoid race, it is believed that they are actually five tribes (or 'hives'), each ruled by a "Queen". No more of the structure is known — even the sex of the ruler. In fact, there is some evidence that the Snee warriors are female, and the Hive leaders are male.

Social Structure: Essentially (as far as can be determined) the same as the political structure.

Military Structure: Again, this parallels the Political structure. The mentality of the Snee seems to consist of 'expand and conquer.' Their race is slowly moving closer to Imperial borders, and the Emperor will not be able to ignore this growing threat much longer.

Currency: Unknown.

Language: Although their native language is believed to be a complex assortment of high-pitched titterings (some beyond humanoid hearing), there are documented incidents where they have spoken clear Imperial Standard (Anglaman).

Appearance: In a word, monstrous. Dark grey to black in color, they have a very tough exoskeleton covering most of their long, jointed body. All encountered have worn some sort of harness which not only carries a variety of weapons, but also gives off pulses of warm mist which periodically engulf the wearer. Standing between 2 and 2.25 meters tall, they possess six limbs, each of which sports a manipulative hand/claw of four digits (one opposes the other three). The middle pair of limbs are smaller than the upper and lower pairs, and are rarely used. the lower pair are largest and strong, the "legs" used for walking upright. The upper pair are very agile, long and strong. The head is ellipsoidal with a long tongue and deadly mandibles. Antennae sprout from the top, and a pair of long faceted eyes, one on each side, allow for a wide range of vision. In many ways they resemble huge ants walking upright, though more anthropomorphic.

Housing: Unknown.

Diet: Exclusively carnivorous, the Snee are known to eat humankind.

Demeanor: In many ways the Snee mentality is incomprehensible to Terrans. They are coldly calculating, and kill without apparent malice but with equal lack of regard for life.

System Notes

Snee exoskeletons should be treated as AT 12. Their hand/claws are extremely strong and capable of tearing through light steel. Although they prefer high-pressure, oxygen-rich environments, the Snee have been known to survive over an hour in complete vacuum. Quick, agile and strong, they are unstoppable warriors. Snee ships are small but powerful and have a knack for striking without warning. Intelligence suggests that they are equipped with some form of stealth "cloaking" ability.

6.25 AOEMARANS

The Aoemarans, while physically bearing absolutely no resemblance to mankind, have a mental outlook surprisingly similar. To all appearances, the average Aoemaran is a blob of protoplasm about two kilos in mass, semitransparent and bluish. Aoemarans themselves, while somewhat mobile, possess virtually no manipulative abilities and would certainly never have progressed to their current evolutionary level without their unique parasitic/symbiotic abilities. Long ago the Aoemarans evolved into creatures which could infuse themselves into a "host" body (preferably one with manipulative abilities), take control of the host and utilize its form. The resident Aoemaran gained nourishment from the the host's bloodstream, and in return was able to effectively fight infections, heal wounds, and provide a number of other helpful compensations. This was originally done with nonintelligent creatures on the Aoemaran Homeworld, but as the race developed starflight and met with other beings, they learned that the same results could be achieved with intelligent humanoids, while maintaining a cooperative rather than dominating relationship. Some humans find the whole idea disgusting and revolting, while others welcome the intellectual intimacy — not to mention the physiological benefits.

Racial Origins: Zosma VI [-45,21,-25] is the Aoemaran Homeworld. They have Minor Clan status under Imperial Supervision.

Favored Ecosystem: The Aoemaran favored ecosystem is a healthy host body. They are very resilient, however, and can survive for short periods in almost any environment.

Political Structure: Aoemarans have a vaguely democratic form of government, though it is (apparently) very informal. Aoemarans have a highly developed sense of honor and respect for other life forms and intelligences.



Social Structure: None apparent.

Currency: Imperial or Provincial monits when necessary.

Language: Aoemarans are Telepathic, though with a very limited range (no more than 3 meters, preferably touching).

Appearance: As noted above, Aoemarans are protoplasmic creatures massing between 1.75 and 2.25 kilograms. Semitransparent and amorphous in form, they are able to move very slowly on their own and penetrate most tissues and semi-solid materials through osmosis.

Diet: Protein and carbohydrate requirements for Aoemarans are very similar to those of most humanoids, thus they are able to gather nutrients from a host body.

Demeanor: Always polite, friendly and respectful, Aoemarans are very logical yet compassionate beings. Their curiosity is vast but tempered with caution. They seem to regard humankind as somewhat impetuous but gifted youths.

System Notes

As noted above, Aoemarans prefer to inhabit a willing intelligent host, with whom they can freely communicate Telepathically. Once inside a host, the Aoemaran is able to extend itself, spreading throughout the body to be hardly noticeable as extra mass. It is able to close any bleeding wound and hold it so until it heals naturally (and the wound will do so without scarring). Aoemarans are even able to replicate most organ functions for up to 10 days should the natural organ be damaged or destroyed (only one organ, however — and not the brain). They can hold a broken limb in place, protect burned tissue and even act as muscles for a short period. Once again, this ability is limited; the little Aoemaran is only 2 kilos, can only do so much at a time, and only so well! They can neutralize any poison with a 100 bonus, and are able to stimulate the host immune system to ward off bacterial and viral infection at +100. Aoemarans can — in an emergency — take control of the host body, though clumsily. They also allow a +50 RR vs stun effects. Able to perceive through the host's senses, the Aoemaran is cognizant of the outside world. They require no sleep (a condition of the host which they find endlessly fascinating and inexplicable).

Caught outside of a host, Aoemarans are AT 4 (-80) and are able to take about 20 hits. It isn't that they are hard to "hit"; they are hard to really damage. Inside a host they are virtually impossible to hit.

An Aoemaran character is certainly an acceptable idea — provided they player is willing to maintain the ever- conscientious and selfless Aoemaran attitude. He had better get along with the host player. Allowing a player to have an Aoemaran NPC is somewhat more tricky, as there is a danger of the Aoemaran turning into a "familiar", who is just around to heal the character and give information. This should be avoided; while they are considerate and cooperative, Aoemarans are separate intelligences with their own free will.

6.26 WIHR-KOHL

Mysterious, amorphous beings, the Wihr-kohl contact humans only when they choose — and then in their own limited way. Apparently unbound by conventional restrictions, they are formless creatures, perhaps of pure energy, who travel the galaxy at incredible speed on errands no more comprehensible than their form.

Racial Origins: Supposedly the Wihr-kohl originated on a gas giant in the Gamma Donzas system (Frontier Zone 19) but that is merely the location of the first contact with one.

Favored Ecosystem: Unknown.

Political Structure: Unknown.

Social Structure: Unknown.

Military Structure: Unknown; believed to be none.

Currency: Unknown; believed to be none.

Language: Telepathic, though the Wihr-kohl communicate in metal pictures, which are sometimes difficult to interpret.

Appearance: A cloud of sparkling, shimmering gas which can vary is size from one to 50 cubic meters. They can take any shape and penetrate any physical or energy barrier. Unconfirmed reports claim that they can assume human form.

Housing: Unknown; believed to be none.

Diet: Unknown. Theories include: solar energy; general electromagnetic radiation; electricity.

Demeanor: Only hostile when provoked, the Wihr-kohl seem rather isolationist in their own way. They apparently have no desire to aid or hinder mankind as a race, but have repeatedly displayed compassion for individuals lost in space or otherwise endangered for reasons beyond their control.

System Notes

Wihr-kohl are essentially indestructible (treat as AT 20 (-150) 500 hits, no criticals) but become 'angry' when attacked. They have been known to deliver the equivalent of the **Thought into Pain** *Energy Channel True* (a considerable electrical charge) when provoked.

Wihr-kohl Player-characters are strongly discouraged; they are simply not appropriate for a campaign.

6.27 TRILOPTERS

Racial Origins: Pulwarin system [-13,62,91]

Favored Ecosystem: Trilopters are in general more environmentally tolerant than humanoids; temperatures of 0° C to 35° do not bother them at all. Protracted stays in temperatures below freezing they find "uncomfortable", but a thermal suit easily corrects the problem. Warm-blooded, they have a very efficient circulatory system. Trilopters do express a preference for warm, humid environments similar to the temperate zones of their Homeworld.

Political Structure: A representative democracy rules all of the Trilopters with shocking efficiency.

Social Structure: All Trilopters are socially equal, though there seems to be a tendency to favor taller (and "more handsome") members of the species. Of course, what one Trilopter finds attractive in another is beyond humans.

Military Structure: Despite their dislike for dangerous situations, this species has a respectable defensive fleet of their own (they are allowed to maintain a fleet despite their Minor Clan status because they are an independently developed race). The Trilopters depend heavily on automation, therefore keeping actual starship crews to a minimum.

Currency: The cosmopolitan Trilopters have shifted entirely to the Imperial Monit for all internal and external transactions.

Language: Trilopter language consists of high-pitched warblings mastered by very few Terrans. They, on the other hand, are skilled linguists and know at least Imperial Standard and Jadic.

Appearance: As noted above, Trilopters have a trinary-based physiology. Their peanut-shaped torso is about 1 meter long, with three leg appendages sprouting from the bottom of the lower swelling. Three equidistant mouths ring the upper half, and above each is a tentacular trunk, above that is an eye on a shorter stalk. The trunks split into three flexible "fingers." 'Lopters have thick, resilient skin (AT 4) of a grey to dark brown hue, and are completely hairless. Their variations of dress are at least as wide as those of humanoids, though they generally don some sort of tunic, belted at the "waist". Technicians of their people wear a harness for holding a variety of 'Lopter tools.

Diet: Trilopters are herbivores, dining on a wide variety of photosynthetic foodstuffs.

Demeanor: No human has ever seen a Trilopter 'get mad'; they seem incapable of any sort of frustration. When they become bored or impatient, they simply go do something else — and cannot be convinced to return to a task until they are ready. For this reason they seem calmly stubborn. 'Lopters are somewhat cowardly, avoiding any sort of combat-related situations when possible. They seem fascinated with humans and enjoy their company, taking delight in imitating their voices. Trilopters have an annoying tendency to talk to themselves (in a three-way conversation) and tell stupid jokes (They claim their humor is beyond human understanding).

6.28 AREED

Like their symbiotic partners, the Eed, the Areed once resided on a very small satellite in the Camelopadi 2 star system (in Frontier Zone 19) which they call *Eafug* and Terrans refer to as *Cleed*. They are multipedal, carbon-based creatures with six prehensile legs and vaguely resemble a cross between the Terran creatures commonly referred to as the starfish and the king crab. Quick, intelligent, and utterly ruthless, they make valuable allies and dangerous foes.

The Areed form bands of 3 to 300 creatures led by a dominant trio of two larger females and a male. Essentially extended families, these bands link with other groups to form clans of 9-900 individuals. Three clans typically inhabit each Eed.

Despite their dominance, the Areed carefully adhere to the unwritten rules underlying their exceptional symbiotic relationship with the Eed. They operate in the vast network of chambers that lie just inside the outer layers of their hosts, moving from room to room through a maze of arteries. These confines are carved out of the dead tissue that forms the bulk of an Eed.

The Areed employ the Eed's raw material stores and energy conversion processes in order to maintain their brutal but sophisticated culture. This culture produces a host of refined, technologically-advanced machines products which permit the Areed to compete against very powerful foes. An Eed is no less formidable than many of the best Imperial warships.

Besides influencing or piloting the movements of the Eed, the Areed can exploit the Eeds' wondrous link with the unified field or the "Essence." While the Areed cannot tap this fundamental understanding of the fabric forming the theme of the universe, they can merge with the Eed themselves. This involves reclining in special, fluid-filled pockets, and it enables the Areed to travel with the Eed whenever their hosts move via the mechanism of composition transfer. Failure to merge results in the Areed being left behind to fend for themselves in the relative void of outer space.

As the Eed innocently colonized many of the systems near Camelopadi 2, the Areed have sought to establish a dominion in space. They have seized dozens of planets and, while the vast majority of Areed still live within the Eed, many bands have staked out territories on the newly-conquered worlds. Thus, the passing years have brought these deadly sentients into conflict with neighboring races.

Areed are divided into three sexual groups. Two of these groups can bear young, the larger "female" group giving birth to 1-5 "males" or 1-20 smaller "females." In turn, the smaller "females" beget 1-10 of the larger "females." All three sexes are involved in the mating process, regardless of the result.

As with the Eed, Areed young develop within ultra-hard, semi-transparent, resinous eggs, although the Areed actually lay their eggs and the young "hatch" rather than being born "alive." A newborn Areed stands about 20 centimeters in height. The males and smaller females soon grow to a height of about a meter, later "molting" in stages which add about 25 centimeters to their stature. These two groups reach a maximum height of about 2 meters. Large Females, on the other hand, grow in sudden spurts of about 50 centimeters and eventually stand as tall as 3 or 4 meters.

Racial Origins: The Areed are descended from the Shew races of the Camelopadi 2 system and are closely related to the Shew Anion. They are of the same general evolutionary class as the Eed. Their home world is Eafug (Cleed).

Favored Ecosystem: The Areed can adapt to virtually any ecosystem within seconds or, in some cases, minutes. They cannot, however, exist unprotected in environments of less than .03 Atmospheres or greater than 300 Atmospheres. Their favorite environment seems to be a high-gravity world with distinctly solid ground and a relatively modest gas atmosphere containing large concentrations of carbon-dioxide, nitrogen, and hydrochloric acid.

RACIAL STATISTICS CHART

Natural/ Mutations	St	Qu	Pr	In	Em	Co	Ag	SD	Me	Re	Ap	SIDp	StDt	RecMp	StLng	TyHtD	MxHts	Ess.	Chan.	Men/Tel	Pois.	Dis.	Natural/ Mutations
Human	+5	0	0	0	0	0	0	+5	0	0	0	12	0	1x	2	D8	120	-50	-50	0	0	0	Human
Neo-Human	+5	+5	+5	+5	+5	+5	+5	+5	+5	+5	+5	12	-1	1x	3	D8	130	-25	-25	0	+	+5	Neo-human
Humanoid I	+10	+0	-10	+0	+0	+10	-5	-15	-5	-5	+0	12	0	.7x	2	D10	150	-20	-20	-10	+0	+0	Humanoid I
Humanoid II	-10	+10	-5	+0	+0	+0	+10	-20	+0	+0	+0	12	0	1x	3	D10	120	-20	-20	-10	+0	+0	Humanoid II
Humanoid III	-10	+0	+0	+10	+10	-5	+0	-5	+5	+10	-10	12	0	1.5x	5	D8	100	-30	-30	+0	-10	-20	Humanoid III
Eugenics Products																							**Eugenics Products**
Transhuman I	+20	-5	+10	+0	-10	+20	-5	-5	-5	-10	+5	10	-1	.5x	2	D10+1	180	-50	-50	-20	+15	+15	Transhuman I
Transhuman II	+0	+15	-5	+15	-5	-5	+20	-5	+10	+5	+0	10	-1	.7x	3	D10	150	-50	-50	-20	+10	+10	Transhuman II
Transhuman III	-5	+0	+0	+5	+0	-5	+0	-5	+15	+15	-5	10	0	1x	6	D8	130	-50	-50	-10	+0	+0	Transhuman III
Transhuman IV	-5	-5	+5	+5	+5	-5	+0	+30	+5	-10	+10	10	0	1x	4	D8	120	-50	-50	-20	+0	+0	Transhuman IV
Transhuman V	+15	+15	+15	+10	+0	+20	+15	+5	+15	+10	+10	12	-2	.5x	4	D10+1	180	-30	-30	+0	+20	+20	Transhuman V
Transhuman VI	+10	+10	+10	+10	+5	+10	+10	+20	+10	+10	+10	10	-1	.7x	4	D10	150	-50	-50	+10	+10	+20	Transhuman VI
Transhuman VII	+25	+15	+15	-5	+5	+25	15	+10	+0	-5	+10	12	-1	.25x	3	D10+2	210	-50	-50	+0	+20	+25	Transhuman VII
Transhuman VIII*	+10	+5	+5	+10	+15	+0	+10	+15	+5	+10	+0	10	0	1x	4	D10	150	-50	-50	+0	-10	+0	Transhuman VIII*
Transhuman IX	+5	+0	+10	+20	+20	+0	+0	+30	+30	+20	+0	10	0	1x	4	D8	120	-30	-30	+20	-10	+0	Transhuman IX
Transhuman X	+5	+10	+5	+30	+0	+5	+20	+5	+15	+20	+5	8	0	1x	3	D8	120	-50	-50	-10	+0	+0	Transhuman X
Transhuman XI	+5	+10	+0	+20	+10	+5	+5	+10	+25	+15	+0	10	0	1x	6	D8	140	-50	-50	+10	+0	+0	Transhuman XI
Transhuman XII	+15	+10	+15	+5	+10	+20	+10	+20	+15	+10	+20	12	-4	.5x	6	D10+1	180	-30	-30	+30	+20	+20	Transhuman XII
Replicants																							**Replicants**
Type I	+20	+20	+0	+0	+0	+10	+20	-10	+0	+0	+0	2	+4	.5x	3	D10+2	200	-50	-50	-20	+30	+30	Type I
Type II	+0	+0	-10	-5	+20	+0	+20	-20	+0	+20	+0	2	+5	.5x	5	D10	130	-50	-50	-10	+10	+10	Type II
Type III	+0	+0	+10	+5	+0	+0	+0	-10	+20	+10	+5	2	+5	1.5x	8	D8	100	-50	-50	+10	+10	+10	Type III
Type IV	+5	+5	+20	-10	+10	+5	+5	-20	-10	-10	+30	2	+5	1x	3	D10	120	-50	-50	+0	+10	+20	Type IV
Type V	+0	+0	-10	-15	-20	+0	+0	-20	-20	-20	+0	2	+4	1.5x	1	D8	100	-50	-50	-20	-20	-10	Type IV
Aliens																							**Aliens**
Altha	+15	+15	+20	+5	+10	+20	+15	+20	+15	+15	+25	10	-3	.5x	3	D10	150	+30	+30	+20	+20	+50	Altha
K'ta'viir	+20	+20	+25	+10	+10	+25	+20	+10	+15	+20	+25	10	-3	.5x	5	D10	150	+40	+40	+30	+30	+50	K'ta'viir
Idorians	-10	+10	-5	+0	+0	+0	+10	-20	+0	+0	+0	12	0	1x	3	D10	120	-20	-20	-10	+0	+0	Idorians
Snee	+30	+20	+20	+0	-20	+20	+10	+0	-5	+5	-80	5	0	1x	2	D20	250	-50	-50	+20	+20	+30	Snee
Aoemarans	-90	-60	-50	+10	+30	+10	-5	+10	+15	+10	-50	10	0	.1x	5	D4	60	-50	-50	+30	+100	+100	Aoemarans
Wihr-Kohl	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Wihr-Kohl
Trilopters	+20	+10	-15	-10	+10	+5	+10	-5	+0	+5	-20	10	0	1x	4	D8	120	-50	-50	+0	+10	+10	Trilopters
Areed	+10	+5	-10	-10	+10	+5	+10	-10	+0	-5	-50	10	0	1x	2	D10	150	+0	-50	-20	+10	+30	Areed
	St	**Qu**	**Pr**	**In**	**Em**	**Co**	**Ag**	**SD**	**Me**	**Re**	**Ap**	**SIDp**	**StDt**	**RecMp**	**StLng**	**TyHtD**	**MxHts**	**Ess.**	**Chan.**	**Men/Tel**	**Pois.**	**Dis.**	

Key:

Soul Departure (SIDp): rounds before the "Soul" of the being departs and he/she/it is no longer revivable. For Androids, this indicates the "death" of the molecutronic brain.

Stat Deterioration (StDt): The number added to any stat deterioration rolls made because of injury or "death".

Recovery Multiplier (RecMp): this is a function of the relative time it takes for the being to heal.

Starting Languages (StLng): The number of languages initially known.

Type of Hit Die (TyHtD): The die used when rolling to determine hits.

Max Hits (MxHts): The maximum number of hits the being can take.

Notes:

* Denotes special ability in addition to stats given.

All bonus are cumulative with other modifications.

1. The Transhumans VI — XI are Kashmerian developments as a result of thousands of years of work and do not (generally) exist except as Kashmere citizens.

2. The stats given for each Transhuman and Replicant type are somewhat variable; within each type are a number of subtypes with aptitude for specific skills. The stats given should be used as guidelines for understanding the general thrust of each type and not treated as absolutes

Political Structure: The Areed operate in clans (Ar. "Bew") of 9-900 individuals. Each clan is comprised of three bands of 3-300 Areed. Six Areed clans form a tribe, or "Hew," and thirty-six form a "Shew." There are three Shews, but only one — the Shew Ulreed — is united. This predatory group is the dominant force among the Areed and is led by a triad comprised of the two large females (Uluru and Elere) and the large male (Alara) that lead the Shew's most exalted band. All of the absolutely hierarchical Areed political mechanisms are tied to lineage, and this trio exercises the power of life and death over all their followers.

Social Structure: Areed social conventions are intertwined with their political system. They mate in bonding triads comprised of a large female, a small female, and a male. Each member of the trio is replaced only upon death.

Military Structure: All Areed fight, and even the very young and very old are capable of meeting most of the physical demands associated with combat. Their military organization, like their social structure, is in accord with the political structure.

Currency: The Areed generally employ barter; however, they have a very clear and uniform valuation system. Because they typically reside inside an Eed, Areed also have access to mineral stores that include a host of precious metals and gems (particularly diamonds). The Shew Ulreed have begun using standardized diamonds as currency, distinguishing the values on the basis of three different sizes and colors (clear, pink, and blue).

Language: The Areed are non-verbal creatures. They communicate in three ways: (1) by varying their magnetic force; (2) by using electrical impulses; and — most commonly — (3) by employing minute variations in their infrared profile (i.e., modifying their thermal silhouette).

Appearance: The Areed are multipedal, carbon-based creatures. They have six prehensile legs, which surround a compact but sleek trunk that houses an array of three sensors. Three opposing fingers crown each appendage and enable the Areed to perform very complex manipulative operations. Beside their tactile function, these fingers also serve as visual, aural, and taste inputs. An Areed can see, particularly over the infrared spectrum, with either its sense lobes or its fingers. Tough-skinned and coated with a highly conductive, resinous outer layer, the Areed often emit visual electric charges. They are imbued with a strong but highly controllable magnetic force and constantly secrete a powerful acidic fluid which flows over their outer surface.

Housing: Most Areed reside in large common areas with an Eed. They rest in small compartments, where they float in highly acidic suspensions of fluid (akin to liquid battery acid). The Areed that live outside the Eed construct similar lodgings using local features or even fauna. Most of these are subterranean.

Diet: The Areed eat virtually anything that can be broken down with hydrochloric or perchloric acid. They enjoy live food, but most live off the nutritious fluid that coats the innermost live tissue in an Eed. Because the Areed can hybernate for up to 300 days without eating, they rarely fall prey to famine.

Worship: The Areed apparently worship their three leaders (the Alara, the Uluru, and the Elera).

6.3 LANGUAGE

Since most worlds embrace a number of tongues, and few characters could know all the languages even on a given planet, translating devices and cooperation may be necessary to solve language problems.

A character's fluency and literacy in a particular language is determined by the skill rank which the character has achieved in his "linguistic" skill for that language.

The GM should decide which languages are automatically known by each of the races in his system. Each character may then expand on this base through the skill acquisition process

6.4 DEATH IN *SPACE MASTER*

For he who lives more lives than one
More deaths than one must die.

Oscar Wilde
The Critic As Artist
c. Prelmp 9775

6.41 DEATH FROM EXCESSIVE CONCUSSION HITS

If a character receives more concussion hits than the sum of his total hit points + his Constitution stat, he begins to die. After a number of rounds equal to his Constitution divided by 10 (rounded off), the character is dead. This process of dying can be halted by lowering the number of hits on the character below the critical point. However, once the character dies, the normal death rules apply.

Example: *Sanvok takes 24 hits and has a 90 Constitution. He receives 115 hits in a round of brutal projectile fire. Once he reaches 115 he drops and begins to die of massive shock. If nothing is done to help Sanvok, he will "die" in 9 rounds. After another brief period, his "soul" will depart.*

6.42 EFFECTS OF DEATH

There are two major effects of death under this rule: (1) the deterioration of the stats due to a lack of oxygen flow to the brain following "death," and (2) the departure of the "soul" from the body. Death, for the present purpose, is a halting of the major bodily functions (heart beat, breathing, etc.). Under these rules drugs and machines can halt the process of dying at any point; healing the cause of death also halts both effects, but does not reverse them. If the cause of death is healed before the soul leaves the body, the person is alive and functional (if there are no other injuries , and no stat is reduced to zero — see below); however any stat loss remains. A *Preservation Unit* will prevent the soul from leaving, but a body kept in one longer than 25 hours will begin to deteriorate as below.

If the soul has left the body before the cause of death is repaired, the body is functional but the character is in a coma and at -75% for even subconscious activity. In general, there is nothing that can be done to help this person, but some races and cultures allegedly have the ability, through mystical rituals, to return the soul to its body. The GM may wish to allow a mingling here of cultures. Masters of Channeling (***Rolemaster***) can call back the soul of a dead man. Alternatively, the GM may wish to add the ability of recalling a soul as a Telepathic Psion.

Deterioration of Stats

Only the Mental stats (Memory, Reasoning, Self Discipline, Empathy, Intuition, and Presence) normally deteriorate. Each round after a character dies a roll is made on the *Stat Gain Chart* (pg. 44) for each mental stat. The column used is as follows: 1 for rounds 1-6 after death, 3 for rounds 7-18 after death, 6-7 for further rounds after death.

The results on this table are the amounts by which the stats are reduced. Only the temporary stats are reduced, not the potentials. Certain races add to the column number used (see *Racial Statistics Chart*, pg.31). If any stat is reduced to 0 or below, the stat is at 0 and the character will remain in a coma even if the cause of death is repaired.

LANGUAGE SKILL CHART

All trait development in this area is broken down into two categories: mastery of the spoken word and reading-writing ability. In order to achieve a semblance of fluency in a language a character must advance to 5 or 6 stages (picks, boxes, etc.) in each area. Beyond that point, the character can refine his language skills so that he can translate more complex speech and writings, understand changes in dialect, and get a feel for subtle patterns that more learned natives may employ.

Skill Rank	Conversational Ability	Reading/Writing Ability
1	Allows recognition of the language when spoken.	Allows recognition of the language in written form.
2	Allows user communication and understand very basic concepts in the form of single words or very short phrases (e.g. eat, danger, room, money, cost, enemy, bathroom, pain, etc.).	Allows user to read or write very simple phrases and words and possibly understand the context of very simple passages. Allows recognition of the language in translated form.
3	User can distinguish between major dialects. Allows user to communicate moderately basic concepts in the form of phrases if being's communication form is compatible with the language. User can get the tone/context of the language when spoken at a normal rate, but no more. He can, however, understand basic phrases spoken at a slow pace.	User can get an overview of simple writings, but will have trouble with specific details. Allows user to write very short sentences of a moderately simple nature (i.e. at primary education level).
4	User might be able to converse on very simple subjects, using whole sentences instead of broken phrases. User can understand everyday conversation when spoken slowly.	User can read moderately simple writings and understand most of the details. User has trouble with subtle concepts. (news-dispatch level reading ability). Allows user to write sentences of simple nature.
5	Allows user to converse freely in everyday conversation of an average nature (e.g. market talk, shooting the breeze, conversation with guards, etc.). Rapid and/or sophisticated speech is still troublesome.	Allows reading of most everyday writings and normal computer spools. User can write on a moderate level.
6	Normal speaking level of the native population, the common man. Subtle or particularly sophisticated concepts still prove troublesome. User cannot understand dialects or archaic speech out of the norm. User converse freely on the same level if physically capable.	Reading and writing level of the average literate creature.
7	True fluency. Allows understanding of, and conversation with, the most learned of native speakers. Sophisticated folk may still brand you as an "outlander," however, and archaic or unusual concepts will still prove troublesome.	Allows one to write at past primary level, and reading ability is that of average member of the stratified classes.
8	Fluency plus the ability to recognize the regional and cultural origin of all speech (although such speech will still prove troublesome to speak or understand).	Secondary education writing level of an average nature. Allows one to read relatively complex material and recognize (but not fully understand) the nature of archaic or unusual dialects or concepts.
9	Absolute fluency in chosen dialect plus simple understanding and speaking ability in closely related dialects.	Allows one to read and write very complex passages, technical manuscripts, but only in the chosen dialect. Allows some translation of related (possibly offworld) dialects, and simple writing ability in such areas.
10	Absolute fluency of all the chosen languages and all closely related dialects. Extremely archaic and complex concepts may prove troublesome if the creature has relocated from several planets.	Allows reading and writing of the most complex nature in the chosen language, as well as strong reading/writing ability in closely related dialects.
10+	As 10 above, unless GM's world system calls for extremely complex languages. We suggest that skill ranks 11-20 be reserved for those who wish to learn extremely ancient or ultra unique versions of the given language (e.g. Old Islamic, or the rare religious dialects of certain forgotten colonies).	As 10 above, unless GM's world system calls for extremely complex languages. We suggest that skill ranks 11-20 be reserved for those who wish to learn extremely ancient or ultra unique versions of the given language (e.g. Old Islamic, or rare dialects of certain forgotten colonies).

Language Multipliers:

Multiply the trait development cost by one of the following factors should the student be beset with the given situation:

Situation (regarding language)	**Multiplier**
Character knows a related language	x1/2
Character has writing but no teacher/*instructor programs	x2 for learning reading/writing; x5 for learning spoken tongue.
Character has teacher* but no writings.	x8 for learning reading/writing if teacher cannot write language;* x2 for learning spoken tongue if teacher cannot write language.
Character has no writings, no teacher.*	— Character cannot learn language.

Note: 1)The teacher must have language skills in the tongue that are higher than the rank being taught. The "teacher" requirement may be fulfilled by residing or traveling in an area where the language is spoken. Alternatively, this requirement is fulfilled if a traveling companion or acquaintance has conversations with the student for a couple of hours a day;

2)In order to use the 1/2 multiplier for knowledge in a related tongue, one must have knowledge skills in the related language that are at a higher rank than that of the skill rank he is attempting to acquire in the new tongue;

*3)This factor may vary according to the language attempted and the character's ability to visualize sound relating to writing and reading. In order to learn reading and writing, even at x8, the character should be familiar with the symbols/alphabet associated with the given language (e.g. his home tongue uses the same symbols or very similar ones).

Every hour after a stat is reduced to 0 the potential for that stat is reduced by an amount rolled on column 6-7 of the *Stat Gain Chart*, pg.44. Sixty rounds (10 minutes) after death, the physical stats (Strength, Constitution, Agility and Quickness) begin to deteriorate. Each hour, roll on column 6-7 of the *Stat Gain Chart* for each of these stats and decrease each one by the amount shown. A stat cannot be reduced below 0; however any further deterioration is taken off of the appropriate potentials. The character can be brought out of this coma if the 0 stats are raised above 0.

Deteriorated temporary stats can be raised to previous levels (but not above potentials) by the following methods: normal level advancement, certain healing drugs, and/or by a normal healing rate of 1 point/stat/month. If potentials have deteriorated, stats cannot be raised above the new, inferior potentials until the potentials are restored (usually only by very powerful drugs or something beyond ***Space Master*** technology).

During a battle, a GM will probably find it convenient to keep track of how many rounds pass between death and the halting of the death process. Then after the resolution of the battle, the calculation of stat reductions can be made.

Departure of the Soul.

Normally 12 rounds (2 minutes) after death, a character's soul leaves his body. This time will vary depending upon the race of the dead character (see *Racial Statistics Chart*, pg.31).

6.5 RACE ABILITIES

Four chief factors are given in the *Racial Statistics Chart*: modifications to bonuses due to stats, modifications to resistance rolls, modifications to the effects of death and injuries, and the number of languages an average member of a race knows when adventuring begins.

Stat Bonus Modifications — Modifications to stat bonuses are in addition to bonuses described in Section 3.1 and detailed in the *Racial Statistics Chart*. For example, a Transhuman I was a muscular 6'7" and the Humanoid III was 5'8" and weighed 60 kilos. However, due to the stat bonus modifications given in the *Racial Statistics Chart*, the Transhuman I's bonus due to Strength is +40 (+20 normal for 99 St + (+20) due to race); while the Humanoid III's bonus due to strength is +15 (+20 normal + (-5) due to race). Stat bonuses may become negative.

7.0 BACKGROUND

Variety and flavor are important assets in any good SFRP game. One of the principal problems with some campaigns/systems is a lack of desire to, or means for, allowing the GM and players a great deal of choice when selecting and developing characters. In this section are a few tips for injecting more flexibility into the generation and development process, thus enabling GMs to further vary characters of the same profession.

7.1 CATEGORY LISTINGS

This background options section helps GMs and players determine what special skills, attributes, or possessions a player character obtains in his or her early life. Using the Background Option picks shown below, a player can choose his fortune, assets, or special abilities prior to the beginning of the campaign. These options should be selected after the player character completes adolescence development and prior to apprenticeship development.

Alternatively, the GM may wish to change the selection sequence, or assign the options in his own manner. Whatever the case, it is suggested that these tables should only be used once in the course of a character's life.

As an option, the GM may wish to allow the PC a roll for a Special Ability (see Section 12.5) as one of his background options.

7.11 USING THE TABLES

1) Each character, regardless of profession, is allotted a certain number of background option picks. The number of picks one receives is dependent upon the character's race and is noted in the following chart.

Race	Background Option Picks
Human	4
Neo-human	4
Humanoid	(1-4)
Transhuman	3
Alterant Replicant	1
Android	1
Alien	Varies (GM Discretion)

Remember that background option picks are not to be confused with development picks.

Should a character's race fall outside of the classifications listed here (e.g., aliens), we suggest that the GM should assign the number of option picks allowed to the character. He may also add special option categories for these types of PCs, or delete some or all of the categories listed here.

2) Characters expend one Background Option Pick for each selection they make from the categories which follow. (i.e., Each option pick expended permits one choice or roll).

3) Prior to making a roll on (or pick from) the categories which follow, the character must allocate his picks to the various categories. There are five to choose from: Special Skills, Special Items, Special Status, Special Wealth and Special Abilities. Characters are free to apply more than one option pick to each category if they desire (e.g., Tarmak the Armsman has chosen to expend all four of her Background Option Picks in the Special Items category).

4) Once the character allocates his picks he rolls once for each pick on the chosen category. He then cross-indexes the roll to find the result. The GM may wish to allow the characters to choose the results, rather than having them make rolls.

7.12 BACKGROUND OPTION CATEGORIES

Special Skills: An option pick used in this category will result in skill bonuses being added to the character's primary, secondary, or hobby skills. The pick may also result in increased stats.

Special Items: The items here include: property, capitol goods, extraordinary weapons and miscellaneous items. The GM may stipulate that a special item is an *heirloom*, and that the character is emotionally bound to the item, in which case the character will not sell the item in question except under extreme circumstances. If multiple rolls or choices are taken in this category, the GM may wish to allow characters to combine item bonuses into one item, or spread them out into several different devices. No bonus should ever exceed + 30, and no single device should deliver more than an"E" critical.

Special Status: Characters opting for more than one pick in this category may receive only one result (however they may make several rolls and choose one).

Generally, this will be the choice with the highest status. It is suggested that only rolls (not choice) be allowed in this category.

Special Wealth: This category provides the character with financial reserves prior to the beginning of play. The GM should stress to the players that they should not take the Elmonits generated on this table and spend them all on neat little gadgets. A character's Elmonit reserves should be directed towards living expenses, which can become rather high, dependent on life style and location. A a cash drain of about 150-400 Elmonits per 30 days for personal maintenance (shelter, food, personal effects, etc.) is appropriate.

7.2 BACKGROUND OPTIONS

7.21 SPECIAL SKILLS CATEGORY

Roll	Result
01-50	Add a special +15 bonus for one secondary skill.
51-65	Make an additional 2/1 hobby pick (see Section 12.3).
66-75	Select one additional language to be written and spoken at skill rank 10. (The character may choose skill with a computer language at his option).
76-85	Player takes skill rank 5 in random secondary skill, or one chosen by the GM to reflect the character's background.
86-95	Add a special +10 bonus for one primary skill.
96-100	Increase one stat by 2 *or* three stats by 1 each; both temporary and potential stats (to a maximum of 101).

7.22 SPECIAL ITEMS CATEGORY

Roll	Result
01-04	Medtab applicator with a cartridge of Jirolene.
05-06	Medtab applicator with a cartridge of Triadenaline
07-08	Medtab applicator with a cartridge of Fir-Queline.
09	Medtab applicator with a cartridge of Stirene.
10-15	Medtab applicator with a cartridge of recreational tabs.
16-17	Wheeled car.
18-22	GEM car.
23-25	Grav car.
26-29	All Terrain Vehicle.
30-31	Recreational speedboat.
32-33	Airboat.
34-36	Hydrofoil.
37	Recreational helicopter.
38	Personal gravitic belt.
39	A small prop-plane.
40	Gravitic flitter.
41-42	Access to a private suborbital shuttle as a non-paying passenger or co-pilot.
43-48	Real estate : undeveloped land.
49-56	Real estate : modest dwelling.
57-68	Real estate : moderate dwelling.
69-75	Real estate : extravagant dwelling.
76-80	Personal body armor.
81-83	A multiscanner (or Repair/ Medscanner if appropriate).
84-87	A trap device encoded against activation to the character only. It can be attached to almost anything, and will deliver up to 5 "A" electricity criticals (or 1 "C" and 2 "A"s or any such combination) before power depletion. It is activated by manual contact.
88-91	+5 weapon (+1 Psion Adder if allowed).
92-94	+10 weapon (+2 Psion Adder if allowed).
95-97	Personal velocity shield (+3 Psion Adder if allowed).
98	Personal deflector shield.
99	Personal absorption shield.
100	Personal barrier shield.

7.23 SPECIAL STATUS CATEGORY

Roll	Status
01-10	Curses. Your family is cursed with one of the following banes:
(01-20)	You cannot refuse an offer of hospitality, regardless of the source or circumstances (within reason);
(21-30)	Low empathy towards non-sentient animal life, therefore you may never befriend an animal;
(31-40)	You can not refuse a plea for help from either an innocent or an underdog — even if it means endangering your own life or intervening against an ally — but you have +20 bonus to all actions taken during such an endeavor;
(41-60)	You can not refuse a personal, one-on-one challenge, but you have a +15 bonus to all actions taken during such an endeavor;
(61-80)	You can not accept a loan without repaying it back threefold;
(81-100)	You can not harm a creature that has not first shown aggressive behavior.
11-20	Exceptionally impoverished family. You have acquired any money you possess through questionable practices.
21-30	Criminal background. Your family is associated with an organized crime network. You carry a recognition device associated with the group.
31-40	Guild background. Your family is connected with an association of merchants or high-tech personnel. You carry the device or phrase of recognition employed by the guild.
41-50	Multi-cultural, multi-linguistic background. You are fluent (10 skill ranks written and spoken) in 2-6 additional languages of your choice and have a basic understanding of the associated cultures.
51-60	NPC Mentor (see Section 7.3).
61-70	Race-friend. You possess an intimate understanding of any one race other than your own, including their language, ways of thinking, lifestyle, racial secrets.
71-80	Your family possesses traces of the blood of a recognized and powerful family (possibly noble).
81-90	Conspiratorial background. You (or your family) are connected with an association of powerful individuals (e.g., a cult) intent upon rebelling against local, regional, or provincial officials. They control assassins, subcults, and other subversive elements, as well as legitimate political and mercantile organs. You carry the recognition device of the group.
91-96	Your family is well-off; make a free wealth roll.
97-100	You are charmed. Events tied to sheer luck or happenstance (i.e. involving no skill or concerted thought) are skewed in your favor by 20%.

7.24 SPECIAL WEALTH CATEGORY

Roll	Elmonits on Account	Monthly Investment Income/Notes
01-02	500	
03-05	750	
06-10	800	
11-15	950	
16-20	1000	
21-25	1200	
26-30	500	100 per month* (investment income).
31-40	1500	
41-50	1500	50 per month (investment income).
51-60	1500	100 per month (investment income).
61-65	2000	100 per month (investment income).
66	6660	100 per month (investment income).
67-70	2000	150 per month (investment income).
71-75	2500	150 per month (investment income).
76-80	3000	200 per month (investment income).
81-85	3500	200 per month (investment income).
86-90	4000	250 per month (investment income).
91-93	4500	250 per month (investment income).
94-95	5000	300 per month (investment income). Character also possess valuable jewelry (1-2 K worth).
96-99	7000	500 per month (investment income)
100	10,000	300 per month (investment income). Character also possesses a "black market" Elmonit account. Funds placed in this account are untaxable. Possession of that Elmonit card is illegal.

*A "month" is an arbitrary 30-day period (3 decadays), carried over from Prelmperial times.



7.3 NPC MENTORS

In fantasy or science fiction literature, it is common to find supporting characters who serve to train, direct, advise, and occasionally rescue the more principle characters. These Mentor figures can be an invaluable aid to the GM and player alike, for they provide another level of detail and continuity for the entire campaign. Mentors can be used to send PCs on missions, rescue PCs who have gotten in over their heads, explain fundamental aspects of the campaign universe, train PCs in the use of skills which are not easily learned by other means (if, for instance, one of the Character Development optional rules is being used), and in general add yet another facet of GM-PC interaction to the game. For player characters who desire a Mentor, the steps described below should be followed.

Note: *The decision to have a Mentor should be made during character generation, and counts as one Background Pick. GMs who wish to give mentors to player characters who have already begun play should not hand them out freely, but rather design some sort of "test" or obstacle which must first be overcome by the PC.*

By and large, Mentors are created by the GM in much the same way as any other non-player characters, although some specific attention must be paid to designing Mentors who will prove consistently useful to the PCs in question (at least until the PCs are sufficiently advanced so as to no longer require the Mentor's services).

NPC Mentor Generation Procedure

1) The profession of the Mentor should be the same as that of the PC disciple, although the skills involved are more important than the actual profession. If the Mentor is a Telepath (or Semi-Telepath), his or her base realm of telepathy will necessarily be the same as the disciple's. Likewise, the Mentor will generally (though by no means always) be of the same race as the disciple.
2) The Temporary Stats of the Mentor will reflect the years of experience he or she has had therefore, the following procedure is used: For Prime Requisites, 1d10 is rolled and added to 90. For all other stats, D100 is rolled (ignoring rolls of less than 20) to determine the original value, and a high open-ended D20 roll is added to signify stat gains (note: no stat total will ever exceed 102). Stat Potentials, as well as Stat Modifiers and Development Points (if desired), are determined in the usual fashion.
3) The experience level of the Mentor can be determined by rolling 2D5 and adding this total to the level of the Mentor's most experienced disciple.
4) The Mentor's background can be determined in the same manner as any player characters'. Often Mentor-figures will have had Mentors themselves at an earlier age, and the names of these figures (as well as a few notable details) might come in handy.
5) The age of the Mentor can be determined by rolling 1d100 open-ended and adding the Mentor's level, then consulting the table below (from which actual age must be extrapolated due to differences in racial longevity):

Total	Mentor's Age Group
up to 5	Pre-adult/Prodigy
06-15	Young Adult
16-30	Mature Adult
31-65	Middle-aged
66-95	Old
96 or up	Venerable

6) The "level of culture" from which the Mentor comes and the Mentor's social standing within that culture will prove valuable not only in determining the nature of his or her personality, but will give a rough indication of the amount of "pull" the Mentor has (e.g., access to technology of information, widespread reputation, "friends in high places," and general clout).

To determine the Mentor's social standing and origin, roll 1D10 and apply any of the following modifiers which are appropriate: if the disciple is of lower class, or from a Minor clan, subtract one; if the disciple is of upper class, add one; if the disciple is of noble class, add three (these modifiers may be cumulative). Finally, consult the table below:

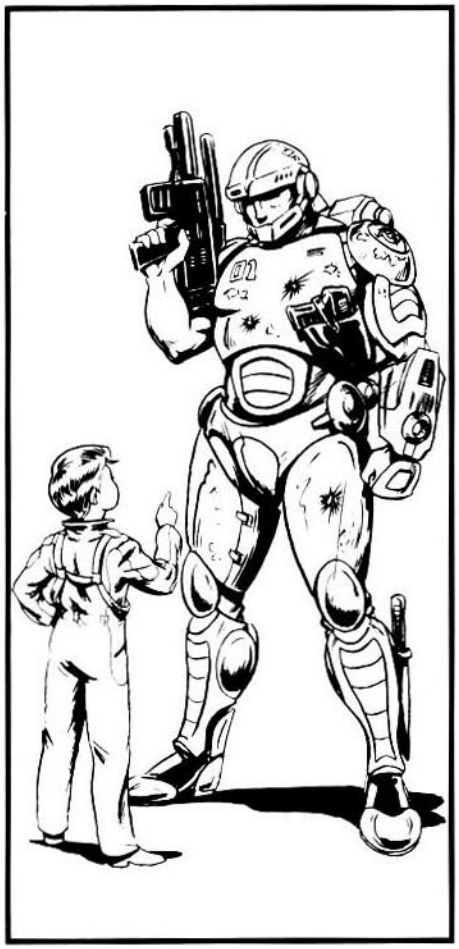
Total	Mentor's Social Status
up to 1	Lower class, Minor Clan
2	Middle class, Minor Clan or Lower class, Independent
3-4	Middle class, Independent or Lower class, Provincial or Lower class, Terran
5-7	Upper class, Minor Clan or Upper class, Independent or Middle class, Provincial or Middle class, Terran
8-9	Upper class, Provincial
10+	Upper class, Terran

7) Lastly, to keep player characters from running to their Mentors at the first sign of any problem, it is necessary to determine just how easy (or difficult) it is to get an audience or appointment with him or her. After all, Mentors are people too, with their own lives, responsibilities, and interests, and may not always be available to come to their disciples' aid. (This inability may be due to constant, pressing business, frequent travel, indulgence in personal interests, irritability, illness, or a past "falling out" with the disciple.) In any case (the actual circumstances must be determined by the GM), this factor is measured in terms of a standard Difficulty Level rating. In order to get a meeting with his or her Mentor, the PC disciple must succeed in a static maneuver roll modified by this factor and the player character's Intuition modifier. Such maneuvers may be attempted once per standard (twenty-five hour) day, unless a result of 05 or lower is obtained (in which case the Mentor really cannot be bothered, and will send the disciple away for 1D100 standard days). To determine the level of difficulty the PC will have in approaching the Mentor, roll 1D100 and consult the following table:

Roll	Difficulty level
01-05	Routine (+30)
06-15	Easy (+20)
16-30	Light (+10)
31-45	Moderate (+0)
46-60	Hard (-10)
61-75	Very Hard (-20)
76-85	Extremely Hard (-30)
86-90	Sheer Folly (-50)
91-95	Absurd (-70)
96-00	Insane (-100)

Fleshing Out the Mentor

The *Non-Player Character Chart* (in the **GM** Book) should be used to determine the actual skills and skill totals which the Mentor possesses, although the GM should feel free to substitute ranks from some skills with ranks in others in order to keep close to the design concept (provided, of course, that the costs in DP and number of ranks available for these skills are commensurate with the Mentor's level). Where the chart calls for a subjective decision to be made as to which skills are chosen, the GM should select skills which the player character disciple possesses (or is studying) whenever possible (since the general assumption is that it was the Mentor who taught many of these skills to the PC to begin with).



If there are still some choices to be made after these bases have been covered, it is a good idea to select skills which the PC disciple will have some need for in the future, so that the Mentor will be able to teach these skills to the disciple when the time comes.

Example: *A level one pilot has learned Orbital, Atmospheric, and N-Space Piloting from her Mentor. The GM gives the Mentor these skills, and also selects Combat and Hyperspace piloting. If and when the PC desires to learn these important aspects of piloting, her Mentor will be prepared to teach them to her.*

The Mentor is certainly one of the most important NPC contacts a player character may have, and as he or she will repeatedly be called into play at the bequest of his or her disciples, great care should be taken in fleshing out all aspects of the Mentor's personality. The factors which must be decided upon, just as for player characters, are Personality, Motivations, Alignment (Morals and Philosophy), General and Physical Appearance, and Demeanor.

7.4 STARTING MONITARY RESOURCES

A GM should look to the nature of the local/world economic system to see how much money a character should start with. Generally, we suggest a character should be given a modest sum, allowing him to acquire the bare essentials in terms of armor, weaponry, food, and the requirements of civilization.

Characters starting in mid-campaign will (hopefully) receive help from party members, but may need better than average equipment to withstand heightened challenges (those not normally faced by first level groups). Some characters may receive no money (e.g., those found robbed and beaten up), but these situations must be carefully weighed.

Give the players a set sum of money — such as 50 Elmonits — plus an amount determined by a D100 roll (e.g., a roll of 43 would give the player an additional 43 Elmonits, all Imperial currency on an Elmonit card.) Remember, the players should not be too rich (they need something to work for) nor too poor (they need something to work with). *No* group should be starting out with their own, gleaming hyperyacht bought with starting cash.

7.5 EXPERIENCES AND FAMILY BACKGROUND

One's outlook on life is necessarily colored by past experience. A character in a SFRP setting will invarably follow this rule to some degree, and the GM should note that rich, varying experiences lodged in a character's history will inspire the player to individualize his character's motivations and feelings.

Family background is, perhaps, the most significant tool in this category. Events involving one's family — legacies, feuds, traditions, etc. all act to give a character certain "reference points" for adventure. A character may seek revenge or some heirloom of great value; he may wish to follow the path of his mother or father. He may need to clear the name of a relative wrongly accused of some terrible crime.

By giving the player a unique background with a number of significant and interesting experiences and family notes, great choice is allowed, and the character will have wide leeway in pursuing interests relating to his past.

SKILL RANK BONUS CHART

Skill Rank	Normal Bonus
0	-25
1	+5
2	+10
3	+15
4	+20
5	+25
6	+30
7	+35
8	+40
9	+45
10	+50
11	+52
12	+54
13	+56
14	+58
15	+60
16	+62
17	+64
18	+66
19	+68
20	+70
21	+71
22	+72
23	+73
24	+74
25	+75
26	+76
27	+77
28	+78
29	+79
30	+80

Plus 1/2 for each skill rank over Skill rank 30.

8.0 KEEPING TRACK OF A CHARACTER

In a Science Fiction Role Playing game each player must keep track of the factors defining and affecting his character, while the GM must keep track of the non-player characters. In ***Space Master***, each player can keep track of his character on a Player Character Record. The Player Character Record has places for all of the important statistics and factors which are important to a character. The GM may want to use Player Character Records for certain non-player characters (NPCs), but in general he only needs to keep track of their levels. This allows him to refer to the Non-Player Character Chart (in the **GM Book**) in order to obtain non-player character bonuses required during play.

The rest of this section discusses the Player Character Record and the different types of capabilities and bonuses that the players should keep track of.

8.1 THE PLAYER CHARACTER RECORD

The Player Character Record has space for all of the factors which affect a character's bonuses and capabilities (e.g., skill ranks, skill bonuses, languages known, Psion lists known, height, weight, etc.). A player should fill in all of the appropriate spaces (this process is described step by step in Section 10.0). When this process is completed, the character is ready to play and has on his Player Character Record all of the bonuses which can affect his actions.

In addition, there is the Player Character Worksheet, where all skills are listed and skill bonuses recorded, level by level.

Anyone using ***Space Master*** may photocopy as many Player Character Records and Worksheets as he wishes for use in his game; however, they may not be copied for commercial usage. Players can use the back of the Character Record to keep track of the character's supplies, equipment and other possessions.

8.2 SKILL BONUSES

Skill bonuses are the numbers added to various rolls which determine the success of events and actions during play. They represent how capable a character is at certain activities. The basic classifications for skill bonuses are the Offensive Bonuses (OB), Defensive Bonuses (DB), Moving Maneuver Bonuses (MM), Vehicular Maneuver Bonuses (VM), Special Purpose Bonuses (SP) and Static Maneuver Bonuses (SM). Each skill bonus has its classification indicated on the Player Character Record.

Each skill bonus is the sum of several specific bonuses, each of which has a column under "Skill Bonuses" on the Character Record Sheet. The specific bonuses include the skill rank bonus (see 3.1), the stat bonus (see 2.4), the level bonus 5.3), item bonuses, and any special bonuses.

The player Character Worksheet has a set of boxes for each skill row which can be used to keep track of skill rank development. Use a "/" to indicate that the skill is **being** developed, and convert it to an "X" when the development is completed.

8.3 SPECIAL PURPOSE BONUSES (SP)

Several of the skills do not fall in the general pattern outlined above: Learning Psion lists, Linguistics, Body Development, and Ambush. Psion lists are listed on separate skill rows on the Record and are marked as *either* learned to a certain level *or* unlearned with a chance of learning. Languages are listed on separate skill rows with only the skill rank recorded. The Body Development Bonus is the number of hits which a character can take before passing out (see Section 3.44). The Ambush *skill rank* is a modification to critical rolls resulting from a sneak attack on the rear of an opponent (see Section 3.44).

PLAYER CHARACTER RECORD

NAME:	SEX:
PROFESSION:	AGE:
BASE HITS: TOTAL HITS:	RACE:
POWER POINTS:	MASS:
ARMOR TYPE:	HEIGHT:
	HAIR:
	EYES:

DEFENSIVE BONUS VERSUS	Energy	Projectile	Missile	Melee
Quickness				
Shield				
Armor Bonus				
TOTAL				

STATS	TEMP	POT	STAT MOD	RACE MOD	TOTAL MOD	DEV. PT
Co						
Ag						
Sd						
Me						
Re						
St						
Qu						
Pr						
In						
Em						
Ap						

EXPERIENCE POINTS:

LEVEL:

SKILL/ABILITY	(STATS)	SKILL BONUS	STAT BONUS	ARMOR PENALTY	ITEMS	MISC	TOTAL

Language	Skill Written	Skill Spoken

MONEY: Elmonits: Monits [cash]:

PSION LISTS	1–5	6–10	11–20	25	30	50

WEAPON	FAIL RANGE	SKILL BONUS	STAT BONUS	WEAPON BONUS	ARMOR PENALTY	LEVEL BONUS	ITEM BONUS	MISC	TOTAL BONUS AT RANGE PB	SR	MR	LR

Cost	Skill	Special	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

8.4 RESISTANCE ROLL BONUSES (RR)

Certain attacks occurring during play will require a character to make a Resistance Roll to determine if or how an attack affects the character (see Section 2.4). The types of attacks are Telepathy, Poisons, Drugs, and Diseases. The attacks' level (caster level if it is Psionic, attack level if a poison drug or disease) is cross-indexed with the target's (defender's) level on the Resistance Chart pg.95 to obtain a single number. In order to successfully resist the attack, the Resistance Roll must be greater than or equal to this number.

Resistance Roll Bonuses consist of a stat bonus, any item bonuses, and race bonus. The bonuses for the following stats affect the listed Resistance Rolls:

Affectant		Resistance Stat
Telepathy	—	Self Discipline
Drugs	—	Constitution
Poisons	—	Constitution
Diseases	—	Constitution

8.5 OTHER CAPABILITIES

Other information is kept on the Player Character Record. This information is not used as much during play as the skill bonuses, but it is still important of keep track of.

Stats — In the "Stats" section of his Player Character Record, the character should record his stats. The stats are numbers between 1 and 102 that represent the physical and mental capabilities of the character (see Section 2.0). The character's temporary stats are placed next to the stats in the column marked "Temp". The character's potential stats are placed next to the stats in the column marked "Pot". Each temporary stat has a bonus associated with it (from the *Stat Bonuses Chart*, pg.45); each of these bonuses is placed in the "Stat Mod" column. Depending on the character's race there may be a racial bonus/subtraction for each stat. This goes in the "Race Mod" column, and the bonus/subtractions are averaged to determine the "Total Mod." Each of the "development stats" (see Section 2.1) has a number of development points (from *The Stat Bonuses Chart*) associated with it; each of these numbers is placed in the "Dev Pt" column.

Level and Experience — Each character has an Experience Point total (see Section 5.3) and a level. These should be recorded in their respective spaces on the Player Character Record.

Armor Type and Defensive Bonus — Each character has an armor type and defensive bonuses which should be recorded on the Player Character Record. Note that a character will actually have four DB's depending on what type of weapon is being used against him (energy, projectile, missile, melee). These may differ if the character is using a personal shield or other specialized defensive equipment.

Constant Information — Certain information about a character is relatively constant and unchanging. The Player Character Record provides spaces for a character's name, age, sex, race, height, mass, hair, eyes, and profession. A space is also provided for any special properties the player might wish to record.

9.0 THE ROLE OF THE CHARACTER

There are certain factors which are not formalized in Science Fiction Role Playing but which still affect the role of a character, and in particular a player character. These are factors which are neither capabilities of nor restrictions to the character; instead, they are facets of his individual nature and temperment. These factors are crucial in bring a character to life in terms of the game, and they make the character seem more realistic to the character's player as well as to the other players and the GM. Three of the most important of these intangible factors are Personality, Motivation and Alignment in the struggle between Good and Evil.

Personality — Many players may inject their own Personality into their character, which is very acceptable and enjoyable. However, sometimes it is exciting, stimulating and rewarding to embody your character with a personality other than your own. Whatever you decide to do, it is important to carefully consider your character's personality.

Motivation — Another question that should be answered about the character is: What is his/her/its motivation? What are his/her/its/their objectives in the game? It may be to adventure and have a good time. It may be to amass as many Elmonits, rare artifacts, and Ardinium-plated starships as possible. It may be to kill and fight. It might be to defeat evil wherever it exists, and thus make the Empire safe for Androids (or any other race). It might be to defeat the good guys and gain immense power yourself. Whatever your character's motivation, it helps to flesh him out.

Alignment — The player should determine what his or her character's philosophy, morals, and social tendencies are. We group these factors under alignment. In most SFRP settings, the easiest decision: is the character good, evil, or neutral (neither good or evil, but out for yourself — otherwise known as an opportunist)? The significance of this decision is dependent upon the GM and the universe in which you are adventuring.

The next question is: What are the morals and philosophy of the character? Does he believe that the end justifies the means? This often leads to the corruption of otherwise "good" characters. Does he respect rigid laws? Some good characters might not, while evil ones might. Is he fatalistic? A good person might feel that evil will triumph regardless of what he as an individual might do, so why bother resisting? Is he a hedonist? Good or evil, his prime concern would be to indulge himself.



10.0
CREATING AND MOLDING A CHARACTER

In a Science Fiction Role Playing game, each participant (player) except for the GM assumes the persona of one of the individual characters — his player character. Each player must first "generate" his player character in order to determine the character's attributes, background, physical appearance, skills, etc. In short, he must determine all of the various factors that control what the character is capable of doing in a Science Fiction Role Playing environment. To generate a character the player should perform each of the following steps (as described in Sections 10.1— 10.8):

1) Decide in general what type of character to play.
2) Roll and assign the character's 10 temporary stats.
3) Choose a profession, a race, and a realm of telepathy.
4) Replace none, one or both prime requisites by 90.
5) Determine the stat potentials.
6) Determine the character's base hit points.
7) Develop the character's adolescence skills (level 0).
8) Determine the character's background.
9) Develop the characters apprenticeship skills (level 1).
10) Expend development points for level 2.
11) Outfit the character.
12) Total the character's penalties and bonuses.
13) Develop a persona for the character.
14) Start Play; character is at level 1.

Before beginning to generate a character, a player should make a general decision as to what type of character he wants to have. This decision should concern the character's profession, race, and his physical and mental attributes.

Example: *The character Sky Cloudd will be used in all of the exzmples in this section. Sky wants to be a human Armsman with good physical characteristics.*

10.1
THE TEMPORARY STATS

First the player must generate the stats (temporary) which determine his character's mental and physical prowess (See Section 2.0). To determine the stats for a character, first make 10 rolls (1-100) and record them. Ignore rolls of less than 20. This reflects the premise that exceptionally weak characters would not be caught alive on a hostile world.

Example: *The player generating Sky rolls: 25,87,76,19,36,82,47,20,98,61. Noting that 19 is below 20, he scratches it out and rolls a 57 to replace it. He curses the roll of exactly 20, but he must keep it.*

Players may assign the 10 randomly generated values to their 10 stats as they desire. This allows the players to run the type of character they want. (After all, the idea is to have fun). Some strict GMs may wish to have the players assign stats in the order they were rolled.

Example: *Sky allocates his stats thus:*

Ag:20 Co:98 Re:61 Me:76 SD:82
St:25 Qu:87 Em:57 In:47 Pr:36

Remember, the higher the stat, the more capable your character will be when performing an action using that particular stat. Keep in mind that when a profession for the character is chosen (see Section 4.0), the value assigned to the prime requisite for the character may be replaced with a value of 90. Thus it is often a good idea to assign your lowest stat to the prime stat.

10.2
CHOOSING A PROFESSION

After assigning the temporary stats, the player must choose his race (see Section 6.0) and a profession (see Section 4.0).

To ensure that adventurers will be the finest examples of their profession, the prime requisites (see Section 4.0) of each character **may** be raised to 90. This also has the effect of preventing a character from being crippled by a single bad stat and tends to even characters out, at least at the start, so that players start at about the same level in at least their chosen profession. If a character wants a stat higher than 90 in his PR, he may keep the naturally rolled stat which he assigned, but he may not raise another stat to 90 (except for his other prime requisite).

Example: *Sky decides to be a Human Armsman. Sky cheerfully replaces the stats for Agility and Strength (the prime requisites for an Armsman), discarding the 20 and 25 and substituting 90's. He couldn't adjust his In or Em to 90 as they are not prime requisites for an Armsman.*

10.3
THE POTENTIAL STATS

To determine a character's potential stat,, roll 1-100 and consult the *Stat Potentials Chart*, (pg. 43) cross-indexing the roll with the range into which the initial stat falls. The number resulting is the potential stat (potential), the value to which that stat could actually rise in the course of play. Generally this level cannot be exceeded.

Example: *Sky's rolls to determine his stat potentials are:*

83 for Ag *89 for St*
96 for Co *57 for Qu*
34 for Re *72 for Em*
41 for Me *56 for In*
14 for SD *22 for Pr*

Starting with his Quickness, Sky determines the potential is the same as his temporary (the chart yields a "-" result, indicating that initial and potential stats are the same). Next, his Constitution. His potential is a 99, due to his lucky '96' potential gain roll. (Sky will be able to resist the Truth drugs when the Lectroids capture him!). His Strength (now 90, because he was able to raise his prime requisites to that figure), is raised to a 95 with the help of his 89 roll. Following this process for the other stats he gets:

Ag:90(90) *St:90(95)*
Co:98(99) *Qu:87(87)*
Re:61(61) *Em:57(71)*
Me:76(76) *In:47(63)*
SD:82(82) *Pr:36(36)*

The first number is the initial temporary value of the stat, the second (in parentheses) is its potential value.

Stat Gain Rolls — Studies show that many human attributes do not reach their peak until the late twenties, after they have reached the adult level that most characters begin adventuring. To reflect the fact that exercise and stress will help a character develop his physical and mental attributes, ***Space Master*** experience guidelines allow him to make stat gain rolls (See Section 5.4) until his temporary stats reach his potentials. When a character reaches the second level of experience, and every level thereafter, he will be entitled to make stat gain rolls to determine if his adventures affect his stats. Yet remember, stats may seldom be improved beyond their potential values.

Effect of Potentials — Potentials have no effect on play whatsoever. Permanently disabling injuries may be reflected in a reduction of potential stats; shorter term injuries cause temporary stat reductions.

STAT POTENTIALS CHART

Roll on	Under	Range of the Initial Stat								
D100	25	25-39	40-59	60-74	75-84	85-89	90-94	95-97	98-99	100
01-10	25	-	-	-	-	-	-	-	-	-
11-20	30	-	-	-	-	-	-	-	-	-
21-30	35	39	-	-	-	-	-	-	-	-
31-35	38	42	59	-	-	-	-	-	-	-
36-40	40	45	62	-	-	-	-	-	-	-
41-45	42	47	64	-	-	-	-	-	-	-
46-49	44	49	66	-	-	-	-	-	-	-
50-51	46	51	68	-	-	-	-	-	-	-
52-53	48	53	70	-	-	-	-	-	-	-
54-55	50	55	71	-	-	-	-	-	-	-
56-57	52	57	72	74	84	-	-	-	-	-
58-59	54	59	73	75	85	-	-	-	-	-
60-61	56	61	74	76	86	-	-	-	-	-
62-63	58	63	75	77	87	-	-	-	-	-
64-65	60	65	76	78	88	-	-	-	-	-
66-67	62	67	77	79	88	89	-	-	-	-
68-69	64	69	78	80	89	89	-	-	-	-
70-71	66	71	79	81	89	90	-	-	-	-
72-73	68	73	80	82	90	90	-	-	-	-
74-75	70	75	81	83	90	91	-	-	-	-
76-77	72	77	82	84	91	91	-	-	-	-
78-79	74	79	83	85	91	92	-	-	-	-
80-81	76	81	84	86	92	92	-	-	-	-
82-83	78	83	85	87	92	93	-	-	-	-
84-85	80	85	86	88	93	93	94	-	-	-
86-87	82	86	87	89	93	94	94	-	-	-
88-89	84	87	88	90	94	94	95	-	-	-
90	86	88	89	91	94	95	95	97	-	-
91	88	89	90	92	95	95	96	97	-	-
92	90	90	91	93	95	96	96	97	-	-
93	91	91	92	94	96	96	97	98	-	-
94	92	92	93	95	96	97	97	98	99	-
95	93	93	94	96	97	97	98	98	99	-
96	94	94	95	97	97	98	98	99	99	-
97	95	95	96	97	98	98	99	99	99	-
98	96	96	97	98	98	99	99	99	100	-
99	97	97	98	98	99	99	100	100	100	-
100	98	98	99	99	99	100	100	100	100	101

Number given is the stat potential. A "-" indicates that the potential is the same as the initial stat.

10.4 ADOLESCENCE SKILL DEVELOPMENT

After a character has generated his stats and chosen a profession, adolescence skill development must be performed. The character must assign his weapon skill development costs, total his development points, and the expend those points to develop his skills (see Section 3.2). This process reflects one experience level of development, representing what the character learned in his childhood and adolescence. A character who has completed this process is considered to be level 0. Section 3.0 describes how development points are obtained and expended. The following example shows how adolescence skill development proceeds.

Example: *Sky has 37 development points (see stats in the previous example) — based on his 5 temporary "development stats": 8 for Agility, 9 for Constitution, 7 for Self Discipline, 6 for Reasoning, and 7 for Memory (Check Dev. Points Column of the Stat Bonuses Chart, pg. 45).*

Sky notes that the weapons development cost sub-categories are not set. He assigns the cost figures to the weapons classes, choosing lower costs for the weaponry he most favors. Since he is an Armsman, he matches categories and costs as follows:

1/5	*1-h Energy*
2/4	*1-h Projectile*
2/7	*2-h Energy*
2/7	*1-h Edged*
2/7	*Thrown*
5	*Launcher*
10	*For the other categories.*

Sky favors 1-handed energy weapons and 1-hand projectile weapons.

Naturally (not being the self-destructive type) he wants to survive. His character starts with 9 hit points as a result of his Co) (see Section 2.4, but he would feel comfortable taking more. Sky feels 9 is inadequate for a serious Armsman. Consequently, he expends 7 of his 37 pts. to acquire 2 body development skills (Cost 2/5. The first skill rank costs 2, the next 5, for a total of 7). This enables him to roll 2 eight-sided (D8) dice and add the result to his point total. Sky now has 30 development points remaining.

Looking to his armor needs, he decides to begin adventuring in an Extended Flak Vest AT 6. Consulting the Armor Chart (pg 62), he notes that the penalty for untrained combatants in a Duralloy vest is -15; the minimum maneuver penalty for trained persons using the armor is -0. He desires the smallest penalty possible (which in this case is fortunately Zero, but realizes he must acquire skill rank 3 before he can reduce the -15 to a -0 (each skill rank equaling 5 proficiency: 3x5=15, 15-15=0).

Sky realizes that because of his St/Ag stat bonus for Maneuving in Armor, he can wear AT 7 with only a -5 maneuver penalty.

The cost figure in this area (Light Body: 1/) indicates that for 1 point per skill rank, he can acquire as much maneuvering in the Extended Flak vest as he needs. Since Sky only chose a relatively unencumbering armor, he need only spend 3 points. Had he chosen to wear an Exoskeleton Breastplate and greaves (AT 18), it would have cost him 22 development points (2 points per rank under "Armored Exoskeleton", and 11 ranks to reduce the -50 to the minimum of -15).*

Moving on to weapons, he decides to concentrate on developing Blast Pistol expertise. He assigned the 1/5 cost breakdown to 1-hand Energy weapon development and must pay 1 pt. for the first rank and 5 pts. for the second skill rank, should he attempt to rise two skill increments immediately. Wanting to become good with Blast Pistol quickly, Sky expends 6 of his development points. He cannot progress more rapidly, since picking up 3 skill ranks when calculating any one experience rank's trait development is not allowed (except for areas marked with a number followed by /).*

Sky now has 21 of his original 37 development points remaining. Next he decides to learn to use a MLA pistol. At a cost of 2 pts. He rises to skill rank one (note that 1-h Projectile weapons costs for him are calculated at 2/5). He wants to go no further than skill rank 1 at this time. His remaining development point total is 19. Sky then decides that he rally wants to be able to use a Plasma Repeator Rifle. His skill rank cost for 2-h Energy is 2/7, so he expends 2 pts. for the first rank and 7 pts. for the second. Note that, had Sky thought earlier about how badly he wanted to use a Plasma Rifle well, he should have assigned it a lower point cost, rather than 1-h projectile. He has chosen, however, and must abide by his earlier decision. This leaves him with 10 points.

*Rounding out his character, he picks up skill rank 1 in Climbing (cost 3), Perception (cost 2), Scanner Analysis (cost 1) First Aid (cost 1) and Driving (cost 1); choosing to learn to drive a gravitic floater car. Sky remembers that Skills marked with a "***" (Such as Driving, Atmospheric Pilot, Heavy Energy Projectors, etc.) are actual general and the skill ranks must be picked in specific areas. He also picks a skill rank in Heavy Energy Projectors, choosing to develop Laser Cannon. Note that he can only pick one rank per level in this skill. Sky totals his expended development points (3+2+1+2+2=10) and notes that he has reached his limit.*

Sky has finished his period of adolescent development. His non-zero skill ranks and their costs are:

Adolescence

2 — 1st skill rank in Body Development
5 — 2nd skill rank in Body Development
3 — 3 skill ranks in Maneuvering Light Body Armor
1 — 1st skill rank in Blaster Pistol
5 — 2nd skill rank in Blaster Pistol
2 — 1st skill rank in MLA pistol
2 — 1st skill rank in Plasma Rifle
7 — 2nd skill rank in Plasma Rifle
3 — 1st skill rank in Climbing
2 — 1st skill rank in Perception
1 — 1st skill rank in Scanner Analysis
1— 1st skill rank in Driving a gravitic floater car
1— 1st skill rank in First Aid
2 — 1st skill rank in Heavy Energy Projector

Since he has obtained two skill ranks in Body development, he rolls 2 D8 (result 6 + 7) and adds the total to his base hit points (13+9=22) and modifies it for Constitution (98 gives a 20% bonus, 20% of 22 = 4; he has 26 total hit points). Had he been a Telepath and picked any skill rank in a group of Psions, he would now make a Psion gain roll.

STAT GAIN CHART

Roll on D100	DIFFERENCE BETWEEN TEMPORARY AND POTENTIAL STAT								
	1	2	3	4-5	6-7	8-9	10-11	12-14	15+
01-04	*	*	*	*	*	*	*	*	*
05-10	0	0	0	0	0	0	+1	+1	+1
11-15	0	0	0	0	0	+1	+1	+2	+2
16-20	0	0	0	0	+1	+1	+2	+3	+3
21-25	0	0	0	+1	+1	+2	+2	+4	+4
26-30	0	0	+1	+1	+2	+2	+3	+5	+5
31-35	0	+1	+1	+1	+2	+2	+3	+5	+6
36-40	0	+1	+1	+1	+2	+3	+4	+6	+7
41-45	0	+1	+1	+2	+3	+3	+4	+6	+8
46-50	0	+1	+1	+2	+3	+3	+5	+7	+9
51-55	+1	+1	+2	+2	+3	+4	+5	+7	+10
56-60	+1	+1	+2	+2	+4	+4	+6	+8	+11
61-65	+1	+1	+2	+3	+4	+4	+6	+8	+11
66-70	+1	+2	+2	+3	+4	+5	+7	+9	+12
71-75	+1	+2	+2	+3	+5	+5	+7	+9	+12
76-80	+1	+2	+3	+3	+5	+6	+8	+10	+13
81-85	+1	+2	+3	+4	+5	+6	+8	+10	+13
86-90	+1	+2	+3	+4	+6	+7	+9	+11	+14
91-95	+1	+2	+3	+4	+6	+7	+9	+11	+14
96-99	+1	+2	+3	+4	+6	+8	+10	+12	+15
100	+1	+2	+3	+4	+6	+8	+10	+12	+15

Locate the column corresponding to the difference between the temporary (real) stat and its potential and roll D100 to determine the amount the temporary stat increases by. Roll separately for each stat.

* A roll of 01-04 indicates that the stress of adventuring has caused a temporary regression of faculties. The stat (temporary value only) is **Reduced by double the amount rolled** (2-8). Note that this reduction is always possible, even if the stat has already reached its potential and thus all 10 stats must be checked for possible loss or gain. Stats reduced in this manner can be restored by stat gain rolls as subsequent experience levels are reached.

Note that this table can also be used to determine recovery from injury or disease. The GM merely assigns a reduction in the appropriate stat (Agility for a sprained ankle, Constitution for a disease, etc.) and allows the character to make periodic recovery rolls provided he observed whatever conditions were necessary for recovery (e.g.: bedrest). In this case, the column would be determined substituting the temporary value of the stat before reduction for the potential, and rolls might continue until the previous temporary was achieved (but not beyond).

10.5 APPRENTICESHIP SKILL DEVELOPMENT

After a player has completed the adolescence skill development process for his character, he performs his apprenticeship skill development. This represents the professional training or apprenticeship that he is presumed to have gone through. Thus, each character goes through the entire skill acquisition process (and receives the skills picked) twice before starting play. Note that the development points from these two levels may not be combined, and that they are treated in always as separate experience levels. Telepath characters are entitled to make Psion gain rolls after expending the development points for each of the two levels. (Thus, it is quite possible for a character to begin with more than one list of Psion.) After completing both skill development processes, a character is 1st level and has 10,000 experience points.

Example: *Next Sky expends development points for the skills he wants to develop during his apprenticeship. Still feeling his total hit points are inadequate, he develops 2 more body devskills (7pts.).*

Continuing his strong — some might say obsessive — effort to learn the use of a Blast Pistol, he expends a further 6 points to raise his skill to rank 4 (1 pt. for the first rank raised — to skill rank 3 — and 5 more to raise it one more — to skill rank 4). He also improves his skill with his handy Plasma Rifle by two ranks (to rank 4) at a cost of 9 pts.

Sky improves his Scanner analysis ability (from rank 1 to rank 3 cost 4 pts.). He wants to learn to swim, so he expends 2 points for 1 skill rank (now he can tread water). Sky then hones his driving skills by two ranks at a total cost of 7. He has expended 35 of his 37 points so far, and having 2 left, decides to learn the basics of shipboard Sensor Analysis. Summarizing his picks:

Apprenticeship

2 — 1st Skill Rank in Body Dev.

5 — 2nd Skill Rank in Body Dev.

1 — 1st Skill Rank in Blaster Pistol

5 — 2nd Skill Rank in Blaster Pistol

2 — 1st Skill Rank in Plasma Repeator Rifle

7 — 2nd Skill Rank in Plasma Repeator Rifle

1 — 1st Skill Rank in Scanner Analysis

3— 2nd Skill Rank in Scanner Analysis

2 — 1st Skill Rank in Swimming

1 — 1st Skill Rank in Driving Gravitic car

6 — 2nd Skill Rank in Driving Gravitic car

2 — 1st Skill Rank in Sensor Analysis

He has finished his apprenticeship and receives these skill ranks as well as those already gained during adolescence. He again rolls 2 D8 for the body development ranks he acquired during his apprenticeship (result 1 + 8) and adds them to the base hit points he had previously rolled (before they were modified for Constitution), 9 + 22 = 31, and again modifies the total for his high constitution (20% of 31=6, 31+6=37). Sky begins play with 37 total hit pts.

Sky must now repeat the process of expending development points for the skills he will develop as he progresses from experience level 1 to level 2. He does not receive these skills until he attains experience level 2. (This development is not included in this example.) Remember that all development points are expended before one embarks on a new experience level.

The skills with which Sky begins play are:

Maneuvering in Armor:

Light Body..... Rank 3
Bonus 15

Weapon Skills:

Blaster Pistol:..... Rank 4
Bonus: 20

MLA Pistol: ..... Rank 1
Bonus: 5

Plasma Repeator Rifle:Rank 4
Bonus: 20

General Skills:

Climbing:..... Rank 1
Bonus: 5

Swimming:..... Rank 1
Bonus: 5

Perception:..... Rank 1
Bonus: 5

Driving (grav. car)..... Rank 3
Bonus: 15

Special Skills:

Scanner Analysis..... Rank 3
Bonus:15

First Aid..... Rank 1
Bonus: 5

Combat Skills:

Heavy Energy ProjectorRank 1
Bonus: 5

Astro skills:

Sensor Analysis: ..... Rank 1
Bonus: 5

All other skills are at rank 0 (Bonus: -25). Sky can take 37 hits.

10.6 DETERMINING THE CHARACTER'S BACKGROUND

The GM and player should determine the player's background; Section 7.0 gives some suggestions for such background details as special abilities, special equipment, monetary resources, family history, etc. The GM can base this background upon the character's raceand profession; as well as the setting of the game itself. This is up to the GM, although the PC concerned should have some input.

There are several possibilities in the Optional Rules, including military training, an NPC Mentor, and hobbies, to help the GM to 'flesh out' the PC background.

10.7 FINAL CHARACTER PREPARATION

Once the player has completed the steps outlined in Sections 10.1 -10.6, he needs to obtain equipment and supplies for his character. He also needs to total each of his bonuses (i.e., Offensive Bonuses, Defensive Bonuses, and all of the other skill bonuses).

10.71 OUTFITTING

A GM must decide with how much equipment and money his Player Characters begin play. Following are a few basic guidelines:

1) Each player begins the game with one normal energy or projectile weapon of his choice, and two magazines/power packs (one for the weapon and a spare). He must have a skill rank of 1 or more in the applicable weapon skill.

2) He begins with clothes (including a light coat and rugged shoes), a holster and belt for his weapon(s) and equipment, and personal effects (including an ident disc, Elmonit card, grooming items, etc.).

Every player should start with some money (see Section 7.0) with which to buy equipment and to survive on until he can get more. The character may purchase (and start the game with) any equipment and supplies that are allowed by the GM. The GM may wish to make specialized equipment and supplies available.

STAT BONUSES CHART

1-100 Stat.	Bonus on D100	Devel. Points	Power Points
102+	+35	11	4
101	+30	10	3
100	+25	10	3
98-99	+20	9	2
95-97	+15	9	2
90-94	+10	8	1
85-89	+5	8	1
75-84	+5	7	1
60-74	0	6	0
40-59	0	5	0
25-39	0	4	0
15-24	-5	3	0
10-14	-5	2	0
5-9	-10	2	0
3-4	-15	1	0
2	-20	1	0
1	-25	1	0

10.72 TOTALING THE BONUSES

At this point the player must determine and total his bonuses for skills and other capabilities.

Skill Rank Bonuses — The number of skill ranks is totaled for each skill, and the bonus is determined from the *Skill Rank Bonus Chart*, (pg. 38) and recorded on the Player Character Record on the appropriate skill's bonus line.

Stat Bonuses — For each stat, the stat bonus is obtained from the *Stat Bonuses Chart* and written in the appropriate space next to the stat on the Player Character Record. These stat bonuses are also recorded on the bonus line of any skill to which they apply.

Professional Bonuses — Some professions receive level combat bonuses and skill bonuses (see Sections 4.0). These bonuses are recorded in the appropriate spaces on the Player Character Record.

Item Bonuses — Certain weapons or equipment provide bonuses to certain skills. These bonuses should be recorded on the Player Character Record.

Special Bonuses — These bonuses can come form background, Psion, armor penalties, etc. Some of these bonuses are already on the Player Character Record. Total these bonuses for each skill and place them in the appropriate spaces on the Player Character Record.

Finally, for each skill, all of the bonuses are summed to obtain the total bonus which is used in play.

10.8 BRINGING THE CHARACTER TO LIFE

The player should develop a scheme and outline of his player character's basic character traits (see Section 9.0). These may be the player's own traits, in which the player character is basically the player himself placed in the game world and situation. Alternatively, the player may choose a persona entirely different from his own, or some medium between the two extremes.

10.9 PHYSICAL APPEARANCE

"It is only shallow people who do not judge by appearances"

Oscar Wilde
c. PreImp 9775

In addition to each character's stats (which affect his capabilities during play), it is desirable to have some measure of the character's appearance. In this section, suggestions for determining factors affecting a character are given (i.e., demeanor, hair color, eye color, height, weight, etc.). The GM should keep in mind that these factors are not essential to a game and may be bypassed in the interest of quicker play.

General Appearance — Appearance (Ap) is a value (01-100) which gives a general idea of the character's exterior look (e.g., an 01 or 02 appearance indicates a really ugly person, while a 99 or 00 appearance would indicate a very handsome or beautiful character). Appearance can be determined either by rolling 1-100 (not open-ended) or by rolling 1-100 and adding the character's Presence bonus (with a maximum result of 100 and a minimum result of 20 less than the character's Presence stat). Appearance can rise or fall during play due to circumstances (e.g., scars, diseases, increases in Presence, etc.). This is a very subjective rating and the GM should treat it as a general guideline during play.

Demeanor — This is an indicator of the general attitude that the character seems to present to the world. This is up to the character and GM, but typical demeanors might include: calm, neutral, angry, sly, greedy, silly, stubborn, stupid, rude, aloof, condescending, shy, overbearing, etc.

Physical Appearance Factors — Such factors as height, weight, hair color, eye color, gender, age, and so on should be determined by the GM and the players.

11.0 NON-PLAYER CHARACTERS

All characters whose actions are not under the control of a player (non-player characters, NPCs) are usually under the control of the GM. The extent to which these "NPCs" are developed and interact with the players is a factor that often determines much of the flavor and color in a Role Playing Game. A variety of NPCs can often inject action and uniqueness into a game, making it more like a colorful story than a series of monochromatic conflicts.

However, it is often a difficult chore to determine the capabilities and skills of a large number of NPCs. To help alleviate some of this hassle, the Non-Player Character Table (5.0 in the **GM book**) is provided.

This chart provides a set of skill bonuses for each of the professions described in Section 4.0. A variety of other statistics concerning each class is also provided. Stats for level 1, 3, 5,10, 15, and 20 are given. To obtain the statistics for some other level, merely extrapolate.

These skill bonuses assume that the NPC has average stats in his non-prime requisites and 90's in his prime requisites. Race attributes and special equipment do not figure in these bonuses.

12.0 OPTIONAL RULES

These rules are meant to provide more flexibility and variety when starting player characters. GMs should realize that these rules allow characters to start play with more skills than are normal under the basic rules.

12.1 ALTERNATIVE STAT GENERATION METHODS

Under the basic rules, the 10 temporary stats are rolled and then assigned to the 10 individual characteristics. Then the profession is chosen and the potentials are rolled for each stat.

Under this optional rule, the order in which the steps of the process are performed is changed. The 10 temporary stats are rolled normally, then the potentials are rolled, then the temporary/potential stat pairs are assigned to the specific characteristics, and finally the profession is chosen.

This rule is included because often stats will be rolled and assigned, with low stats in characteristics that a player does not want to emphasize. Then the player will choose his profession and roll his potentials. If he is lucky in those areas where he has placed his low stats and unlucky in other areas, he can end up with higher potentials in unwanted areas. This optional rule allows the players more control over their stats, specifically their potentials. If a GM wants a random stat potential situation, he should use the basic rules.

To handle the replacement of prime requisites by 90, the actual D100 rolls for potentials should be recorded. If the prime requisites are replaced with 90's the original D100 rolls can be used to calculate the new potentials.

12.2 OPTIONAL LEVEL ADVANCEMENT RULES

These optional rules concern the process of character and skill development. They make the level advancement process slightly more complicated but more realistic.

12.21 PARTIAL SKILL ADVANCEMENT AT HALF-LEVEL

When a character reaches an experience point that is more than halfway to his next level, he can advance 1 skill rank in up to 3 skill areas. He may only select skill areas he is currently developing.

The reasons for including this rule are threefold. At the lower levels the amount of experience required to advance a level is more than in other SF role playing systems. This reverses at the higher levels since our experience progression is arithmetic, rather than geometric. Secondly, it is a compromise between the reality of a continuous learning process and the playability of developing skills only at discrete intervals. Finally, if the three skills chosen are skills that have recently been employed in the adventure in progress, then this rule reflects the action in the game.

The GM has two options when using this rule; he may allow the player to choose the three skills, or the GM can examine the activities of the character during the past half-level and choose the skills or advance based upon those activities. The GM may also choose to vary these options depending upon the situation.

If one of the "skills" chosen is a Psion List, the character may be allowed to roll to learn the Psion list being developed. If he is successful, then he will be able to cast Psions on the list of a level equal to lower than his current level.

12.22 ADDITIONAL REQUIREMENTS FOR SKILL ACQUISITION

Under the basic rules, there are no physical requirements for skill development. The only requirements for a character to learn a skill are (1) to expend the development points and (2) to gain an experience level. This assumes that the character practices and meditates on the skills which he is learning. The following rules provide requirements that must be met before skills can be learned. The GM can adopt some, none, or all of the following optional rules. These rules add some extra bookkeeping and complexity to the skill development and level advancement process.

Practice and Studying — Under this rule a certain amount of time must be spent practicing and/or studying a a skill to be developed (whichever is appropriate). The amount of time spent should be determined by the GM, depending upon his world system and the pace that he wants to set for his game. The suggested values are 1 day/skill rank and 1 week for a Psion list. This practice or study can occur anytime after the skills have been chosen for development.

The practice or study should take approximately 8 hours per day. The time could be spread over a long period of time at 8 hours/skill rank and 56 hours per Psion list. Under some world systems (or for some races) this might be more or less than 8 hours per day.

Equipment and Facilities for Practice — A GM may want to require equipment and facilities for practice. This could be accomplished by having gyms, practice arenas, schools, guilds, etc. This adds complexity, but provides a reason for adventure in a town or city setting in a campaign game.

Material and Facilities for Studying — For reasons similar to those given above, the GM may want to require material and facilities for learning and studying Psion lists, linguistics, etc. This requirement would also allow the GM to restrict the use of certain Psion lists that do not fit into the world system being used. It also can be used to initiate quests and adventures to obtain certain rare and expensive Psion lists.

Meditation Period — Often when an experience level is reached by a character it occurs at an active moment during a game. If the character has already completed his practice, he may reasonably request that he be allowed to advance his developed skill ranks. This can be very disruptive.

Under this rule, once an experience level is reached the skills developed are not advanced until the character has slept or meditated for 8 hours (more or less depending upon the wishes of the GM). This reflects the character thinking or dreaming over the experience that he has gained during the last level and how it applies to his skills and abilities.

12.3 HOBBIES

Characters usually begin play with fairly normal Science Fiction Role Playing characters. Due to the cost effectiveness of developing certain skills, this may seem very restrictive to some people. This option suggests that a simulation of hobby skills be used. Hobbies are defined to be in this case skills or abilities that do not normally coincide with the profession of the character. For example, Healers are rarely mass murderers.

At the end of the development period for adolescence, the character may choose a skill as his primary hobby and another skill as his secondary hobby. At the end of his apprenticeship development period (before Psion rolls), the character receives 4 extra skill ranks in his primary and 2 extra skill ranks in his secondary hobby. Any skill can be chosen to be a hobby, and the skill ranks obtained are in addition to any developed by a more normal process. A hobby area cannot have a skill acquisition cost of 20 or more.

This optional rule is only meant to provide a guideline for the use of hobbies we have found they make characters more individualized and unique. A GM may want to change the number of hobbies (e.g., 5-1,4-2,or 3-3). The GM may want to restrict the use of hobbies to coincide with the individual backgrounds or his world system.

12.4 PC TRAINING

The following sections are designed to be easily interfaced with existant campaigns, and add a considerable amount of detail and personal touch to any player character. Players who wish to utilize these options should discuss the details and ramifications with their GM, as many of the decisions made herein will reflect the overall feel of the campaign in general. By toying with these parameters, players and GMs alike can design more unique and detailed characters, adventures, and campaigns.

Military/Paramilitary Training

One of the central aspects of the ***Space Master*** universe, as well as most other SFRP games, is the all-pervasive presence of various military groups. These groups or services are an integral part of the campaign atmosphere, from the mighty forces of the Terran Empire to the small but dedicated bands of rebel fighters which oppose them. They include any other Provincial or independent navies, scout services, or security forces. Player characters will often encounter these groups, or members of these groups, and some may wish to be enlisted themselves (or to have been enlisted at some earlier time in the PCs life). In either case, the skills and attitudes inherent in any such group will (or should) be recognizably unique to that specific group. In order to create and maintain services such as these, the GM must first determine exactly what sort of training their members would receive. (The core aspect, or "personality," of all militaristic groups lies in the uniformity of their own specific training programs). Only by relying upon certain specific fundamental values or skills can any service hope to attain the consistency (and interchangeability) of personnel which is necessary for it to function. This section allows the GM to create and maintain unique and consistent military and paramilitary services (and sub-branches of those services) by use of a simple form. Once completed, this form will guide the GM in the creation of NPC servicemen as well as enlisted PCs. An example of such a form in its completed stage is included at the end of this section; for PC and NPC members of the Devonian Xeno Scouts.

Any NPC servicemen can be assumed to have made it through the training programs delineated here, and will have "reaped the benefits" (i.e., will possess, at a minimum, the skills indicated) of the service which trained him. Therefore, for such NPCs, only the skills learned section of this outline is important. Any player character who wishes to do the samemust first pass several tests, meet minimum requirements, and succeed in making it through the training program. Exception: for PCs who have not yet begun play, the GM may wish to simply make the same assumption as is made for NPCs (i.e., training has already been successfully completed). In this case, all that the player need do is expend the required number of Development Points to purchase the indicated skills at the indicated rank. Also, such PCs must be assumed to have entered the service at level 0 (or possibly in adolescence), and will begin play (as per usual) at level one as enlisted personnel, ready to begin their military careers.

Military/Paramilitary Training Procedure

General Description: In order to select a service branch which appeals to him or her, the player needs to know several important general facts about any given branch. Likewise, these notes will aid the GM in running NPC servicemen. The general description of any such group should include the group's primary and, secondary responsibilities, as well as the prevailing attitude of the personnel within the group, and perhaps the amount of funding and respect the group receives from its sponsoring government. Once the PC has decided to join a given service branch, the following steps must be followed:

Enlistment requirements: Each service will have its own ideas as to what a "useable' individual is, and these views are reflected in the minimum (temporary) stats and minimum skills requirements. These minimums should be set (when designing the service branch) by the GM, and must be met by any PC who desires enlistment. Likewise, each service branch will have its own ideas as to which individuals will definitely be refused enlistment, regardless of stats and skills (e.g., immigrants, felons, etc). If the PC meets the minimums and does not fall into the refused category, he or she may enlist. The enlistment difficulty is denoted by use of a standard Difficulty Level rating, and indicates the severity of the service's enlistment examinations, physicals, and psychological tests. The PC must succeed in a static maneuver roll modified by this Difficulty Level, along with any stat modifiers given in the modifier(s) section (decided by the GM). Obviously, some branches will desire Reasoning over Constitution, etc. If the total roll is less than 100, the PC has failed the entrance exams (for whatever reason the GM sees fit) and may or may not be able to try again at a future date (depending on whether or not such individuals are refused enlistment by the branch in question). If the total roll is 101 or higher, the PC has passed the entrance exams and is officially enlisted. Some branches will offer enlisting PCs a choice of sub-branches, while others will insist upon completion of "basic training" before any such decisions may be made. Still others will do a background check of enlisting personnel, and this may have some influence upon which sub-branches the PC will be allowed to select.

Divisions and basic training: Any given division or sub-branch (with the exception of "basic training") may have prerequisites, minimum stats, and/or minimum skills requirements above and beyond those of ordinary enlistment which must be met by any personnel who choose to join that division. Likewise, any given division (except basic) may refuse to allow certain individuals to join. If these requirements (determined by the GM when designing the service division) are met, the PC may enter the division in question.

The skills learned in any given division will usually be well known to all citizens of the Province or region, although this does not preclude the possibility of covert organizations whose very existence may be al secret. In any case, once the PC meets the requirements of the division, he or she will spend the indicated time to train in these skills. At the end of this training period (during which the PC is assumed to have expended the necessary Development Points for the skills in question — any leftover DP are forfeited), the player must succeed in another static maneuver roll, at the DIFF. (Difficulty Level) and with the MODS (modifiers) that the GM sees as applicable (these MODS will generally be stat modifiers, although they may be straight additions to or subtractions from the roll, depending upon the GM's view of the service division in question). This is called the Training Roll.

If the adjusted total obtained on the training roll is 100 or lower, the player character has not succeeded in passing through training, and will either have to do it all over again (the skills learned are not cumulative in such a case) or join a different division (assuming that this is possible within the service branch). A critically low roll (of 05 or lower) indicates that some sort of major difficulty has occurred; the PC has suffered some physical damage or stat deterioration, run into legal complications, or has been dishonorably discharged due to an inability to adjust to military lifestyle, etc. Usually, a character who fails a training roll three times will be discharged due to an inability to adjust to military lifestyle, etc. Usually, a character who fails a training roll three times will be discharged from service, and will thereafter be considered refused enlistment for the service branch in question, although this practice may differ from service to service and will almost certainly differ during times of war (during which a positive modifier might be applied to both the enlistment and training rolls, due to the less stringent enforcement of criteria most military groups exercise in such times).

If the adjusted total for the training roll is 101 or higher, the PC has completed training, and will have accumulated enough experience points to place him or her at the bottom of the next experience level. At this time, the PC makes Stat Gain rolls as per the usual procedure, locks in all indicated ranks of skills learned during training and receives any special level bonuses and modifications which may apply due to profession (Section 4.0).

A critically high total on the training roll (of 200 or higher) indicates an unusual level of success; the PC will have been awarded a raise in service rank and/or pay, or will be assigned to a very desirable installation, route, or detail. Lastly, having completed training, the PC will be issued his or her basic equipment. This equipment may (and most likely will) differ from division to division, and should be noted on the form.

For the duration of any PCs enlisted career, the GM will have to approve any study picks the player makes for the character, as the opportunity to study many skills will be greatly lessened (or completely negated) by the nature of the service, division, and/or assignment in question. These stipulations are purely value judgements on the part of the GM, and must also be taken into account during the creation of NPC members of such organizations.

12.5 PC SPECIAL ABILITIES

The following are suggested modifications/improvements which might be employed in mutations, eugenically influenced persons, Androids or Replicants. They are by no means the only possibilities, but note that most have corresponding drawbacks, for the purpose of play balance and variety.

1) Inner eyelid (protection from dust/sand/bright light). +20 when operating under such circumstances.

2) Six-digited hands/feet. +10 to Balance rolls and manipulative rolls (Picking locks, delicate repairs, etc).

3) Acute sense of smell: distinguish odors at +50; 30m upwind and 1000m downwind; 60m in still air. Tracking at +25. Skill in recognition possible at a cost of 1/3 (In/Me). However, character is susceptible to nosebleeds and operate at an overall -5 for every 300m above sea level (normal Terran atmospheric pressure) and -50 in severely lower pressure environments. Double all bleeding hits suffered from Vacuum (decompression) Criticals.

4) Natural night vision allows perfect sight in equivalent to Terran normal clear night, 10m even in pitch dark. However, normal sight in full daylight is only possible with goggles or tinted lenses. Goggles cause a -15 Perception penalty.

5) Unusual voice ability provides a +20 when using Public Speaking, Acting, or utilizing the Psionic powers of Voice. However, the vocal chord and tonsil arrangement makes them vulnerable to bacterial infection: possessor must make a monthly RR vs Strep Throat at -30. Even if cured promptly with drugs, there is a 10% chance with each infection that the ability is reduced by 5 (can become *negative*). There is also a chance of acquired immunity to antibiotics if used frequently. In any case, victim cannot speak while ill.

6) Acute hearing allows isolation and analysis of any sound within 300m under normal circumstances, and through up to 3m of solid (non-dampening) material. Also can use high pitched, whistling sounds to determine the size and shape of enclosed spaces (up to 300m) with great accuracy using sonar. Unfortunately, any loud noise nearby (a projectile gunshot, a jet engine, an alarm) will possibly cause deafness. Roll a RR (modified at GM's discretion); deafness lasts one hour/5% failure.

7) Incredible appearance provides +30 to all Seduction, Public Speaking and Acting rolls and certain charisma-oriented Psions (useable against own or very similar race of course. A Trilopter can barely tell one humanoid from another, much less realize that one is "beautiful"). For other skills using Presence add a 20 bonus to that Stat. However, Memory and Reasoning were sacrificed: -10 to those stat bonuses. ("All looks and no brain" as they say...)

8) Improved bone and muscle structure allow a +20 to all leaping maneuvers, as well as double the normal range (2m vertical; 6m horizontal static start; 15m horizontal running start). This attribute also allows a +20 bonus to movement and such skills as Tumbling, Zero-G Maneuvering, and Dance. The drawback is that you must have daily infusions of Calcix IV, a calcium derivative which keeps your tissues in condition. For each day the infusion is missed, your skill reduces by 5. After ten days a comparable permanent decline begins, until after 20 total days the skeleton is too fragile to withstand any strain at all and collapses. As soon as infusions are re-initiated temporary damage is reversed and any permanent damage arrested.

MILITARY/PARAMILITARY TRAINING FORM EXAMPLE

SERVICE BRANCH: Devonian Xeno Scouts **HEADQUARTERS:** Karoline

GENERAL DESCRIPTION: Handle exploration, scientific evaluation (Resource Development and Sentient Status Ratings), xenological contact and production development on Frontier worlds; supply and transport aid during wartime. The most lenient and least glorified of the Devonian services. Standard tour is five years, one year tours available for specialists.

ENLISTMENT REQUIREMENTS

MINIMUM (TEMP) STATS: CO 75, IN 60

MINIMUM SKILLS: Perception (1 rank)

REFUSED ENLISTMENT: Repeat drug offenders, Colosians, suspected subversives, the physically handicapped, MERLOGH offenders.

ENLISTMENT DIFFICULTY: ROUTINE **MODIFIERS(S):** CO/IN

DIVISIONS AND BASIC TRAINING

DIVISION	Admin.	Basic/Spt.	Engineers	Piloting	Survey
PREREQUISITES	Prof: ADM	None	BASIC	BASIC	BASIC
			TECHs/ENG	PILOTs	EX/RE/PLs
MINIMUM STATS	RE 75	As above	AG 75	Qu 75	In 75
				AG 60	
MINIMUM SKILLS	A Math 1	As above	A Math 1	As above	As above
REFUSED	Non Devon	As above	As above	As above	As above
	citizens				
SKILLS LEARNED	Admin 2	Admin 1	Contort 1	Stargz 2	Surv**2
	Diplo 1	Signal 1	Rep. SA 2	Orb Plt 2	1st Aid 1
	Trade 2	MNV:LBA 3	Mech T 2	N Plt 2	Mult SA 2
	A Math 2	Percep 1	Elec T 2	H Plt 2	Planet. 2
	Propag. 1	Body Dev 1	Comp T 2	N Astro 1	Gen Bot 1
	Planet. 1	AFV 1	Pow T 2	H Astro 1	Gen Zoo 1
		Planet. 1	Mech En 1	SENSR 2	G Anthr 1
		Stun Pst 1	Electrn 1	EW.Comm 2	G Psych 1
TIME TO TRAIN	0.3 years	0.3 years	0.3 years	0.3 years	0.3 years
DIFFS & MODS	MDM RE	LT CO/IN	MDM IN/AG	HD QU/IN	MDM CO/IN
BASIC EQUIPMENT	Microcomp	Dura. Vest	R Scanner	As BASIC	As BASIC
	Discviewer	Abs Shld	Toolkit		
	Desk	St Pistol			
		UV Goggles			
		Ear Comm			
		3 En Cells			
		2 R/A pacs			

MILITARY/PARAMILITARY TRAINING FORM

SERVICE BRANCH: _____ **HEADQUARTERS:** _____

GENERAL DESCRIPTION:

ENLISTMENT REQUIREMENTS

MINIMUM (TEMP) STATS:

MINIMUM SKILLS:

REFUSED ENLISTMENT:

ENLISTMENT DIFFICULTY:	**MODIFIER(S):**

DIVISIONS AND BASIC TRAINING

DIVISION					
PREREQUISITES					
MINIMUM STATS					
MINIMUM SKILLS					
REFUSED					
SKILLS LEARNED					
TIME TO TRAIN					
DIFFS & MODS					
BASIC EQUIPMENT					

P

9) Training and selective brain use allow you to slip into *Memory Mode,* which allows assimilation of data at 10x normal speed (reading about 5,000 wpm) and total recall. This is particularly useful for learning languages and other memory related skills (cost for learning languages and history is halved.) However, this is very draining to the body. The day following each daily (lengthy: one hour or more) use of the ability, your temporary Co is reduced by 30. Also, Reasoning and Intuition are sacrificed: these stats are at -10 to their bonuses. Short-term *Memory Mode* (memorizing a brief manuscript or conversation) has no such ill effects. *Memory Trance* duration is pre-set before entering to last, for instance, as long as the conversation, tape or manuscript. Someone in the Trance cannot be awakened prematurely except by extreme means (slapping or other pain); memory of the trance in progress is lost .

10) Superb synapse development allows for blinding reactions: +20 to OB, and DB (in addition to normal Stat bonuses). You will always strike first unless surprised; and have the option of using adrenal *Speed* at will, 100% chance of success (with appropriate Adrenal Moves Rules applicable, pg. 12). To balance this activity, you require 1/2 again as much rest as the average person every night. (For most hominoids, 8 hours is the norm, so you would require 12). If the full rest was not gained, the ability is not useable for that day.

11) An elaborate gill system exists in addition to your lungs, allowing you to breathe either water or air with equal ease. The volume cost, however, reduces your exhaustion point total by 1/3 (with a 90 Co, one would normally have 90 Exhaustion Pts; you have 60). You are also susceptible to asthma attacks: 5% chance every time you come out of the water that you are incapacitated for 1-10 turns (minutes).

12) Due to unusual joint design you gain a +20 to all thrown attacks as well as static maneuvers involving the hands (locks, repair/construction) or feet (Balance). You also gain a +30 bonus to Contortions, being able to realign many joints. Unfortunately, whenever you land after a fall or leap, or strike something with your hand or an object in your hand, you must roll a RR for the ankle or wrist joint. On a roll of 01-05 the limb is sprained, you are stunned 1-10 rounds, and you are at -75 for appropriate actions until the sprain is healed.

13) Due to unheard-of Empathic abilities, you have a +20 to all skills utilizing that stat, and in addition have the ability to judge truth in others. To judge truth, you enter a *Truthtrance*, in which you can tell 80% of the time whether a statement is true. The remaining 20% you simply cannot tell, and reiteration of the statement only clouds judgement. When declaring truth, however, you are 98% accurate (For this roll, only the GM knows for sure; there is always a margin for error). You must be within 5m of the speaker in person for full accuracy. Truthtrance can last as long as desired, but sleep double the time length of the trance is *immediately* required (the truthsayer passes out). Unfortunately, you are forever at -50 to Acting attempts; and, perhaps worse, you are so sensitive to those around you that if any friend (group member, for game purposes) within 10m takes damage (hits) *you* take exactly half as many as he or she does. You do not take their criticals, but the hits can send you into unconscious shock, after which you take no more (since they are mentally inflicted). These hits come from any and *all* friends in the radius, and can be cured as normal hits are healed.

14) As a result of superior muscle and skeletal structure you are unusually strong and have an additional +20 to Strength bonuses (in addition to normal stat bonuses). However, You have a slight control problem and must roll every time you apply strength in a more delicate situation (opening a door, picking up a glass). A roll of 01-05 indicates that you overestimated and probably broke whatever you are holding. This is GM discretion, but as an example, one roll for breaking something during a meal is enough.

15) A superior conscious control of your body's internal functioning gives you a number of abilities: to concentrate platelets at a bleeding wound and stop up to one hit per round bleeding for every round of concentration; to be immune from the effects of *Stun;* to enter a trance and devote your body's full power to resisting a poison or disease (+50 to RR); to take double the normal number of hits without losing consciousness. It's too bad that you have chronic memory problems. Every time you wake up from sleep you must roll to see how many skills (zero, one or two) and which of your skills (including Secondary skills, Psion lists, and all others but body development) have been totally forgotten. Those skills are forgotten for that day, but restored during sleep; new skills could be lost tomorrow.

Note: *you never forget this special ability.*

12.6 VERY HIGH STAT BONUSES

Below is a chart for detailing two options for very high stats.

EXTENDED STAT BONUSES

	Option 1		Option 2	
STAT	BONUS	PP	BONUS	PP
100	+25	3	+25	3
101	+30	3.5	+30	3
102	+35	4	+35	4
103	+40	4.5	+40	4
104	+45	5	+45	5
105	+49	5.4	+50	5
106	+53	5.7	+55	6
107	+57	6	+60	6
108	+61	6.25	+65	7
109	+65	6.5	+70	7
110	+68	6.75	+75	8
111	+71	7	+80	8
112	+74	7.25	+85	9
113	+77	7.5	+90	10
114	+80	7.75	+95	10
115	+82	8	+100	11
116	+84	8.2	+105	11
117	+86	8.4	+110	11
118	+88	8.6	+115	12
119	+90	8.8	+120	12
120+	+1/lvl	.2/lvl	+5/lvl	.5/lvl

12.7 INTEGRATING STAT AND RACIAL BONUSES

To some GMs the different Racial bonuses (such as for Transhumans) are somewhat tedious, as they are held separate from the actual stat. One way of dealing with this is to change the character's actual stat (temporary and potential) to reflect the bonus.

Example: *Meteora is a Transhuman VII with a temporary strength of 89 and potential of 99. Consulting the Racial Statistics Chart (page 45) the GM notes that Meteora has a Racial St bonus of +25. An 89 would give her a +5, a 99 is +20. Thus, rather than keep two separate bonuses, the GM adjusts Meteora's 89 to a 101 and (consulting the* Extended Stat Bonuses Chart) *her 99 to a 104.*

WEAPON TERMINOLOGY AND USEFUL ABBREVIATIONS:

Automatic: Refers to any weapon which is capable of rapid-fire bursts of ammunition.

DB: Defensive Bonus, the total of a number of modifiers which affect how difficult it is to "hit" an opponent.

Energy weapon: Any weapon which projects an energy beam/burst as opposed to a physical projectile or missile weapon.

Fire: Any distanced weapon attack, this term corresponds to the "missile" concept in ***Rolemaster***, but is broadened to encompass projectile and energy weaponry.

Melee: Hand-to-hand combat (as opposed to "fire" combat) where opponents are physically engaged — be it a fistfight, a duel with rapiers, or a wrestling match. All of these are considered melee.

Missile weapon: In ***Space Master*** this indicates a low velocity airborne projectile; usually from a manually fired weapon. Such weapons include an arrow from a bow, a quarrel from a crossbow, a stone from a sling, a dart from a dart gun, etc. Thrown weapons are also included in this area. Normally, missile weapons do **not** include projectiles fired by explosions or other high-velocity propulsion means. Grenades are delivered (thrown) as missile weapons, but the effect/attack of a grenade is resolved as a *projectile* weapon attack (due to concussion and shrapnel effects).

OB: Offensive Bonus, the total of a number of modifiers which affect an attacker's chances of hitting an opponent with a weapon.

Projectile weapon: As opposed to a *missile* weapon, this indicates a device which mechanically fires a high-velocity projectile.

Psion: Referring to Telepathic/Psionic power; the act of using such power. This corresponds the the ***Rolemaster*** term "Spell" which refers to the use of a magical ability.

Self-reloading: Refers to any weapon which reloads (or recharges) itself and is ready for another shot almost immediately (i.e., it is capable of two attacks in the same round). Most energy weapons and projectile weapons fall into this category, while normal bows and thrown weapons do not. In terms of ***Space Master***, a self-reloading weapon is any weapon with a "Rate of Fire" of 2/rnd or 2 bursts (see the **Tech Book**).

13.0 THE BATTLE ROUND

All combat in the ***Rolemaster*** system takes place within a framework of ten-second *rounds* and one-minute *turns*. Normally, each combatant is allowed one attack roll per round, whether it be a spell/Psion, missile (bow and thrown fire) or melee. The rationale behind allowing missile and melee combatants only one roll every ten seconds is that, though he or she may actually swing or shoot more often that this, only one *effective* attack is made in a given round.

This concept is preserved in spirit in the ***Space Master*** system, though allowances have to be made for advanced multi-shot (i.e., self-reloading) weapons like revolvers, submachine guns, and plasma repeator rifles.

The basic principle to keep in mind is that each action takes a percentage of a round to complete. For example, one can view a physical attack as at least a 50% activity, casting a Psion as a 75% activity, preparing a Psion as a 90% activity, and movement as a 0-100% activity. Thus someone that casts a Psion may not make another attack.

For the sake of consistency, ***Space Master*** assumes that missile (bow and thrown weapon) attacks take 50% activity as opposed to the normal 75% for 1st Edition ***Rolemaster***. Both ***Space Master*** and the upcoming 2nd Edition ***Rolemaster*** will use this 50% figure with very specific "reloading" times. 2nd Edition ***Rolemaster*** will also incorporate the "two fire phase" battle round sequence presented in the next section.

13.1 THE BATTLE ROUND SEQUENCE

The combat sequence in ***Space Master*** is essentially the same as that used in the 1st Edition ***Rolemaster*** system, with a few additions necessary to incorporate the superior abilities of high-tech weaponry. The expanded ***Space Master*** combat round sequence is shown below, with the new additions asterisked. The RM "Spell" phases are now called "Psion" phases and the RM "Missile" phases are now called "Fire" phases.

There are now *two* Fire Phases (and of course, two Fire Result Phases). Only hand weapons which do not require reloading may fire in both phases (e.g., not a bow, crossbow, or single shot firearm). Examples are automatic pistols, assault rifles, and most energy weapons. These weapons can be fired more easily and frequently, and are thus offered two rolls during the round sequence. Details of exactly how self-reloading weapons are to be used are found later in this section.

1 — Psion Action Phase
2 — Psion Results Phase
3 — Psion Orientation Phase
4 — Fire Phase (A)
5 — Fire Result Phase (A)
6 — Movement/Maneuver Phase
7 — Fire Phase (B) *
8 — Fire Result Phase (B) *
9 — Melee Phase
10 — Melee Result Phase
11 — Final Orientation Phase

PSION PHASE

All combatants who will cast (or prepare) a Psion during this round must specify any pertinent information to the GM (Psion type, target, option to wait for opportunity fire, etc.). If any spells are to be cast/prepared, they would also be specified in this phase.

PSION RESULTS PHASE

All "cast" (not prepared) Psions and spells specified in the previous phase are resolved simultaneously, unless an exception is indicated by the system or the GM. Effects are applied immediately, except Psions held on opportunity.

- Movement/Maneuver is reduced to a maximum of 25% of normal for those who have cast a Psion this round, and 10% for those who have prepared a Psion.

Psion Orientation Phase

All combatants who performed unusual activities during the previous phase (e.g., *Teleportation*, *Leaving*, etc.) must make an orientation roll to determine how well they have adapted themselves to their new surroundings. An exceptionally low roll might incapacitate them for the remainder of the round and prejudice their chance for successful action in the next round, while an exceptionally high roll would indicate the best possible result (intermediate values should be adjusted by the GM if necessary). The GM must determine what constitutes unusual activity within the context of the situation.

Fire Phase (A)

All combatants who will fire during this phase must specify missile type, target/target area, and any other pertinent information. Users of self-reloading weapons (e.g., energy and automatic/semi-automatic projectile) are able to fire in both this and Fire Phase B. Users of missile (bow) weapons and thrown weapons may fire in either phase, but only one. Exception: theoretically a character with a throwable weapon in each hand may throw one in Fire Phase (A) and one in Fire Phase (B).

- Psion casters/preparers may **not** fire.

Fire Result Phase (A)

All missile attacks specified in the previous phase are resolved simultaneously, unless an exception is indicated. All results are applied immediately. In the following phases, all phase (A) firers have 50% of their activity left and thus may:

- Melee with a -50 mod to OB; **or**
- Move/maneuver at 50% of normal; **or**
- Fire normally in Fire Phase (B) (self-reloading Weapon Firers only, because other weapons will require a "reload" maneuver).

Movement/Maneuver Phase

All combatants in play may move up to the maximum of their movement allowance (depending on movement system, and any activity engaged in during the earlier phases, see Section 19.0). Success or failure of an extraordinary maneuver must be resolved as indicated in Section 18.2.

- *Reloading* is treated as a maneuver that may take anywhere from 30% of normal activity to 300% or more of normal activity.
- Normally, drawing a weapon takes 20% of normal activity while changing weapons takes 50% of activity.

Fire Phase (B)

Same as Fire Phase (A), except that a character may **not** fire if he has done any of the following this round:

- Cast/prepared a Psion.
- Fired in Fire Phase (A) and moved/maneuvered.
- Moved/maneuvered more than 50% of normal allowance.
- Been incapacitated and/or failed an orientation or maneuver roll.

Fire Result Phase (B)

Essentially the same as Fire Result Phase (A).

Melee Phase

All characters may make a melee attack except those who have done any of the following this round:

- Cast or prepared a Psion.
- Fired in Fire Phase (A) and moved/maneuvered.
- Moved/maneuvered and fired in Fire Phase (B).
- Fired in Fire Phase (A) and fired in Fire Phase (B).
- Moved/maneuvered more than 50% of normal allowance.
- Been incapacitated and/or failed an orientation or maneuver roll.

Melee Result Phase

Within each group of combatants attempting to melee attack each other, attacks are conducted according to the following sequence:

1. Determine order in which combatants will attack by comparing initiative (Quickness, and other factors, depending on circumstance).
2. First combatant attack and result are applied immediately.
3. Second combatant, third combatant, etc., attack and apply results in order.
4. First combatant attacks with any useable second weapon, if any(e.g., he entered melee with a weapon in each hand, he is hasted, etc.).
5. Second, third combatants, etc., attack with second weapon, if any.

Final orientation Phase

In the judgment of the GM, any combatant who has been under significant pressure (e.g. surprise), or has made an unusual maneuver may be required to make an orientation roll, which may affect his ability to act in the next round.

13.2 EXCEPTIONS TO THE BATTLE ROUND SEQUENCE

Opportunity Action

Combatants may plot *opportunity action* if they wish to perform a combat activity in a following phase of the current round or a following round. For example, a combatant may wish to withhold his Fire attack until he sees who is moving where, and then fire. Opportunity action is announced during the correct phase for the desired action. Movement restrictions apply as if the combatant had actually performed the action during the correct phase. A combatant who has planned opportunity action can take no other action (except reduced movement) until the action is performed or cancelled. Opportunity fire occurs first in a phase, unless otherwise indicated by the GM (see Section 14.5).

Example: *During the Psion phase, a combatant with a prepared Psion announces opportunity Psion casting. He may then cast the Psion in any of the following phases of this and the following rounds. Until he casts the Psion, he may neither melee, fire, nor make extraordinary maneuvers. He is also reduced to 25% of his normal movement until the round after he casts the Psion or until he cancels this opportunity action. During a fire phase of some following round, a character attempts to fire a gun. The Telepath who has planned opportunity fire now casts his Psion, resolving it before the gun may be fired. If the gunman is killed or incapacitated, the attack will not take place.*

OB Penalties From Movement/Maneuver

If a character moves/maneuvers and then fires in Fire Phase (B) or melees in Melee Phase, he takes an OB mod to that attack. The OB mod is -5 for every 5% moved/maneuvered. In order to fire or melee, the character must have moved/maneuvered less than 50% of his normal allowance and performed no other activity.

Changing Targets

In certain circumstances in which a character changes targets, he may take an OB mod against his new target for one attack. In all cases, the character must be aware of the new target in order toface it..

In Fire Phase (A): If the firer attacked a target in Fire Phase (B) of the previous round *and/or* the Melee Phase of the previous round, he must take a -20 mod to his attack if the new target is 0° to 90° from the previous target **or** a -40 mod to his attack if the change is 91° to 180°.

In Fire Phase (B): If a character fired at a target in Fire Phase (A), he must take a -20 mod to his attack if the new target is 0° to 90° from the previous target **or** a -40 mod to his attack if the change is 91° to 180°.

In Melee Phase: If a character fired at a target in Fire Phase (A), he must take a -20 mod to his attack if the new target is 0° to 90° from the previous target **or** a -40 mod to his attack if the change is 91° to 180°.

In Melee Phase: If a character fired at a target in Fire Phase (B), the new target must be within 0° to 90° of the previous target and the character takes a -30 mod to his attack. If the change is 91° to 180°, the character will be unable to melee the new target, but he can change the target's attack (if any) to a flank attack instead of a rear attack.

Fire-and-Melee

If he performs no other actions, a character may fire with a weapon in one hand and then melee with a weapon in his other hand. However, if he wishes to fire with a weapon in one hand and then switch another weapon to the same hand to melee with, he must take a -20 mod to both attacks.

Both weapons must be "1-Handed", the fire weapon must be dropped (or thrown), and the melee weapon must be held in the other hand during firing. The missile target should be the same as or very close to the melee target. This is only allowed *before* a combatant actually enters melee. Of course, the character may perform no other activity during the round.

Fire Weapons in Melee

In general, fire weapons cannot be used while engaged in melee. However, a GM may allow a relatively small one-handed weapon (e.g., a pistol, thrown dagger, etc.) to be fired in melee in certain situations. The potential firer must be able to make a normal melee attack (e.g., may not have performed earlier actions that would prohibit him from making a melee attack).

In such a case, the firer's opponent should make his melee attack first. Then the firer should make a maneuver roll to see if he can fire. If successful, the firer would then be allowed to fire his weapon. If this maneuver is attempted, the character may not make his normal melee attack.

Fire While Moving

A characters using a fire weapon that performs no other actions in a round has the option of combining his movement with Fire Phase (B). In this way, the combatant may move up to 50% of his normal movement allowance, and fire during movement at -50 to his attack. A GM should require a maneuver roll for this action. (e.g., If the character fails the roll, he may only get part of the way through his movement, or perhaps not be allowed to fire.)

Note: *Opponents on "opportunity fire" would have the option of firing at a character attempting such a maneuver before he would fire at them.*

13.3 RELOADING

A character may attempt a maneuver to reload his weapon during any Movement/Maneuver Phase. The percentage of normal activity that is required varies for different weapons from 30% to 300% or more. Each type of reload has a required activity percentage. These "reload times" differs from those in ***Rolemaster*** but the effects in play are approximately the same.

If the activity % required cannot be completed during a single Movement/Maneuver Phase then it may be continued in the Movement/Maneuver Phase of the next round (e.g., if reloading takes 150% activity, it will take at least one full round and half the activity of another round to complete). If any other action is taken during a reloading maneuver, the reloading is canceled and must be restarted from scratch.

Type of Reload	% Activity
Projectiles:	
Single Shot	30
Clip	50
Belt	100
Energy Power Supplies:	
Cell	50
Cartridge	75
Pack	100
Bow Ammo:	
Short Bow	60
Composite Bow	70
Long Bow	80
Light Crossbow	170
Heavy Crossbow	230
Miscellaneous:	
Sling	50
Drawing a Weapon	20
Sheathing a Weapon	30
Picking up a Weapon	40
Changing Weapons	50

Option 1: A GM may allow a character to reduce the required % activity for a reload by up to 30% of normal activity by taking a OB penalty for his next fire attack. The OB penalty is equal to the activity reduction (e.g., a reduction in reload time of 20% of normal activity would result in a -20 OB mod). For bows and slings, this option closely reflects the reload rules found in ***Arms Law & Claw Law***.

Option 2: A GM may allow a character to make a maneuver roll to attempt to reload in less than the required time. We suggest that the minimum reload time be no less than half the normal amount. For example, a reload in half the normal time would be a Extremely Hard maneuver, in 3/4 the normal time would be a Hard maneuver, etc.

13.4 MANEUVERING

When a combatant indicates an attempted maneuver, the GM should assign a *degree of difficulty* to the maneuver. The degree of difficulty is chosen from those listed across the top of the *Personal Maneuver Chart* (18.4). The combatant then makes a maneuver roll. After the maneuver roll is modified by bonuses and penalties, the net maneuver roll is cross-indexed with the degree of difficulty of the table to obtain the result. It is important to remember that certain maneuvers may be deemed Impossible by the GM. The player should be advised that such a maneuver is doomed to failure.

Maneuver Roll: The outcome of an attempted maneuver is resolved by rolling percentile dice. The number result is the maneuver roll, which is open-ended.

01-05 Roll: An unmodified dice roll between 01 and 05 inclusive indicates exceptional clumsiness. The dice are rolled again and *subtracted* from the first roll. If the second roll is between 96 and 100 inclusive, then a third roll is made and also subtracted, and so on. The sum of these rolls (often a negative number) is the maneuver roll.

96-100 Roll: A dice roll between 96 and 100 inclusive indicates exceptional agility. The dice are rolled again, and the result added to the first roll. If the second roll is between 96 and 100 inclusive, then a third roll is made and also added, and so on. The sum of these rolls is the maneuver roll.

Note: *Open-ended rolls can only continue in one direction once that direction has been established by the initial roll; they cannot see-saw up and down.*

Maneuver bonuses and Penalties: Attempted maneuvers can be affected by various factors such as skills, armor and special equipment. Bonuses and penalties for these factors are outlined in *The Static Action Chart* (18.3). The sum of these bonuses and penalties is added to the maneuver roll to determine the net maneuver roll.

Maneuver Results: Most results are self-explanatory, but a percentage result can be interpreted in several ways by the GM. In the case of an all-or-nothing maneuver (i.e., no partial success) a second dice roll must be made. If this second roll is equal to or less than the original percentage result, then the maneuver succeeds. Otherwise, the maneuver fails. If a maneuver can be partially successful, then the original percentage result is the degree of success.

13.5 ORIENTATION ROLLS

When required by the GM, a combatant must make an orientation roll to determine his degree of self-control and awareness. The GM must determine the difficulty of the orientation, then the combatant makes the orientation roll in the same manner as a maneuver. Failure means disorientation and no further action is allowed for that round. Success means that the combatant is under control and aware of the situation, and may take further action that he would normally be allowed.

13.6 MOVEMENT CONFLICTS

When two or more combatants attempt to perform conflicting movements (such as two characters who are headed for the same space), the GM may choose to resolve the conflict by having the combatants in question make maneuver rolls. If one character succeeds and the other fais, the result is obvious. Otherwise:

- The conflict can be considered a draw, and movement for the involved parties can be terminated at the point of conflict;

or

- The GM can use a comparison of maneuver rolls (higher roll having choice of position) **and** by common sense. A combination of the two is possible, where one of the characters, due to position, might have an add to his maneuver roll, but phenomenal luck could still beat him.

In these cases of conflicting movement, the GM will have to ultimately decide himself the outcome of the conflict. The maneuver rolls of the involved parties are intended to aid him in his decision.

13.7 HASTE AND SPEED

Certain Psions will modify the normal turn sequence to some degree. The most common of these modifications will be *Haste* (or *Speed*). A person who is hasted will basically have 200% normal activity, but must abide by the sequence restrictions. That is, whatever activity the person takes will have to occur in the proper phase (thus, a hasted person could **not** move, fight and then move again, denying his adversary the chance to swing back). A hasted person could fire a bow, move and then melee, **or** attack twice in a melee phase (once at the beginning and once at the end).

- A hasted character may not fire more than twice a round.
- Psions take a hasted caster 1/2 the normal time to prepare and throw, but throwing more than one Psion/round is still prohibited.

Psion Class	When takes effect	Remaining Activity
I	Psion Results Phase	125%
II	Psion Results Phase	35%
III	Next turn	20%

In the case of a class III Psion prepared by a hasted caster, it should be treated as a class I Psion next turn (when it takes effect, and for the purposes of determining the movement allowed to the caster afterwards) whether the caster is hasted that round or not.

Note: *If the GM is prohibiting the casting of two Psions in one round, as is suggested, he may also wish to prohibit the preparation of a second Psion in the same round that another is cast.*

14.0 UNUSUAL SEQUENCE MODIFICATIONS

The personal weapons listed in the Master Weapons Charts provide a combatant with ample opportunity to utilize destructive mechanisms in a variety of clever and deadly ways. Below are listed the combat options which characters in the game of ***Space Master*** may use. They include semi-automatic fire, automatic fire, weapon combinations, opportunity fire, and alternate firing methods.

14.1 SINGLE SHOT/SEMI-AUTOMATIC FIRE

Whether a weapon is allowed 1 shot per round (1/rnd) or 2 shots per round (2/rnd), such fire is assumed to be of a discreet nature, with each shot opportunity aimed at a single target. Some weapons may be fired in either an automatic or semi-automatic mode. Skills in a particular weapon must be developed separately for each of these two modes of fire, though they are considered to be "similar" skills for determining bonuses.

The only weapon that has the possibility of affecting more than one target with a single shot (barring the use of some Optional Rules) is the shotgun (standard or sawed-off).

Conventional Shotguns (standard and sawed-off)

If the primary target of a shotgun discharge is next to another potential target, that potential (secondary) target may be attacked with another (secondary) combat roll if: **A)** the secondary target is within 5% (lateral displacement) of the range to the primary target, (10% if the shotgun is sawed-off) and **B)** the attacker also has a clear line of fire to that secondary target. To simulate the reduced effect of a shotgun discharge at a secondary target, allow no OB modifier to the secondary combat roll.

Example: *K. Borgstr, leader of the Impertinent Slobs, is armed with a 15mm Shotgun and is being charged by two Frothing Berserkers out in the open. He discharges his shotgun when they are 40 meters away, selecting his primary target to be the Berserker "on the left". He may make a secondary combat roll against the other Berserker (on the right) if that second Berserker is no more than 2 meters (5% of 40) to the side of the first Berserker. K. Borgstr may not add his OB with the shotgun to his secondary combat roll against the Berserker on the right.*

14.2 AUTOMATIC/BURST FIRE

Several automatic Projectile weapons, and a fewer number of Energy weapons, are allowed to use the Burst Fire option in combat. Some weapons use it exclusively. A single burst is assumed to be a discharge of five to ten individual shots. For rules lawyers who like to keep strict track of such things, a burst is considered to be an exact discharge of five (5) individual shots.

14.21 STANDARD BURST OPTIONS

Burst fire can be used in three different ways. An attacker may:

1) spray a restricted arc in front of him with Burst Fire in the hopes of affecting multiple targets, or,

2) spray a restricted arc in front of him with Burst Fire in the hopes of affecting a single target and having an enhanced probability of hitting, or finally,

3) concentrate the Burst Fire at a single target in the hopes of inflicting a greater amount of damage than would have been done otherwise.

Example: *Dexter P. Flarghoser, possessor of a Burst Fire capable weapon, faces several hostile Belching Infiltraters. He now has three options. Dexter can try to hit five of them by spraying a burst. Alternatively, he could spray a tight burst across one of the Infiltraters, increasing his probability of hitting, but only hitting him with one strike and possibly damaging up to four secondary targets. Finally, Mr. Flarghoser could hold his Burst Fire on one Belching Infiltrater, significantly increasing the damage he could do.*

Below is an elaborated description of these three options:

Spray Multiple Targets

Burst Fire capable weapons may spray a 60 degree arc at Short Range, a 30 degree arc at Medium Range, or a 15 degree arc out to Long Range. The attacker may specify from two (2) to five (5) targets within the given arc as being subject to the Burst Fire attack. Each target so selected must be adjacent (i.e. relatively close) to at least one other target. In other words, potential targets in the firing arc may not be skipped so that two widely separated targets (or groups) may (only) be affected by the spray. If an attacker sprays Burst Fire indiscriminately into a group of targets, determine up to five randomly which may be affected.

Example: *A line of ten unsuspecting Trilopters are approaching a hidden machine gun nest manned by a Frothing Berserker. The Frothing Berserker may not select two 'lopters at one end of the line and three at the other end as targets of his Burst Fire attack. He would have to choose up to five that were next to one another.*

If, on the other hand, the Trilopters were milling about in a disorderly group, the Frothing Berserker would just fire into them, and five would be randomly selected for the combat resolution process. Poor things.



Every eligible target is attacked on the appropriate table with separate combat rolls made for each one. The attacker's Offensive Bonus is halved for each separate combat roll. Such multiple target attacks are resolved on the appropriate table as if the target had been the subject of a single shot attack.

Spray Single Target

Firers of Burst Fire capable weapons may select a single target within range and spray him with a burst of fire, not with the intention of hitting him with multiple strikes, but rather getting an enhanced probability of at least hitting him with one. Such firers expend a full burst of ammunition, receive a +25 to their OB for that attack, but any hit obtained is resolved as if the target had been subject to only a single shot attack.

If there are other potential targets to one meter of either side of the primary target, up to four of them (selected at random) are attacked as secondary targets. There is no Offensive Bonus modifier to these secondary attacks.

Concentrate on Single Target

Burst Fire weapons may concentrate their multiple projected strikes on a single target within range, with the intention of hitting him with more than one strike. One combat roll is made with normal modifiers and cross-referenced on the appropriate attack table. Any concussion hits delivered are multiplied by 150%, and critical results become enhanced. Refer to the specific cases in this section for more details.

Example: *A Frothing Berserker unloads a burst of Heavy MG fire into an unarmored Idorian at Short Range. After modifying the combat roll, the Berserker tops-out and scores a 37G result on the Small Projectile table. The actual damage delivered would therefore be 56 concussion hits (150% of 37), an "E" Automatic/Shrapnel critical and a "B" Impact critical. That Idorian should have been wearing his exoskeleton.*

14.22 BURST OPTIONS FOR SPECIFIC WEAPON TYPES

Let us examine each of these three options in the context of the various weapons which can use Burst Fire (assuming standard ammunitions are used).

Conventional Machine Pistols, Assault Rifles, Machine Guns, and Rocketguns:

1) Spraying Burst Fire against multiple targets. Every eligible target (up to five) is attacked on the Small Projectile table, with a separate combat roll made against each. Halve the attacker's Offensive Bonus. The normal number of concussion hits are delivered with Puncture and possible Impact criticals.

2) Spraying Burst Fire against a single target. Add 25 to the Attacker's OB. Use the Small Projectile table. The normal number of concussion hits are delivered with Puncture and possible Impact criticals.

3) Concentrating Burst Fire against a single target. Use the Small Projectile table. Multiply the concussion hits by 150% and change the normal primary critical (Puncture) to an Automatic/Shrapnel critical.

Autoshotguns:

1) Spraying Burst Fire against multiple targets. Every eligible target (up to five) is attacked on the Shotgun table, with a separate roll against each. Halve the attacker's Offensive Bonus. The normal number of concussion hits are delivered with either Puncture (or, depending on the type of ammunition, Slash) criticals, or an Automatic/Shrapnel critical.

2) Spraying Burst Fire against a single target. Add +25 to the Attacker's OB. Use the Shotgun table. The normal number of concussion hits are delivered with a Puncture (or Slash) critical, or an Automatic/Shrapnel critical.

3) Concentrating Burst Fire against a single target. Use the Shotgun table, but any concussion hits scored are multiplied by 150%, and all criticals are rolled on the Automatic/Shrapnel Critical Table.

Note: *the GM may wish to enhance this truly deadly weapon by rolling the Automatic/Shrapnel critical twice when the Autoshotgun is used in this way.*

Needleguns:

1) Spraying Burst Fire against multiple targets. Every eligible target (up to five) is attacked on the Small Projectile table, with a separate combat roll made against each. Halve the attacker's Offensive Bonus. The normal number of concussion hits are delivered with Slash and possible Impact criticals.

2) Spraying Burst Fire against a single target. Add 25 to the Attacker's OB. Use the Small Projectile table. The normal number of concussion hits are delivered with Slash and possible Impact criticals.

3) Concentrating Burst Fire against a single target. Use the Small Projectile table. Multiply the concussion hits by 150% and change the normal primary critical (Slash) to an Automatic/Shrapnel critical.

Plasmatic Repeators:

1) Spraying Burst Fire against multiple targets. Every eligible target (up to five) is attacked on the Blaster table with a separate combat roll made against each. Halve the attacker's Offensive Bonus. The normal number of concussion hits are delivered with Heat and possible Radiation criticals.

2) Spraying Burst Fire against a single target. Add 25 to the Attacker's OB. Use the Blaster table. The normal number of concussion hits are delivered with Heat and possible Radiation criticals.

3) Concentrating Burst Fire against a single target. Use the Blaster table. Multiply the concussion hits by 150% and add an Impact critical of the same severity as the primary (Heat) critical delivered.

Example: *Jym-bob, armed with a Plasma Repeator Rifle, concentrates his Burst Fire capability on a Frothing Berserker who is screaming maniacally and waving a hatchet over his head (this is, therefore, an example of the third Burst Fire option). Due to an incredible OB, Jym-bob scores a 66H result on the Blaster table. Thus the Frothing Berserker takes 99 concussion hits (150% of 66), an "E" Heat critical, "E" Impact critical, and a "C" Radiation critical. The Berserker is toast. Good shooting, Jym.*

14.3 WEAPON COMBINATIONS

A number of weapon combinations are possible in ***Space Master***. A combatant may weild a dagger in one hand and a sword in another. Similarly, an attacker could have a pistol/sword combination, pistol/pistol combination, or even an assault weapon/assault weapon combination. The GM must be very careful if he chooses to allow such combinations. A superior Agility, or perhaps even ambidexterity may be prerequisites. In most cases, one or both weapons should be at a -20 penalty in combat. This is at the GM's discretion. Such an armed combatant should be restricted to one target per phase, unless Hasted or otherwise operating in an accelerated mode.

The OB for a Weapon Combination attack made in one phase should not exceed the highest Offensive Bonus for the particular weapons being used. For example, if a combatant is using two weapons, one of which he has a 20 OB with, and another which he has a 60 OB with, the total OB for the Weapon Combination attack should not exceed a +60 total (and the poorer weapon could not have more of an OB applied to it than its maximum OB skill bonus). Therefore, in this example, a Weapon Combination attack could be made with one attack (the better one) at +40, and the other attack (the poorer one) at +20, (the total being 60).

Note: *For 2 melee weapons, this concept differs from* ***Rolemaster,*** *so the GM may wish to handle melee weapons differently.*

14.4 OFF-HAND FIRING

Weapon skills must normally be developed separately for each hand (e.g., firing a pistol from the right hand as opposed to the left hand). When a weapon is wielded from the wrong hand, it is considered to be a "similar" skill, and so only half of the combatant's Skill Rank Bonus is used (see Section 3.6). In addition, barring ambidexterity, using a weapon in the off-hand (e.g., the left hand for right handed combatants) incurs an additional -20 OB penalty.

14.5 OPPORTUNITY FIRE

A combatant may claim Opportunity Fire during any phase of the combat round that he would normally be able to fire, and does not (see Section 3.2). He may then fire normally during a subsequent phase of the same round or a following round (and would resolve his fire before other combatants). Opportunity Fire must be claimed against a known foe (or group of foes in the same location). It may also be claimed against a terrain feature or specific area (like a window, portal, the corner of a building, etc.).

Example: *Mr. B is in combat with Frothing Berserkers. During Fire Phase (A), he claims Opportunity Fire on a specific Berserker he knows is hiding behind a big rock. During the Movement and Maneuver Phase of the next round, the Berserker breaks from cover and tries to run to a trench where all of his buddies are. He never makes it, however, as Mr. B pegs him off with his Linex Rifle fired (in this case) during the Movement and Maneuver Phase.*

Movement is restricted to 25% of normal until the action is taken or cancelled. A combatant who has declared Opportunity Fire may take no other action (except reduced movement) until the Opportunity Fire is performed or cancelled. Opportunity Fire occurs first in any given phase unless otherwise indicated by the GM. Multiple rate of fire weapons may not hold more than one shot or burst on opportunity at any given time, nor may they fire twice in the same phase.

Example: *Assume the same situation as given in the example above. However, this time the Berserker steps out from behind the rock during the Movement and Maneuver Phase, but Mr. B holds his Opportunity Fire. The next phase of the combat round is Fire Phase (B). Mr. B decides that he wants to take his shot now, and fires first. Mr. B's player also wants to take his normal Fire Phase B shot, but the GM indicates (quite correctly) that no combatant may fire the same weapon twice in the same phase. Mr. B's player says that is unfair. The GM says (quite correctly) that Mr. B's player is unreasonable. The game then quickly degenerates into a fist-fight and next week, Mr. B's player doesn't show up to the game. Not surprisingly, it goes much more smoothly.*

14.6 OTHER FIRING METHODS

In general, a weapon's Type indicates how it is normally used. For instance, a Medium Pistol is a 1-Handed Projectile Weapon and is normally used in one hand. An Assault Laser is a 2-Handed Energy Weapon normally used with two hands. A Heavy Plasma Repeator is a Support Energy Weapon and obtains optimum results when when discharged from a firing platform. However, there is nothing to stop someone from using a pistol steadied with a second hand, firing an Assault Rifle with one hand, or unleashing a Heavy Machine Gun from the hip. Here is a listing of various alternative firing methods and associated bonuses and penalties.

1-Handed Projectile & Energy Weapons

If a 1-Handed Projectile or Energy Weapon is fired with two hands (one to steady the weapon), add +5 to the attacker's OB when firing at Medium or Long Range.

2-Handed Projectile & Energy Weapons

If a 2-Handed Projectile or Energy Weapon is braced before it is discharged (that is, its barrel rests upon a stable surface or platform), add +5 to the attacker's OB when firing at Medium or Long Range. Double the "changing targets" penalty when firing weapons this way.

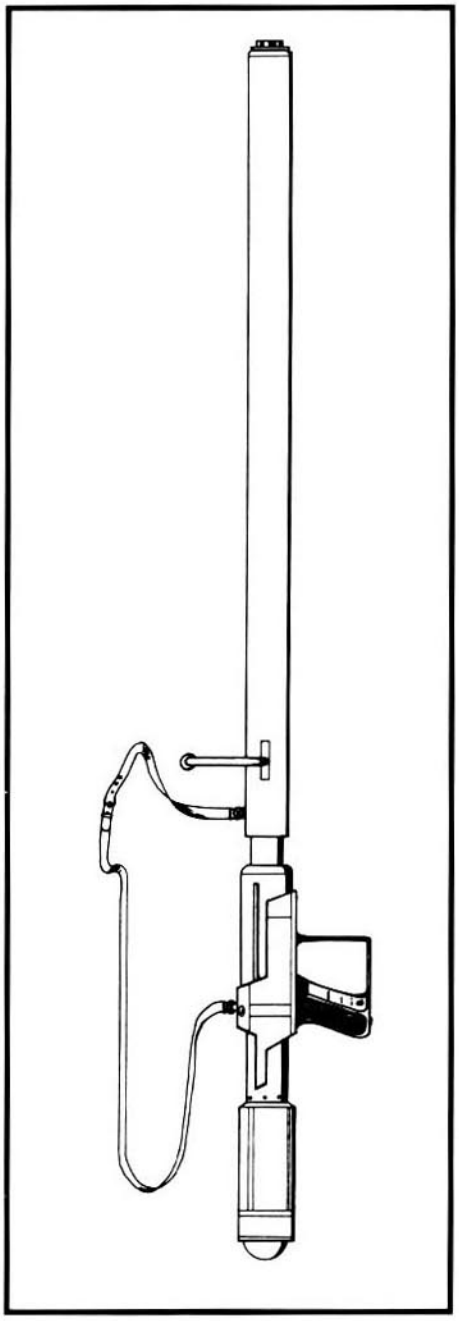
If a Projectile Carbine or Assault Energy Weapon is fired with one hand, the attacker's OB is modified by -20. If a Projectile Rifle or Energy Rifle (Exceptions: MLA Rifle and Plasma Repeator Rifle) is fired with one hand, the attacker's OB is modified by -40. If an MLA or Plasma Repeator Rifle is fired with one hand, the attacker's OB is modified by -80. In all cases, the ranges of the weapons are halved.

Support Projectile and Energy Weapons

If Support Projectile or Energy Weapons are fired without the benefit of their mounts, two hands must be used, and the attacker's OB is modified by -80. Also, all ranges are halved. Exception: the attacker's OB modification is only -40 for using a Light Machine Gun and -60 for using a Medium Machine Gun in this manner.

14.7 SUPERIOR ADVANTAGE

If the GM determines that a combatant has an overwhelming advantage over his opponent, that combatant may be assumed to carry out his chosen action to the fullest extent of intention. Thus, executions and the like may be implemented without consulting the appropriate attack chart. A roll should still be made to determine if a failure, etc. occurs.



14.8 GRENADE, MISSILE AND EXPLOSIVE WARHEAD RULES

Explosive devices in ***Space Master*** all use the same general body of guidelines (some would call them rules). Universally, an explosive device, whether it be a grenade (thrown or launched), portable missile, land mine, bomb, or other warhead, will produce its effect within Blast Radii of specific sizes. These Blast Radii are given in the appropriate ammunition section. Unless otherwise specified, any explosive device will generate five (5) Blast Radii upon detonation. The most deadly effects will be felt within the first Blast Radius (also called Ground Zero). Reduced effects radiate outward, and the damage thresholds thus produced are evident when one examines the *Grenade/ Explosive Warhead Attack Chart.*

Whether thrown or fired from a launcher, grenades, and other like warheads, can be resolved in essentially the same manner. There are two processes involved; delivery and effect.

Thrown Grenade Delivery

Grenade delivery occurs during any Fire Phase in the combat round. In addition, grenades, demolition charges and the like can be placed or thrown during the Movement and Maneuver Phase of the round.

The attacker must specify where he would like the warhead to land (and presumably, subsequently detonate). He then rolls and adds his Thrown: Grenade OB, the range modifier specified in the chart below, and any other modifiers stipulated by the GM (for example, if the attacker is trying to throw a grenade through a narrow aperture, the GM may say that it is Very Hard to do and assign a -20 difficulty modifier).

Thrown Grenade Range Modifiers

	Range	Modifier
Point-blank	1-3m	+100
Short Range	4-10m	+50
Medium Range	11-30m	+30
Long Range	31-50m	+0

Note: *It is contingent upon the GM to assign difficulty modifiers if he deems that an attacker's attempted throw or the conditions involved are, in some way, unusual.*

Note: *Grenade throwers with contact fused grenades may actually want to hit a specific individual with a grenade (and get a +35 touching bonus during the effect resolution process). This is difficult to do, however. Subtract the target's Quickness bonus (if he is "combat aware" and able to move) and an additional -30 from the delivery roll.*

If the net result is over 100, the grenade lands as intended. The delivery process is complete, and the attacker may move on to the effect resolution process. If the net result is 100 or less, the warhead was not placed as desired and the *Thrown Error Chart* is consulted to determine where it did, in fact land. Once that is determined, the attacker then proceeds on to the effect resolution process.

To determine the range of an error on a 100 or less roll, use the original modified roll and consult the following Chart:

THROWN ERROR CHART

Net Roll	PB	SR	MR	LR
100+	0	0	0	0
99-100	1	1	1	1
98	1	1	1	2
97	1	1	1	3
96	1	1	2	4
95	1	1	2	5
94	1	2	3	6
93	1	2	3	7
92	1	2	4	8
91	1	2	5	10
86-90	1	2	6	12
81-85	2	3	8	14
71-80	2	3	10	16
51-70	2	3	12	18
31-50	2	4	14	20
11-30	3	5	17	25
06-10	3	6	20	30
02-05	3	8	25	40
01	4	10	30	50

All distances are in meters.

Next determine direction of error: for game purposes we will assume six possible error vectors (especially handy when playing on a hex grid). An unmodified, closed 1D100 roll is made to determine direction based on range. Abbreviations are: L = Long; LR = Long and Right; LL = Long and Left; S = Short; SR = Short and Right; SR = Short and Left.

ERROR DIRECTION CHART

1D100 ROLL	RANGE PB	SR	MR	LR
90-100	L	L	L	L
80-89	L	L	L	LR
70-79	L	L	L	LL
60-69	L	L	LR	SR
50-59	L	L	LL	SR
40-49	L	LR	SR	S
30-39	L	LL	SL	S
20-29	LR	SR	S	S
10-19	LL	SL	S	S
05-09	SR	S	S	S
03-04	SL	S	S	S
01-02	S	S	S	S

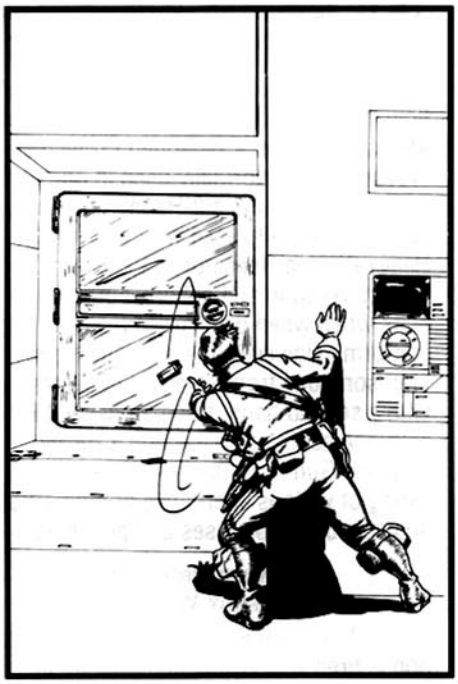
Using this data establish the new landing and detonation point. Note all other potential targets in the new Blast Radii, then proceed to the effect resolution process.

Grenade Launcher and Missile Delivery

Launcher wielders use the ranges on the *Master Weapons Table* (see **Tech Book**) and in the ammunition notes section. The attack roll in combat is made to determine where the missile, launched grenade, or rocket propelled grenade lands, and subsequently detonates. This is a delivery resolution process. The roll is modified by the appropriate OB, the range modifier (as given on the *Master Weapons Table* or ammunition notes section), and any miscellaneous modifier stipulated by the GM.

Note: *A Launcher wielder may want to hit a specific individual with a contact fused warhead in order to gain an advantageous effect resolution modifier (+35 touching bonus). Individuals are difficult to hit however, so subtract the target's Quickness bonus (if he is "combat aware" and able to move), and an additional -30 from the delivery roll.*

If the net result is over 100, the warhead is delivered on target. The attacker may then go on to the effect resolution process. If the net result is 100 or less, consult the *Launcher Error Chart* to determine how far the warhead is off-target. Use the original roll and cross-index with the range to the target.



LAUNCHER ERROR CHART

Net Roll	PB	Short	Med	Long
100+	0	0	0	0
99-100	1	1	1	1
98	1	1	1	3
97	1	1	2	5
96	1	1	3	10
95	1	2	4	15
94	2	2	5	20
93	2	2	6	30
92	2	3	7	40
91	3	4	8	50
86-90	3	5	9	60
81-85	4	6	10	70
71-80	4	8	20	80
51-70	5	10	30	100
31-50	6	15	40	200
11-30	7	20	50	400
06-10	8	30	60	600
02-05	9	40	80	800
01	10	50	100	1000

All distances are in meters.

Next, determine direction of error: for game purposes we will assume six possible error vectors (especially handy when playing on a hex grid). An unmodified, closed 1D100 roll is made to determine direction based on range. Consult the *Error Direction Chart* to determine direction of the error.

Using this data, establish the new delivery point. Note all other potential targets in the new Blast Radii, and proceed on to the effect resolution process.

Effect Resolution Process

Once the warhead detonation point has been established, the actual effects of the detonation are resolved. The mechanics of the timing of the detonation are dependant upon the particular fuse being used. The various fuse options are dealt with in the ammunition notes section. What follows is the step-by-step effect resolution process:

1) Identify all potential targets. This will be dependant upon the size of the warhead's Blast Radii.

2) Classify each targets as being within one of the five Blast Radii produced by the warhead.

3) Make an effect resolution roll against each separate target on the *Grenade/ Explosive Warhead Attack Chart,* adding only the appropriate modifiers as listed on that Chart. (Note: there is **no** attacker'sOB factored into the effect resolution process. The skill bonus only applies to the placement of the warhead.)

Quickness bonuses only have effect in certain tactical situations, (i.e., if target character(s) take action for cover, tumbling, etc). GM must determine whether this is feasible based on the situation. Energy shields will usually have an effect on the blast. See the Grenade listing in the ammunition notes section.

Constructions and Hits to Destroy

Material	Hits/unit of thickness
Wood	5 hits/cm
Glass	1 hit/.5cm
Stone	8 hits/cm (min 5 cm)
Concrete	8 hits/cm (min 5 cm)
Masonry	6 hits/cm (min 10 cm)
Glassteel	30 hits/.5 cm
Light Steel	20 hits/mm
Reinforced Steel	40 hits/mm

Note: Assume all to be AT 20.

14.9 POINT BLANK FIRE

Certain weapons have their damage threshold increased by one Mk.# when discharged at Point Blank range. Weapons so affected include those using the Small Projectile, Laser, Blaster, Stunner/ Disruptor, and Flamer Attack Tables.

15.0 DEFENSIVE CAPABILITIES IN COMBAT

In combat there are many variables which affect the severity of an attack. The defender has several factors which work in his favor, including: armor, armor add-ons, shield, quickness, special items, and the ability to parry (i.e., forgo one's attack effectiveness in the interest of self-preservation). Armor is the basic classification of protection, while all other defensive capabilities are expressed in terms of a Defensive Bonus (DB) which will modify the attacker's combat roll in the defender's favor.

15.1 ARMOR

Armor is the basic protective material which covers the body. It is divided into five categories of four types each, thus there are 20 Armor Types (AT) represented in ***Space Master***. For those players familiar with ***Rolemaster***, the 20 ***Space Master*** ATs closely approximate those found in ***RM***, and one will note that the standard progressions of "toughness" and "body covering" are followed here. Below are listed the 20 ***Space Master*** ATs with accompanying descriptions.

15.11 CLOTH-SKIN BASE

This category encompasses normal cloth attire, robes, unarmored environmental suits and normal animal hides.

Skin (AT 1)
Normal clothing, assumed worn if other covering is not specified.

Robes/Environmental Suit (AT 2)
Encumbering full-length ceremonial robes or non-armored environmental suiting.

Light Hide (AT 3)
The natural hide of certain animals (e.g., deer, dog, wolf and the like).

Heavy Hide (AT 4)
The skin of androids, and the natural hide of certain animals (e.g., buffalo, elephant, bear and the like).

15.12 LIGHT BODY ARMOR

This category encompasses pliable, lightweight ballistic cloths and alloys. References to "kevlar" assume an advanced material with superior puncture resistance, while "duralloy" is the name given to any number of soft armors which become rigid when struck by a considerable force.

LBA Flak Vest (AT 5)
A heavy quilt or kevlar vest covering the back, torso and abdomen.

LBA Extended Flak Vest (AT 6)
A heavy quilt or kevlar vest which extends down the arms and to mid-thigh.

LBA Reinforced Flak Vest (AT 7)
An Extended Flak Vest with duralloy plates sewn in for added protection.

LBA Reinforced Flak Armor (AT 8)
A full suit of duralloy-reinforced kevlar, covering the entire body from the collar to the lower legs. Extra padding protects the joints and groin.

15.13 PLIABLE ARMORED BODYSUITS:

This category encompasses environmentally secure bodysuits of flexible but resilient cloth covered with laminated, yet somewhat pliable, armor pieces. The armored sections are typically made of duralloys layered with battleplastics. When a compatible helmet and life support system are added to the armor types of this category, the wearer may be totally immune to hostile environments (such as hard vacuum). This category also includes the rigid hide coverings of certain animals.

ABS Pliable Breastplate (AT 9)
An environmental bodysuit mated with a soft-armored breastplate which covers the back, torso and abdomen. There may also be shoulder/upper arm and thigh armor.

ABS Pliable Breastplate And Greaves (AT 10)
An environmental bodysuit covered with a soft-armored breastplate, as well as arm and leg greaves. The greaves typically cover the outer forearms, thighs and shins.

ABS Pliable Half Plate (AT 11)
An environmental bodysuit coupled with soft-armored plates which cover the torso, back, abdomen, arms, and the fronts and backs of the legs. Also, the hides of certain creatures that contain at least a few rigid plates (e.g., rhinoceros, alligator, and the like).

ABS Pliable Full Plate (AT 12)
An environmental bodysuit covered with soft-armored plates. Additional areas protected include the neck, groin, buttocks, hands and feet. Many joints remain exposed however. Also, the hides of creatures which contain many rigid plates (e.g., turtles, crabs, certain alien beasts, and the like).

15.14 MESH ARMORED BODYSUITS

This category encompasses environmentally secure bodysuits of non-constricting and resilient cloths, covered with mesh armor to various degrees. Mesh armor is a flexible covering of plasteels and synthi-armors woven so as to give optimum mobility for the considerable protection they impart to the wearer. When these armor types are coupled with a compatible helmet and life support system, the wearer may be totally immune to hostile environments (like vacuum).

ABS Mesh Shirt (AT 13)
An environmental bodysuit mated with a mesh armor shirt which covers the torso to the mid-thigh, back, and half of the upper arms.

ABS Mesh Shirt And Greaves (AT 14)
An environmental bodysuit and mesh armor shirt coupled with arm and shin greaves. The greaves may be of mesh or battleplastics.

ABS Full Mesh (AT 15)
An environmental bodysuit under mesh armor which covers most of the body in the form of a shirt and leggings.

ABS Battle Mesh (AT 16)
An environmental bodysuit covered completely by reinforced mesh armor. Extra padding, in the form of cushioned duralloys and/or battleplastics protect the groin and joints.

15.15 ARMORED EXOSKELETONS

This category encompasses advanced battle armor, the toughest protection available to combatants short of Powered Armor. Exoskeletons are hard integrated plates which can deflect many attacks which would otherwise cleave through lesser armor types. Exoskeleton armor is typically a fused amalgam of hardened duralloys, ceramic plates, and battleplastics, formed in such a way as to allow maximum maneuverability. The last two armor types in this category may be sealed against the environment, as they have integral helms and life support systems.

AEX Exoskeleton Breastplate (AT 17)
An exoskeletal breastplate with auxiliary plates covering the back, upper arms, abdomen and upper thighs.

AEX Exoskeleton Breastplate And Greaves (AT 18)
An exoskeletal breastplate with auxiliary plates. This armor type also includes greaves of hardened battleplastics which protect the forearms and shins.

AEX Half Exoskeleton (AT 19)
A rigid exoskeletal armor covering most of the body. An undersuiting of mesh and resilient cloths protect exposed areas (such as the neck, groin, joints, and backs of the legs).

AEX Full Armored Exoskeleton (AT 20)
A rigid exoskeletal armor which covers the entire body. Plates may overlap at the joints, imparting complete combat integrity.

ARMOR CHART

Armor Type	Minimum Maneuver Penalty[1]	Maximum Maneuver Penalty[2]	Missile Attack Penalty[3]	Quickness Penalty[4]	Radiation Bonus[5]
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	-15	-5	0	0
7	-10	-40	-10	10	0
8	-15	-50	-10	15	0
9	-5	-50	0	0	-1 level
10	-10	-55	-10	5	-1 level
11	-15	-80	-20	15	-1 level
12	-15	-90	-30	15	-1 level
13	-5	-50	0	0	-1 level
14	-10	-60	-10	5	-1 level
15	-20	-80	-20	15	-1 level
16	-25	-90	-20	15	-1 level
17	-10	-55	0	5	-1 level
18	-15	-60	-10	15	-1 level
19	-20	-85	-30	20	-2 levels
20	-30	-95	-40	25	-3 levels

1. Minimum maneuver penalties apply to persons fully trained in maneuvering while wearing the given armor type. This minimum penalty may be further reduced by applying the wearer's Maneuver In Armor stat bonus (Ag/St), to a fully, or near fully, developed skill bonus.
2. Maximum maneuver penalties apply to persons fully untrained in maneuvering while wearing the given armor type. The wearer's Maneuver In Armor stat bonus (Ag/St), may reduce this penalty.
3. Missile attack penalties act as subtractions from the Offensive Bonus used for the given attack. Attacks subject to this penalty are only hand-delivered missile attacks such as bow fire, thrown spears, tossed grenades and the like. This penalty does NOT apply to firearm discharges or technical missile fire such as RPGs, PMLs, grenade launchers and the like. This penalty is meant to reflect the disadvantageous effect of restrictive armor worn on the arms of a combatant.
4. Quickness penalties act to reduce or cancel the given portion of a combatant's Defensive Bonus based upon his Quickness stat bonus. This penalty can only apply against the armor wearer's Quickness bonus, and will not reduce a combatant's Defensive Bonus below the value it would be had there been no Quickness bonus whatsoever.
5. Radiation bonus indicates the reduction to the Radiation critical level should the armor wearer become subject to a harmful radiation attack. For example, if the wearer of AT 10 must be subjected to a "B" Radiation critical, he would instead take an "A" critical. If a warrior in AT 20 takes an "E" Radiation critical, it is resolved as a "B" critical, and so on.

15.2 PERSONAL SHIELDS

The effects of a Personal Energy Shield are represented in combat by an addition to the wearer's Defensive Bonus. Function parameters of the various shield types are given in the Personal Equipment listing found in the **Tech Book**. There are four types of shields in ***Space Master***, each with its own particular strengths and weaknesses. They are summarized here:

PERSONAL SHIELD CHART

Shield Type	Defensive Bonus Versus			
	Energy	Projectile	Missile	Melee
Velocity*	0	+60	+45	+30
Deflector	+60	+40	+15	+5
Absorption	+30	+30	+30	+30
Barrier	+90	+70	+70	+60

*Velocity shield is also available with a Collector (See **Tech Book**)

The GM is free to choose which, if any, Personal Shields will be allowed into his game, and their availability. He is also free to design new shields and/or redesign the ones listed here. If the GM's game is particularly deadly, shield availability should be increased, while at the other extreme, shields may be rare or reduced in power.

15.3 DEFENSIVE BONUS

The sum of all bonuses and penalties which affect the defender's susceptibility to being hit and damaged in combat is called the Defensive Bonus (DB). It is the number which is subtracted from the attacker's combat roll. The defender's DB is composed of bonuses and/or penalties for superior/inferior armor, armor add-ons, personal shield, Quickness stat bonus/penalty, position and cover, special items, and Adrenal Defense skill bonus. A defender may also parry (i.e., dodge) incoming attacks by forgoing a portion of his own attack ability. Defensive Bonus categories and the various parrying options are listed below.

15.31 SUPERIOR/INFERIOR ARMOR

Especially good armor (in terms of materials used and construction quality) does not change that armor's basic type, but rather adds a bonus to the wearer's DB. Conversely, shoddy armor will incur a penalty to the wearer's DB. It is highly recommended that Superior Armor bonuses rarely exceed +10 or +15.

Example: *Black-jack Shelak, a rather successful space pirate, wears a Mesh Shirt and Greaves (AT 14) taken from the lifeless body of a Kashmerian Agent. The GM has decided that this armored bodysuit is of superior construction (being designed and produced by a highly revered armaments company) and so awards it a +10 quality bonus. This armored bodysuit is thus AT 14(10).*

15.32 ARMOR ADD-ONS

The 20 basic armor types described earlier can be somewhat modified and upgraded by Armor Add-ons.

As presented, there are no intrinsic penalties involved in incorporating Armor Add-ons. However, at the GM's discretion, various penalties may be introduced into the game. For instance, a Reflective Armor Layer may be shiny and so detract from the wearer's Hiding bonus, or, Ballistic Cloth Weaves may be heavy and thus give a maneuver penalty to the wearer. Such penalties are totally subjective and should be determined by the GM if he wishes to incorporate them at all.

Note: *only one Armor Add-on "coating" may be applied per suit of armor.*

What follows is a listing of the various Armor Add-on options:

- Ballistic Cloth Weave: Ballistic Cloths may be integrated into an Environmental Suit (AT 2), the environmental undersuiting intrinsic to the Armored Bodysuits (ATs 9-16), and the environmentally integrated Armored Exoskeletons (ATs 19-20). At the GM's discretion, Ballistic Cloths may also be incorporated into normal clothing (AT 1). Ballistic Cloth Weave add-ons increase the wearer's Defensive Bonus by 10 against personal weapon projectile fire and shrapnel-generating attacks (such as shrapnel grenade detonations).
- Reflective Armor Layer: Reflective Armor is an unencumbering anti-laser protective covering. In the form of either a lightweight set of clothing, or a matte coating on existing armor, the Reflective Armor Layer will increase the wearer's Defensive Bonus by 10 against personal weapon laser fire and visible light-based attacks. Essentially, any AT could be given a Reflective Armor Layer.
- Super-ceramic Armor Layer: Super-ceramics are excellent heat dissipaters which can be both integrated into Armored Exoskeleton plates (ATs 17-20) and coated over Mesh Armored Bodysuits (ATs 13-16). A Super-ceramic Armor Layer will increase the wearer's Defensive Bonus by 10 against personal weapon laser, flamer, blaster, and plasma repeator fire, as well as other heat-based attacks.

15.33 PERSONAL SHIELDS

As described above, personal shields will impart a bonus to the wearer's DB, but the bonus will usually be dependant upon the type of incoming attack (i.e., Energy fire, Projectile fire, hand-delivered Missile fire, or Melee attack).

There may be occasions when a defender carries an actual physical shield (usually strapped to the arm) composed of stretched hides, wood, or metal. As a general rule of thumb, such shields will add +5 to the wielder's DB versus Energy and Projectile fire and +20 versus Missile and Melee attacks. Quality and size of the shield will affect these modifiers. In most cases, such shields will only affect frontal attacks and may never be used to "parry" Energy or Projectile fire (see Parrying Options below).

Note: *Shield Psions may be used to parry any attack within the limitations described for Shields and Parrying.*

15.34 QUICKNESS STAT BONUS/PENALTY

A combatant's DB is modified by his Quickness stat bonus or penalty. If the defender is wearing certain types of cumbersome armor, his Quickness stat bonus may be reduced or eliminated completely (but never below zero). A defender only has his Quickness stat bonus factored into his DB if he is aware that he is in a combat situation and is free to move.

Example: *Sky Cloudd, a novice Armsman, has a temporary Quickness stat score of 98 (good rolling, Sky!). Unencumbered by armor, Sky is AT 1(20) when in a combat situation and free to move. Sky now puts on an Exoskeleton Breastplate and Greaves which reduces his Quickness stat bonus by 15. Now when he is in combat, barring other modifiers, Sky is AT 18(5). Use the breastplate, Sky!*

15.35 PSIONS

Some Psions may add to a combatant's DB. These are described in the Psion Rules.

15.36 POSITION AND COVER

The GM may award a variable bonus to a defender, if his position is judged to be advantageous. Bonuses so awarded should be based upon the percentage of the defender's body protected and the ability of cover to stop incoming fire. Penalties due to a defender's disadvantageous position are reflected in modifications to the attacker's Offensive Bonus.

Here are some sample Cover bonuses:

Half Soft Cover: .....+20
Full Soft Cover: .....+40
Half Hard Cover: .....+50
Full Hard Cover: .....+100

Note: *If a combatant is completely protected by cover, and is making no attack himself, the GM may rule that no attack may be made against him.*

Example: *Eddie Baron, wondering why he ever joined the Millennium Warriors, finds himself defending behind a low stone wall against the combined forces of an Imperial ground assault unit. During combat, Eddie stands to fire his Blast Rifle. The wall rises to his waist, protecting him from the Imperial soldier's Assault Lasers. The GM awards Eddie a Cover DB modifier of +50.*

15.37 SPECIAL ITEMS

There may be special items in a GM's campaign which will impart a DB to their possessors. These may range from unique artifacts to lucky charms, and their design/strength is subject to the GM's devising.

15.38 ADRENAL DEFENSE

As described in the ***Space Master*** **Player Book**, Adrenal Defense is a skill which adds to a defender's DB. This is a very restrictive DB factor however, as the combatant must be aware of his attacker, may not be carrying any weapons (larger than a knife or small pistol) or heavy items, and may only be wearing armor for which he has no Maneuver or Quickness Penalty. If a defender is using Adrenal Defense, the full skill rank is used against Melee attacks, while half skill rank is used against hand-delivered Missile attacks and one quarter skill rank is used against Energy and Projectile fire.

15.39 PARRYING OPTIONS

A defender may wish to place more emphasis on personal defense than is implicit in the ***Space Master*** personal combat system. Therefore, a combatant may wish to sacrifice some or all of his Offensive Bonus (OB) with the weapon he is presently using, in order to increase his DB. Such an action is called Parrying, though it may best be though of in most ***Space Master*** combat situations as dodging. It naturally follows that a combatant must have something available to dodge behind, but that is left to the player's ingenuity.

The premise of sacrificing offensive capabilities in order to increase ones defensive capability is a fundamental component in both the ***Rolemaster*** and ***Space Master*** personal combat systems, so ***Rolemaster*** players will be on familiar ground here.

If the defender is making no attack himself during the round (and so concentrating solely on his own well-being) his highest weapon OB is used to calculate the DB generated by Parrying. To carry this case one step further, the defender may not only be forfeiting his attack opportunity, but may also be out of the line of sight of all attackers and totally concealed behind hard cover. In this case, the defender may not be attacked at all (though ingenious attackers may start to concentrate their fire on the defender's cover!)

Parrying Energy Fire

During Fire Phase (A) of the combat round, a combatant may elect to commit some or all of his Offensive Bonus (with the weapon he is using) to parry an incoming Energy fire attack from a specific opponent that the defender is aware of. The defender must have either a Personal Shield Collector or a suitable terrain feature to parry with (i.e., dodge behind). If a combatant elects to devote some or all of his OB to parry such an incoming attack from a given opponent, he may change his allotment from Phase to Phase. The portion of the defender's OB which has been switched to DB must naturally be subtracted from that combatant's own attacks during the round.

Example: *Ryk Storm, with his trusty Blast Rifle, stands at the corner of a building during a vicious street fight. Around the corner, advancing down an alleyway, is a motley array of Alien Creeps who know Ryk is waiting for them. The GM states that Fire Phase (A) has begun. Ryk (OB 50) would like to forgo part of his OB in the interest of his own well-being, so switches 30 points of his OB to DB. The GM informs Ryk that the 30 points are only effective against one opponent's fire ("You are concentrating on one of them in particular, you see," says the GM). Ryk decides to "parry" (dodge) the attack of the first Alien Creep that fires at him. Ryk's 30 points (actually, only a fraction of them; see below) will benefit his DB against that particular Alien Creep during Fire Phase (A) and Fire Phase (B). Ryk's own attacks are reduced to an OB of 20 (50 - 30 = 20).*

The portion of the defender's OB switched to DB is not at full value against Energy fire attacks however. The defender must take that portion of the OB committed to parrying an energy attack and halve it before adding it to his DB for the round.

Example: *Continuing from the example above...*

The first Alien Creep to fire at Ryk is using a Laser Pistol, so of the 30 points of OB Ryk switched to DB, only 15 of them are effective. Ryk adds 15 to his DB versus the attack by the first Alien Creep. If the same creature fires at Ryk again during Fire Phase (B), Ryk will add 15 to his DB again (provided Ryk still has the corner of the building to dodge behind).

Note:*For those readers concerned about Ryk, don't forget he is still getting the GM's Cover DB bonus, for the corner of the building, against all of the Creep's incoming attacks, ("+50 "says the GM)*

Parrying Projectile Fire

All rules and restrictions specified above for Parrying Energy Fire, in their entirety, apply to defenders who wish to parry Projectile fire.

Parrying Missile Fire

A defender may parry an incoming hand-delivered Missile attack, and has more options available to him than those who would attempt to dodge opponents armed with Energy and Projectile armaments. Firstly, hand-delivered Missile fire encompasses (mostly) archaic attack forms like hurled spears and clubs, arrows, crossbow bolts, bolas, sheep, etc. This category does *not* include technical, self-propelled, area-effect explosive missiles (which use a different attack resolution process anyway). Players and GMs are well advised to appreciate the difference between these two attack forms.

To parry a hand-delivered Missile attack, the defender must be aware that he will be subject to the attack. He must also have a Shield Collector, suitable terrain, or a physical shield to Parry the Missile with. As with all Parrying Options, the defender may reduce his OB, in whole or in part, and shift that bonus to his DB. When parrying Missile fire, the shift must be declared at the beginning of Fire Phase (A) and is only applicable against one Missile attack. Unlike parrying Energy and Projectile fire, the amount of OB switched to DB is not halved, but rather has full effect.

Parrying Melee Attacks

A defender may parry a Melee attack during the Melee Phase of the combat round by switching any or all of his OB (with the Melee weapon he is using during the Melee Phase) to DB. There is no halving process as in parrying Energy or Projectile fire. Rather, all points of OB so switched are converted to enhance DB.

The designation is done at the beginning of the Melee Phase.

Melee attacks are generally hand-delivered and include such things as a swung sword, mace, chair, or rifle butt used as a club and so on.

To parry a Melee attack, the defender must be aware that he will be subject to the attack. He must also have a Shield Collector, suitable terrain, active shield Psion, physical shield, or a Melee weapon

Note: *A two-handed melee weapon can only parry a one-handed melee weapon attack at 50% efficiency.*

Example: *What follows is a rather exhaustive example to illustrate the extent of one's defensive capabilities in combat. Ready? Here goes...*

Julianna T. Nipper is an Explorer in a bind. Caught alone on a hostile world with only her Assault Rifle to protect her, she has been cornered in a refinery complex by Raving Maniacs. She wears an armored bodysuit of Pliable Half Plate AT 11. It is of superior quality for a +5 Defensive Bonus. She wears a Personal Absorption Shield; +30 to Defensive Bonus versus all attacks. Julianna has a temporary Quickness stat of 76 which would give her a +5 Defensive Bonus, but her armor, with a Quickness Penalty of 15, eliminates any hope of a bonus for Quickness. Finally, she wears a Sianetic Harbinger "amulet of protection" around her neck which confers a +10 Item Defensive Bonus. Therefore, as is, Julianna is AT 11(+45). She has an OB of +80 for firing her Assault Rifle (all right!).

Julianna has just run into a room filled with machinery. Unfortunately, there is only one entrance to the room, and Raving Maniacs will soon be streaming in through it. Julianna hunkers down behind a cast metal Fizbin Boiler (a +60 Cover Defensive Bonus says the GM) and levels her Assault Rifle at the portal. Over the course of the next few rounds she mows down six of the Maniacs, but the last two of her pursuers have entered the room and reached cover. One is armed with a Laser Pistol, Light Crossbow and a dagger (Maniac A), while the other is armed with a Blast Rifle (Maniac B). A new round of combat begins. It is Fire Phase (A) and Julianna declares that she will parry (dodge) any of Maniac B's Blast Rifle attacks using the Fizbin Boiler. She reduces her OB by 30 in order to get 15 added to her DB against Maniac B for the round (half effect versus Energy Weapons — the Blast Rifle in this case). Julianna and Maniac B fire at each other while Maniac A goes on Opportunity Fire with his Light Crossbow. Versus Maniac B, Julianna is AT 11(120). (5 + 30 + 10 + 60 + 15 = 120). She shreds Maniac B; he misses her. End of Fire Phase (A).



During the Movement and Maneuver Phase, Maniac A, who is on Opportunity Fire, gets to a good firing position behind Julianna with his reduced (25%) movement rate. Julianna meanwhile searches for a new Assault Rifle magazine, but realizes that she has run out of ammo.

It is now Fire Phase (B). Maniac A fires his crossbow bolt. Julianna no longer has the Cover Defensive Bonus, and her Parry no longer applies (this is a different attacker, not that there is anything left to dodge behind anyway...). Julianna is AT 11(45). (5 + 30 + 10 = 45). The bolt strikes her but does no critical damage (lucky!). There is no action in the Melee Phase this round.

Next round, Fire Phase (A) is skipped; Julianna's Assault Rifle might as well be a pickled herring, and Maniac A has no readied weapon in hand (the crossbow doesn't load itself you know). During the Movement and Maneuver Phase, Maniac A draws his Laser Pistol and dagger, and charges poor Julianna who can only grit her teeth and raise her rifle butt. During Fire Phase (B) Maniac A fires Point Blank with the Laser Pistol, to which Julianna is AT 11(+45) again. The Laser Pistol malfunctions ("Oh well, fortunes of war," says Julianna's player).

It is now the Melee Phase. Julianna's OB with the Assault Rifle, used as a club, is +30 (yes, you can develop this skill says the author, it's a two-handed weapon). She thinks about switching 20 points from this OB to enhance her DB, but then realizes that the Raving Maniac has used 50% of his movement and maneuver allowance, AND made a Fire Phase (B) attack. That's 100% of the Maniac's activity for the round, so he won't be able to attack with the dagger this Melee Phase! So Julianna punts the idea of switching a portion of her OB to DB. (Had the Maniac not fired the Laser in Fire Phase (B), he could have used the dagger in melee this round. Against the dagger attack, Julianna would have been AT 11(55). 5 + 30 + 10 + 10 {for the parry of a one-handed weapon by a two-handed weapon, that's 50% of 20} = 65).

In any event, Julianna rolls open-ended with her Melee (Club) attack and tops-out, driving the Maniac's jaw bone up into his brain. He collapses. Julianna, composing herself, sets out to find some more Assault Rifle ammunition.

16.0
OFFENSIVE CAPABILITIES IN COMBAT

The success of an attack will depend heavily on the weapon or weapon combination used, and the offensive capabilities possessed by the attacker. The factors which can affect the combat roll include: expertise, physical prowess, experience, superior/inferior weapon(s), weapon combination, special equipment, position, status of the defender and status of the attacker. The sum of all bonuses and penalties related to the attacker is called the Offensive Bonus (OB).

16.1 PERSONAL OFFENSIVE BONUSES

The Offensive Bonus is added to the attacker's combat roll during the resolution of a given attack. Below is a descriptive listing of the factors which contribute to a combatant's OB.

Expertise (skill)

Expertise in ***Space Master*** is measured in terms of Skill Ranks. The higher the number of Skill Ranks one possesses in a given weapon skill, the higher the resultant OB will be. See the character generation and skill development rules to determine the contribution of one's expertise to OB. With respect to firearms, a combatant's Targeting skill will also add to his OB.

Physical Prowess

Certain characteristic stat scores, particularly Strength and Agility, will contribute to a combatant's OB. If the characteristics have exceptionally low scores, these will cause a subtraction from the OB.

Experience

Certain character professions get a bonus to their OB based on their level of experience. See the descriptions of character professions to determine if a given combatant is entitled to such a bonus to the OB.

16.2 ITEM OFFENSIVE BONUSES

Superior/Inferior Weapons And Ammunition

Weapons and ammunition, remarkable in material, construction, or workmanship, may add a bonus or penalty to a combatant's OB. It is strongly suggested that bonuses for superior quality weapons rarely exceed +10 or +15.

Special Ammunition

As explained in the ammunition section, certain types of ammunition will add to a combatant's OB.

Weapon Combination

As discussed in the Combat Options section, combatants may use certain weapon combinations. Implicit in most such combinations is a penalty for one or both weapons. This penalty will reduce the wielder's OB.

Special Equipment

Certain items of special equipment, whether technical or mystic, will grant a bonus to the combatant's OB. Such pieces of equipment can range from Laser sighting devices to Sianetic Harbinger artifacts.

Psions

Certain Psions will add a bonus to the combatant's OB.

Position

At the GM's discretion, a bonus or penalty may adjust a combatant's OB if his position is determined to be somehow superior or inferior to his opponent's.

Status Of The Defender And The Attacker

A summary of the various status modifiers to an OB are listed in the following Offensive Bonuses and Penalties Chart.



OFFENSIVE BONUS AND PENALTIES CHART

(Effects are cumulative unless otherwise noted)

Category	Effect on Combatant's OB
Flank Attack	+15 *
Rear Attack	+20 *
Surprise	+20
Stunned Foe	+20 †*
Downed Foe	+30 †*
Prone Foe	+50 †*
Wounded to > 25% of total hits	-10
Wounded to> 50% of total hits	-10
Wounded to > 75% of total hits	-10
Armor penalty to hand-missile attack	-variable
Moving (% of possible move = effect)	-variable
Drawing Weapon	-20
Miscellaneous (lighting, duress, berserk, size, etc. Determined by GM.)	+/-variable

Notes

* Only applies to Melee attacks, or Projectile, Energy, and hand-delivered Missile attacks made at Point Blank or Short Range.

† Non-cumulative with each other.

17.0
COMBAT RESOLUTION

A melee swing or fire attack is resolved by cross-indexing the net attack roll with the target's armor type (AT) on the correct *Attack Table* for the weapon being used. The effects of *Failures* and *Critical Strikes* are found on the correct *Failure/Fumble Table* or *Critical Strike Table* (see **Tech Book**). In each fire phase, all attacks are treated as simultaneous. For melee, first determine the order in which the combatants will swing. Then resolve each attack in sequence, implementing the results immediately.

17.1 FIRST SWING DETERMINATION

The quickest combatant normally swings first in a melee, but this may be be modified based on a number of factors, including weapon size, weight, etc.

17.2 ATTACK RESOLUTION

The net attack roll representing the swing/fire is the *attack roll* (high open-ended) **plus** the Attacker's *OB* **minus** the Defender's *DB*. This result is cross-indexed with the Defender's armor type (AT) on the Attack Table corresponding to the attacker's weapon to arrive at the result of the swing/fire. In certain cases where an attack is especially bad or good, another roll may be required to determine the results of a *Failure* or *Critical Strike*.

The Attack Roll

A swing/fire is represented by rolling percentile dice (high open-ended). The result is the *attack roll* for the attack.

The Unmodified Roll: If the attack roll is in the lowest possible result range (the Failure range), a "Failure" occurs and no further modifications to the attack roll are made.

Over One-Hundred Roll: The attack roll is high open-ended, providing the possibility for any combatant to hit any given opponent — no matter what the respective OBs and DBs are. If the *unmodified* attack roll is between 96 and 100 inclusive, the dice are rolled again and the second roll is added to the first. The dice rolls can continue to be made and summed ad infinitum, until a roll is made that is less than 96. This stops the process and the total of all of the rolls is the relevant "attack roll".

The Net Attack Roll

If the attack roll does not indicate a "Failure", the *net attack roll* is determined by adding the OB to the attack roll and subtracting the defender's DB. The attack roll may also be modified due to a number of other factors summarized in Sections 15.0 and 16.0 (e.g., attacker's wounds, defender's cover, etc.). The *net attack roll* is then cross-indexed with the defender's armor type on the attack table corresponding to the weapon used by the attacker.

Note that on the weapon attack tables there are intermediate *thresholds* below the theoretical "max-out" of the chart. These thresholds are indicated by dotted lines and a phrase such as "Maximum for Mk. I weapons". This refers to a specific reference on the *Master Weapons Tables* in the **Tech Book**, the "Table Used" column. This not only indicates which table to use, but the relative power of that weapon on the table, designated by a Mark number (Mk.). A weapon's net attack roll cannot exceed the designated threshold for the weapon's Mark #; instead, the maximum allowed result is used.

Example: *Ryk makes a net roll of 87 and has an OB of 100 with his blast pistol. His target has a DB of 30, so his net attack roll is 157. However, on the Blaster chart, the pistol threshold occurs at 105. Therefore, that is the level at which the roll is cross-indexed against the target AT.*

Failures

Each weapon has a "failure range". An *unmodified* attack roll in this range results in the attack having no effect. Instead another process is necessary. In ***Space Master*** refer to the *Master Weapon Tables* and the bottom of the weapon's Attack Table for specific information.

In the case of Energy and Projectile weapons, a 1D10 (roll one percentile die to attain a 1-10 — '0' indicating '10' in this case) roll is required to determine if there has been a weapon failure (such a malfunction, jam, or dead power cell) or if the character has actually fumbled his weapon. If there has been a weapon failure, apply the result indicated on the attack chart. If the 1D10 roll indicates a *Fumble*, the player must roll again on the appropriate Fumble or FailureTable.

Non-Failure Results

A typical result will have two components, as indicated below:

17 B

The first component will be a number from 0 on up, which is the number of *concussion hits* delivered to the target. The second component is a letter describing the severity of a *critical strike* (if any — no letter indicates that no critical strike was delivered). The *type* of critical normally given is noted on the table itself, (e.g., a Blaster normally gives a Heat critical).

Concussion Hits: Each combatant has a limited number of concussion hits. When the limit is passed, the combatant is rendered unconsious and can take no further action until he is back under the limit. Death may be caused if this limit is exceed by a certain amount.

Critical Strikes: The severity of critical strikes ranges from A (least severe) to E (most severe) with letters F through I indicating multiple criticals, detailed on the individual attack tables. When a critical strike is indicated on the net attack roll, a second roll (always 1-100) is made and the resulting number is cross-indexed with the severity of the strike (A, B, C, D, or E). If a combination critical is indicated, *two* rolls are made, one for each critical indicated. Any additional concussion hits indicated are immediately applied, as well as any other effects.

Critical Strike Interpretations: Most of the critical strike results are self-explanatory. However, certain results may have to be modified due to circumstance (i.e., a defender behind a low wall hit by a laser receiving a critical strike calling for damage to his ankle should, instead, indicate a hit to the wrist). Similarly, if a critical strike calling for an unspecified limb to be broken or otherwise damaged is rolled, then the limb affected should be determined randomly (unless the GM determines that certain limbs are much more likely to have been hit). A stunned combatant may 'parry' to his front at half his normal ability (unless *no parry* is indicated) but may not attack or change face.

- All damages (including hits) unless otherwise indicated, are only applicable to the target combatant.
- Bleeding indicated on the Critical strike tables is reflected in the form of additional concussion hits. This is meant to show the gradual weakening brought on by blood loss.
- "Next swing" can refer to a fire attack as well as a melee attack.

PART III: GENERAL ACTIVITY RULES

Each skill is classified as being applicable to a moving maneuver (MM), a Vehicular Maneuver (VM) a Static Maneuver (SM), an attack (using OB), or a Special Purpose (SP). This section describes how each of these types of bonuses are used to resolve actions.

18.0 PERSONAL MANEUVERS

"Every time I see you falling
I get down on my knees and pray..."

"Please don't say leave it 'till later,
I'll have my last chance on the stairway..."

Anonymous Musicians
Old Earth
PreImp c. 9650

18.1 MANEUVER DIFFICULTY MODIFIERS

In ***Space Master***, maneuver difficulty is ranked into one of ten categories, as listed below.

Routine	(+30)
Easy	(+20)
Light	(+10)
Medium	(+0)
Hard	(-10)
Very Hard	(-20)
Extremely Hard	(-30)
Sheer Folly	(-50)
Absurd	(-70)
Insane	(-100)

In addition to the basic difficulty modifier, there are a number of different modifiers to any maneuver (environment, condition of character making the maneuver, etc.). These will be discussed in more detail in the following sections.

18.2 RESOLVING PERSONAL MANEUVERS

On pages 78-80 are included two maneuver charts: the *Personal Maneuver Chart,* (with the difficulty modifiers across the top), and the *Alternate Personal Maneuver Chart*, with columns for each type of maneuver. The GM may choose which chart to employ; both are modified by factors in the *Static Action Chart*.

18.21 MANEUVERS

Maneuvers are actions (other than attacks and Psion casting) which under normal circumstances have a chance of failing and usually entail an element of risk. Thus normal movement and activities (e.g., walking, climbing stairs, drawing a weapon, etc.) are not maneuvers, while unusual activities (swimming, climbing a rope, running up or down stairs, driving a vehicle, piloting a ship) and activities performed under stress (running, dodging, stalking, hiding, etc.) are maneuvers and require rolls. The GM is the final judge as to what is a maneuver and requires a roll, and what is normal activity and doesn't require a roll. Maneuvers are further classified as being Moving Maneuvers , Vehicular Maneuvers (Section 22.0) or Static Maneuvers. Each class of maneuvers is resolved differently.

Moving and Static maneuvers are resolved using the *Personal Maneuver Chart and the Static Action Chart* (or, at the GM's discretion, the *Alternate Personal Maneuver Chart*) while vehicular maneuvers are resolved using the *Vehicular Maneuver/ Astrogation Chart (pg 84-85).*

18.22 MOVING MANEUVERS

Moving Maneuvers include Climbing, Swimming, Stalking, and any complex or unusual movement (Acrobatics, Dodging, Tumbling, Diving, etc.). If a character decides to make a Moving Maneuver as his action for a turn, the GM should assign it a difficulty: Routine, Easy, Light, Medium, Hard, Very Hard, Extremely Hard, Sheer Folly, Absurd or Insane. The maneuver must still be within the physical capabilities of the character, and is limited to covering a distance no more than half of the character's normal (not running) movement. The GM may also assign an additional modification to the maneuver roll (e.g., an unassisted running leap across a 12 meter chasm for a human might be given a difficulty of "Absurd -70" since the Imperial Olympic record is only around 9 meters). Assigning difficulty requires a familiarity with the *Personal Maneuver Chart* and a subjective decision by the GM.

After the difficulty is assigned, the character may then decide not to attempt the maneuver (i.e., he reconsiders and decides not to do it). In this case, he cancels his action and may perform a limited action as described in 18.25.

If the character decides to proceed with the maneuver, he makes an open-ended roll and adds his appropriate bonus along with any other applicable modifications. The resulting total is cross-indexed with the difficulty on the *Personal Maneuver Chart* to obtain the maneuver result.

To summarize:

1) The character states the nature of his maneuver.
2) The GM assigns a difficulty and any special modifications to the maneuver.
3) The character decides whether or not to perform the maneuver.
4) If he decides to perform the maneuver, an open-ended roll is made.
5) All applicable modifications are made to the roll.
6) The total is applied to the *Personal Maneuver Chart.*

18.23 VEHICULAR MANEUVERS

Vehicular maneuvers (VM) include Driving, spaceship Piloting (both normally and while in combat) as well as piloting any air or water craft. See Section 22.0 for detailed rules for Vehicular Maneuvers.

18.24 STATIC MANEUVERS

Static Maneuvers (SM) include Tracking, Hiding, Picking Locks, Astrogation, Repairs, Perception, influencing other characters, and any other complex or unusual activity not involving significant movement. If a character chooses a Static Maneuver as his action for a round, the GM must assign any applicable modifications from the *Static Action Chart* and then the character must decide whether or not to actually perform the maneuver (see below for the effects of canceling an action). The GM may require more than one round for maneuvers which he decides are very difficult or complex. He may also allow a character to decrease the difficulty of appropriate maneuvers by using multiple rounds.



Additionaly, the GM must decide whether he is using the *Personal Maneuver Chart*, or the *Alternate Personal Maneuver Chart*, which has the maneuver types across the top, rather than the complexity level. It is important the the GM be consistent in his use of the tables.

If the character decides to proceed with the maneuver, he makes an open-ended roll and adds his appropriate bonus along with any other applicable modifications. If the modified roll is greater than 100, the action is successful. If not, the action fails.

To summarize:

1)The character states the nature of his maneuver.
2) The GM assigns a difficulty to the maneuver including special modifications.
3) The character decides whether or not perform the maneuver.
4) If he decides to perform the maneuver, an open-ended roll is made.
5) All applicable modifications are made to the roll.
6) Success: if the modified roll is over 100; Otherwise, Failure.

18.25 CANCELING ACTION

During a round, an action may be canceled before it would otherwise be resolved. A character who has canceled his action may perform one of the following alternative actions: melee with half his normal Offensive Bonus OR move half his normal (not running) movement **or** fire **or** make a maneuver modified by -30. The alternative action chosen must be performed when the other actions of that type are normally resolved.

19.0
MOVEMENT AND ENCUMBRANCE

The nature of Science Fiction, more than any other type of fiction, demands variety and veracity — unusual characters performing diverse actions in exotic environments. The possibilities are infinite, but detailed action (combat, etc) often requires near exact determination of a character's whereabouts and speed. The following section allows quick determination of character's movement rates and endurance levels under a variety of circumstances, and may serve as a basis for further (i.e., specific, local) situations.

Note: *As it appears here, the term "Factor by" means "Multiply by (1 + the modifier stated as a percentage)." (E.g., when you multiplied your Base Hit Points times your 1 + (Co/100) , you "factored by" Co Mod).*

Different races have different **Walking Movement Rates**, or **WMR**s. The Base WMR for all known Hominoids is 17 m per (10 second) Round (about 6 kph). Add the Race's St and Qu Mods (from the Racial Statistics Chart), and factor 17 by their total, rounding as usual. The result is the Average Racial WMR.

Average Racial WMR = 17 x [1 + (St mod + Qu mod)/100]
(e.g., Human WMR = 17.85, or 18).

PERSONAL WMR CALCULATIONS:

Modifications to the Average Racial WMR makes use of the **Movement and Encumbrance Chart** . In each of the three cases, the applicable WMR Mods (from the table) are added together to determine the "Factor", and the WMR obtained in The Previous Step is (you guessed it) factored by this total.

The *Unencumbered Factor* takes the character's Qu and Ag into account (temporary stats should be averaged before consulting the table), as well as Height (in meters). Factor the Average Racial WMR by the total to obtain the character's Unencumbered WMR.

Unencumbered WMR =
(Avg Racial WMR) x [1 + (Qu & Ag WMR Mod + Height WMR mod)/100]

The *Encumbrance Factor* is based on armor worn (the WMR mod is the same as the "Quickness Penalty" for the armor type) and "Encumbrance Units" carried (one EU of gear/etc equals one tenth the character's weight in kilos). The subtotal obtained (if negative) is offset by the character's ST Mod (if positive), but can never exceed ±0. Factor the Unencumbered WMR by the end total to obtain the Encumbered WMR.

Encumbered WMR =
(Unencumbered WMR) x [1 + (Armor WMR mod + EU WMR mod + St bonus)/100]
or
Unencumbered MMR, if smaller than above.

The Local/Gravity Factor comes into play whenever the Local Gravity differs from the character's own Homeworld's. Divide the Current Gravity by the character's Homeworld Gravity and consult the table. Factor the Encumbered WMR by the Mod shown.

All Movement and Moving Maneuvers attempted in an environment where a Gravity Factor exists receive a penalty as shown on the MM mod column. Skill in Alien Environments may be bought to offset this penalty (never raising it above ±0) though the Player must specify "Extremely Low G", "Low G", "High G" or "Extremely High G". Possessing "Low G" adds half rank bonus in "X-Low" environs (and vice-versa. "High G" adds half rank bonus in "X-High" environs (and vice-versa). These categories are indicated by the bold lines across the Gravity column on the table.

Example: *Sky's QU and AG average at 90, and he is 2.1 meters tall (almost 6'10"). His Unencumbered Factor is +15 (+10 for stats, +5 for stride), or 1.15. Multiplying this by 18 (Base WMR for Humans) gives us Sky's Unencumbered WMR: 20.7 (rounded to 21). Let's say Sky weighs 113 kilos (250 lbs). This means that each 11 kilos he carries is one Encumbrance Unit. Now let's put his mesh shirt and greave armor on him (WMR Mod of -5), and gives him 1 EU of gear (-10); his Encumbrance Factor is now -15, or .85, which gives him an Encumbered WMR of 17 (just a little bit slower than the average,* ***Unencumbered*** *Human). NOW, let's have Sky (who comes from a planet where the gravity is 1.2 Terran G's) travel to a planet with only .6G (Current/Homeworld Gravity = .5), and walk him around. For Sky, the Gravity Factor is +35, or 1.35, which gives him a local WMR of 22.95 (23 meters/Round). Bear in mind, however, that any detailed Movement or Moving Maneuvers Sky attempts will be at -35 unless Sky has the appropriate Alien Environments skill. Given enough Alien Environments skill ranks, Sky could reduce his Moving Maneuver penalty to 0. All Right, Sky!*

20.0 INJURY AND HEALING

"He's dead, Jim."

A Doctor (not a Miracle-worker)

20.1 INJURIES

Although death is a looming danger, injuries are much more common. Some injuries, however, effectively disable a character. Most make adventuring tough and, given their frequency, can present the characters with significant obstacles, including penalties or prohibitions applicable to the use of appendages, the deployment of senses, maneuvers, combat, or even simple travel.

Generally, injuries in ***Space Master*** occur as a result of damage from a critical strike. As such, the injuries are often described quite specifically. This provides a tremendous variety of effects and adds flavor to the game. It also requires a very specific healing system, equipment, skills and drugs covering every possible plight. The medical equipment found in the **Tech Book** is designed to provide detailed descriptions covering any injury which might arise.

In any case, treating injuries is considered to be one or more Static Maneuvers. The GM should have an understanding of the equipment available and the extent of the injury, then decide what sort of procedures will be necessary to correct the problem. Often the critical damage description itself will provide the key information. The GM then needs to have the player performing the operation roll, including the following modifiers:

1) Equipment complexity
2) General Static Action modifiers
3) Applicable medical skill
4) Other factors the GM deems appropriate

The GM should decide which static action chart he wishes to use. He should also remain consistent which chart he uses throughout the campaign, though he can mix and match maneuver 'types' (e.g., using the *Alternate Personal Maneuver Chart* for healing and the main chart for all other maneuvers), if he wishes. The modified roll is then cross-indexed, and the result determined and applied.

20.11 GENERAL DEGREES OF INJURY

It is still helpful to categorize injuries in broad, manageable groupings. These enable the GM to apply certain general rules regarding recovery and effect.

1) Light Injuries. If a specific injury results in a penalty of -0 to -20, it is considered "light." In addition, light injuries include wounds which yield 1-5 hits per round as a result of bleeding.
2) Medium Injuries. Specific injuries which result in a penalty of -21 to -50 are considered of "medium" severity. Medium injuries also include wounds which yield 6-10 hits per round as a result of bleeding. Fractures with an unspecified penalty are medium injuries.
3) Severe Injuries. Should a specific injury result in a penalty of -51 or more, it is "severe." In addition, severe injuries include shattered bones and wounds which yield more than 10 hits per round as a result of bleeding. Any wound which destroys an organ (e.g., eye, kidney, etc.) or renders it inoperable for more than one day is also severe.

MOVEMENT AND ENCUMBRANCE CHART

WMR Mod	Qu&Ag	Height/ Stride	Armor Worn	# of EU's	C/HW Grav	MM Mod
+50					.3	-50
+40					.4	-40
+35	102+				.5	-35
+30	101				.6	-30
+25	100				.7	-25
+20	98-99				.8	-20
+15	95-97	2.3-2.45			.85	-15
+10	90-94	2.15-2.29			.9	-10
+5	75-89	2-2.14			.95	-5
±0	25-74	1.71-1.99		<1	1	±0
-5	10-24	1.56-1.7	AT 10, 14, & 17		1.05	-5
-10	5-9	1.41-1.55	AT 7	1	1.1	-10
-15	3-4	1.26-1.4	AT 8, 11, 12, 15, 16 & 18		1.15	-15
-20	2	1.11-1.25	AT 19	2	1.2	-20
-25	1	.95-1.1	AT 20	3	1.3	-25
-30				4	1.4	-30
-35				5	1.5	-35
-40				6	1.6	-40
-50				7	1.7	-50
-60				8	1.8	-60
-70				9	1.9	-70
-80				10	2	-80
-90				11	2.1	-90
-100				12	2.2	-100
-110				13	2.3	-110
-120				14	2.4	-120
-150				15	2.5	-150

20.12 TREATMENT

Even after an injury is treated, however, recovery is rarely instantaneous. The GM must consider the effect of the wound after treatment. For instance, how long does it take to recover? Will there be any permanent damage (e.g., a lowering of stats)? What effect does the wound have on the character while he is recovering?

The form of treatment for a given injury is normally prescribed by :

1) the description fo the wound, or

2) the explanation of the Psion or medical technique employed. Some injuries, for instance, are healed by techniques that require the victim to remain immobilized during treatment. Whatever the treatment, the procedures should be followed, lest the treatment fail.

20.13 FIRST AID

First aid can be employed by virtually anyone, but has limited effectiveness. Essentially, the 'medic' must make a successful *Static Action* (see Section 18.24) in order to aid the victim. This roll is modified by the actor's First Aid secondary skill bonus. Anyone having a "0" First Aid skill rank operates at -25 (modified by stat bonuses).

First Aid skills enable a character to heal any light injury, so long as he utilizes the necessary equipment (e.g., a compress and bandage for light bleeding, splints or slings for light sprains or fractures, etc.). In addition, this skill can be used to slow or halt the effects of medium or severe injuries (e.g., you can reduce any bleeding rate by 5 hits/round, or more if you use a tourniquet; or you can set a medium fracture and stop any associated deterioration). First aid is generally ineffective when dealing with medium or severe nerve or organ damage.

20.14 RECOVERY FROM WOUNDS

Some operations and Psions specify recovery time. Where they do not, use the *Healing Recovery Chart* (pg 72) which gives some suggested recovery times for general injuries. As a rule, the recuperation period for multiple injuries equals that of the worst wound plus half the cumulative recovery time for all other concurrent wounds.

Example: *As a result of a swindle, Drake Morgan buys a gravscooter with defective braking thrusters. The first time Drake tries to slam on the brakes, the thrusters fail, sending him crashing into a safety wall. Drake receives a severe head wound (recovery time 30 days), a medium bone wound (recover time six days), and a light tissue wound (recovery time one day). Assuming he is healed, his total recovery time is 33.5 days (30 + 3 + .5). Poor Drake.*

While recovering, a character's penalty gradually declines. To determine the rate at which the character returns to normal health, divide the penalty by the recovery time (in days). The result is the daily reduction in character's penalty. Round off any fraction and apply any leftover penalty to the amount recovered the first day. If the recovery time is less than or equal to two days, the GM may wish to determine recovery on an hourly basis.

Example: *Drake received a total penalty of -70 as a result of his impact. If his recovery time is 33.5 days, he divides 70 by 33.5, yielding a restoration rate of 2.09. He rounds this to 2. So, Drake's penalty is reduced by 2 each day of recuperation. Since 2 times 33.5 equals only 67, there is a 3 remainder. This is applied to the first day of recovery, meaning that Drake's penalty is reduced by 5 after the first day.*

When an injury description specifies that the organ, appendage, etc. is useless, the penalty is considered -100. Recovery usually begins when the area is healed.

If a critical strike description specifies that an area of the victim's body is useless or at a subtraction for a set period, it is assumed to be penalized accordingly for the entire prescribed period. However, once the period passes; recovery begins as if the area was healed. Any healing during the set period will start the recovery process earlier.

20.15 RECOVERY FROM HITS

Concussion hits heal at a rate of one per hour if the victim is resting. Should the victim be active, the rate drops to one every three hours. This may be adjusted by a race's recovery (healing) multiplier.

20.16 PERMANENT DAMAGE

Most of these questions are very subjective and must be decided on a case to case basis. For example, having an arm cut off and then re-attached might cause a loss of Agility (temporary or permanent) and maybe a scar. Clinical death might cause a general loss of abilities, partial loss of experience and scars.

As a rule of thumb, a character might receive permanent damage only in case of a severe wound. In such a situation, have the character make an open-ended D100 roll and add a number equal to his Constitution (not simply the Co bonus). Should the result exceed 100, there is no permanent damage. If it falls short of 101+, the greater the difference, the worse the permanent damage.

20.17 DISEASE

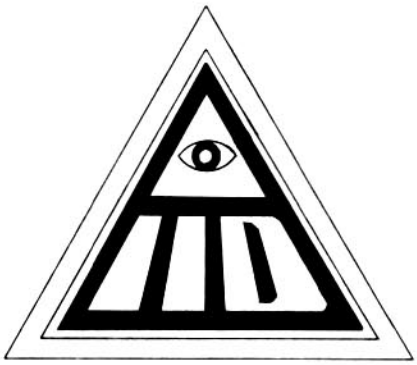
Although disease should be a relatively rare misfortune in the civilized environment of ***Space Master***, new viruses and bacteria could be encountered on the Frontier. It be the result of a Random Event, a part of a character's makeup (e.g., Skhan has a hereditary disease which leads to a drooling problem), an artificial creation of some mad virologist, or a simple decision/calculation on the part of the GM.

A person attacked by a disease must make a resistance roll, comparing his own level with that of the disease (Use the RR table). The victim adds his Constitution bonus and his Race bonus to the roll. When the poor victim fails the RR, the GM should determine the degree of failure by comparing the adjusted RR with the number needed to succeed. Unless the disease is described otherwise, (e.g., the disease delivers only moderate effects), the difference indicates the severity of the effect.

RR Failure	Effect Severity
01-25	mild
26-50	moderate
51-100	serious
101 +	extreme

20.2 HEALING RECOVERY CHART

This chart provides recovery times for most general injuries. When using it, apply the character's Constitution bonus to any roll. The result is the recovery time for light injuries. Multiply the figure by 5 for medium injuries and by 10 for severe injuries. Halve the recovery time if the victim is hospitalized or placed in some other special care.



21.0 USING EQUIPMENT

Within this section a number of ill-defined role playing activities will be (vaguely) covered. Such day-to-day activities as reading your multiscanner, looking for security systems — and how to handle them within game mechanics — will be discussed. Everything below should be carefully considered by the GM before integrating into his game.

21.1 SUCCESS AND FAILURE

Throughout the universe of ***Space Master*** the magic number for all maneuvers not covered in some table is a (modified) 100. If you roll *over* a 100 after all the bonuses and penalties are included, you have succeeded in whatever maneuver you have attempted. In the following sections any reference to a "successful" roll implies a net roll of 100 or above.

Some alternatives which include 'partial success' are discussed below.

In general, all rolls can be open-ended, most rolls using a piece of equipment for data-gathering, healing, etc., are high open-ended rolls *only*. A roll of 01-05 is read as-is, and has specific meaning regarding use of the equipment.

A GM may wish to use the Alternate Personal Maneuver Chart (pg 80) for scanning and sensing.

21.2 MAKING SCANS

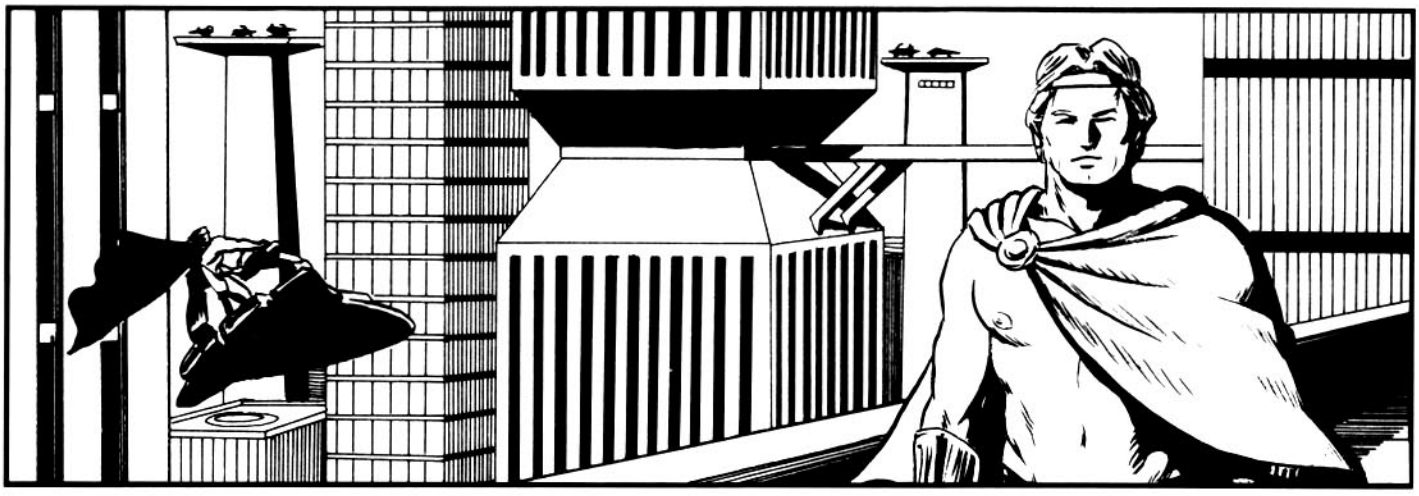
Multiscanners are immensely popular tools in some campaigns, greatly enhancing a group's ability to analyze and understand their environment. Carefully monitored, these machines can enhance a game. Allowed to run amok, however, "multiscanner abusers" can ruin the excitement of a campaign. The GM can use the following suggested range and complexity modifiers (in addition to he Static Action modifiers if applicable). Multiscanners, Repair Scanners, and Medscanners must be 'aimed' within about 10° of their intended target, or the user must make a sweep, taking about one full minute (a hasty sweep will incur a penalty equal to the hastiness, i.e., a 30 second sweep will have a -50 penalty, a 15-second sweep a -75 penalty, etc.) Only Tactical Scanners have an automatic 360° sweep.

Scanners

Handheld scanning devices are capable of various types of scan/analysis, as well as recording scan information for future, more detailed analysis by an onboard ship or land-based computer. They are also capable of normal audio-video recording. On the opposite page is a summary of the scans which can be performed.

HEALING RECOVERY CHART

Roll	Type of Damage					
	Burn	Bone	Tissue	Head	Organs	Muscle/Tendon
01-15	3 days	5 days	3 days	10 days	9 days	7 days
16-35	2 days	3 days	2 days	7 days	6 days	4 days
36-65	2 days	2 days	1 day	5 days	4 days	3 days
66-90	1 day	1 day	1 day	3 days	3 days	2 days
91-100	1 day	1 day	1 day	2 days	2 days	1 day



SCANNER CHART

Multiscanner

Life Types

Scan/Detection Type	Point Blank	Short Range	Medium Range	Long Range	Extreme Range
Life form detection:	10	100	500	1000	2000
Determine # of units	10	50	100	200	500
Determine Basic Type	5	10	20	50	100
Determine Race	1	5	10	30	60

Power Emanations

Scan/Detection Type	Point Blank	Short Range	Medium Range	Long Range	Extreme Range
Personal Comm beam				100	
Ship Comm				500	
Base Comm				1 km	10 km
Ship Reactor				10 km	
Base Reactor				100 km	

At 1/10th of detection range (again, somewhat variable, dependent on conditions and skill of scanner operator) specifics can be made out (interception of transmission, exact location and type of power generation).

Physical Analysis

Scan/Detection Type	Point Blank	Short Range	Medium Range	Long Range	Extreme Range
One gram	1	3	5	10	30
One kg	50	100	1km	10km	20km

This could be modified depending on the rarity of the material.

Repair Scanner

Scan/Detection Type	Point Blank	Short Range	Medium Range	Long Range	Extreme Range
Disrupted Circuit				50	100
Deepscan Lock			50cm	1	3
Any Electrical Current	10	30	50	100	500

Other Power Emanations and Physical Analysis functions as Multiscanner with triple range.

Medical Scanner

Scan/Detection Type	Point Blank	Short Range	Medium Range	Long Range	Extreme Range
Life form detection	10	100	500	1000	2000
Determine # of units	20	100	300	500	1000
Determine Basic Type	10	30	50	100	300
Determine Race	3	10	30	50	100
Verify specific Individual	1	3	5	10	30
Detect bacteria/virus	1	3	5	10	30

Tactical Scanner

Scan/Detection Type	Point Blank	Short Range	Medium Range	Long Range	Extreme Range
Detect Motion	10	20	30	40	50
Detect Infrared	10	20	30	40	50
Specify Moving objects	3	5	10	15	20
Specify Infrared objects	3	5	10	15	20

General Modifiers

Point Blank ..... Routine (+30)
Short Range ..... Light (+10)
Medium Range ..... Hard (-10)
Long Range ..... Extremely Hard (-30)
Extreme Range ..... Absurd (-70)

21.3 SENSOR SYSTEMS

As explained elsewhere, the term SENSR is an abbreviation of the device's means of operation: Selected Electromagnetic/Neutrino-Stream Reflection. Although hand-held Scanners use much the same method, their limited range and specialized function make them quite a bit simpler to understand than ship-mounted SENSR systems. Such systems consist of three parts: The Emissions Unit (which treats/charges and sends out the Stream), the Retrieval Unit (which attracts and collects the reflected particles), and the Selection/Analysis System (which consists of any Computer programs and/or sentient operators — the system which specifies and correlates the actual data).

Skills Used:

The Sensor Analysis skill is used to modify any use of the SENSR system (unless something goes wrong with it). This score is averaged with the Computer's program rank bonus. Analysis without the appropriate (or any) program is three Difficulty Levels higher than normal ("Medium" operations become "Extremely Hard", etc). SENSR attempts are rolled on the appropriate column of the Main *Personal Maneuver Chart* (pg 79), or the *Alternate Personal Maneuver Chart* (pg 80). Problems with the Emissions Unit are treated by Power Systems Tech, while the Retrieval Unit requires Electrical Tech. SENSR Analysis program problems (obviously) fall under the realm of the Computer Tech.

Visual Display:

A frequently-used capability, it is impossible without the appropriate Computer program in the CPU. Data to be displayed must first be SENSR'd by the Computer. See below for Base Difficulties.

Graphic Data Display:

This is Another popular use of the Analysis programs (in most cases, creating such a display without the necessary program would be at least a Complex research project) which allows data retrieved to be sorted and displayed in a graphic/pictorial manner. For instance, a search for lifeforms on a nearby planet will reveal their presence (and possibly even number), but if you want a map of the major settled areas, you need a Graphic Data Display. This is a separate static maneuver (aside from the initial SENSR scan), performed by the Computer (use the program rank mod) at the same Difficulty Level as the original scan.

Range:

There are four Range Categories for the SENSR; Short, Medium, Long, and Extreme. Range modifies the Base Difficulty of any SENSR Analysis attempted, as below:

Category	Extends To	Difficulty Level Adjustment
Short	1 Light-Second (300,000 km)	- 1 (HARD becomes MEDIUM, etc)
Medium	1 Astro. Unit (150 mill. km)	±0 ("Standard operating range")
Long	1 Light-Year (9460.8 bill. km)	+ 1 (LIGHT becomes MEDIUM, etc)
Extreme	Limit of SENSR range	+ 2 plus 1 per 10 LY distant

BIO ANALYSIS CAPABILITIES CHART

Target/Nature of Analysis	Base Difficulty Level	Notes/ Limitations
Detect Presence of Lifeforms	Easy (+20)	(Known Types)
Determine Bio-Kingdom of Lifeform	Medium (+0)	Flora/Fauna/Fungi
Determine distribution of Lifeform	Hard (-10)	Must have "Search" data
Determine Chemical Base	Very Hard (-20)	(Known types)
Determine Body Shape/Size	Medium (+0)	
Determine Body Temperature	Light (+10)	
Physiological Structure	Very Hard (-20)	Skeleton/Organs, etc.
State of Health	Extremely Hard (-30)	(Known Physiologies)
Diet	Very Hard (-20)	(From waste matter in Body)
Search for Known Individual	Easy (+20)	If SENSRing a construct
	Sheer Folly (-50)	If SENSRing a planet
Visual Display of SENSR'd being	Light (+10)	Black/White 2-D image‡
	Medium (+0)	Color 2-D image‡
	Very Hard (-20)	Color 3-D image (Hologram)

‡ Image can be made to rotate to show other views

CONSTRUCT ANALYSIS CAPABILITIES CHART

Target/Nature of Analysis	Base Difficulty Level	Notes/ Limitations
Power Use (Personal/Vehicular/Civic)	Hard†/Sheer Folly*/Routine	
Communication (Pers/Vehic/Civ)	ExHard†/Absurd*/Easy	Including band/freq.
Computer Mk. #	Sheer Folly*	
Drive ("M/A"/Atomic/Lesser)	Very Hard*/ExHard*/Sheer Folly*	And/or Maneuver Mod.
Energy Weapon	Extremely Hard§	Mk. #10 or higher
EW/Stealth	Absurd (-70)*	see EW section
Fuel ("M/A"/Fission/Fusion)	Easy/Light/Hard	
Grav/Antigrav Field	Medium (+0)†	
Molecular Structure	Hard (-10)	(Known compounds)
Atomic Structure	Extremely Hard (-30)	(Known elements)
Missiles/Torpedoes	Hard (-10) §	
Open Spaces (Bays/Holds, etc)	Light (+10)	
Screens/Shields	Very Hard (-20)*	
SENSRs	Sheer Folly (-50)*	
Silhouette Display	Routine (+30)	
Tonnage	Light (+10)	
Current Hits	Hard (-10)	
Workshop	Sheer Folly (-50)*	
Visual Display of SENSR'd vehicle/ship	Light (+10)	Color 2-D image‡
	Hard (-10)	Color 3-D image (hologram)
Visual Display of SENSR'd civic area	Very Hard (-20)	Color 2-D image‡

† = Assumes item/system operating. If not, -50.
* = Assumes Item/system NOT operating. If on, add standard diminishing bonus per each Rank currently in use. (1-10=+5 ea, 11-20=+2 ea, etc).
§ = Add Mk. # of weapon.
‡ Image can be made to rotate to show other views

EW/Stealth:

The primary function of the Stealth system is to distort and/or nullify pervasive SENSR Scans. Any SENSR attempts versus a "Stealthy" Target take a penalty equal to the Stealth bonus, regardless of the type of scan attempted. See the section on EW for more details.



Example: *Jym-bob has found a large, bizarre construct floating in the Rhetorica Nebula and attempts to SENSR it tor energy weapons from Long Range. The GM knows that there are no energy weapons aboard, but he also knows that the construct emits a constant "Stealth" (EW) field of +70. The Base Difficulty for the task is Extremely Hard (-30) (the footnote tells the GM to add the Mk. # which is zero), but the Actual difficulty is Sheer Folly (-50) due to range. The Die roll is modified for Jym-bob's Sensor skill (+45), for the Difficulty (-50), and for the EW (-70), leaving Jym-bob's poor Player a total of -75 to determine that he's looking for nothing.*

PLANETARY ANALYSIS CAPABILITIES CHART

Target/Nature of Analysis	Base Difficulty Level	Notes/ Limitations
Atmospheric Makeup	Medium (+0)	(Known Compounds/Gases)
Climate Code	Hard (-10)*	Hot/Warm/Temperate, etc
Mean Planetary Density	Medium (+0)*	
Geological Makeup	Extremely Hard (-30)*	(Known Elements/Ores)
Gravity/Escape Velocity	Light (+10)	
Hydrosphere	Easy (+20)*	
Meteorological Phenomena/Patterns	Very Hard (-20)*	-30 if climate "dormant"
Planetary Circumference	Routine (+30)	
Precipitation Code	Medium (+0)	Rainy/Humid/Arid, etc
Rotation Period (Day	Easy (+20	
Mean Surface Temperature	Light (+10)*	
Current Surface Temperature	Easy (+20)	within a single "region"
Visual display of SENSR'd area	Light (+10)	very poor detail at >SR

* = Assumes full planetary orbit performed. If not, -50 from roll, and time required is x6 ("1 rd" = 1 min).

STAR SYSTEM ANALYSIS CAPABILITIES CHART

Target/Nature of Analysis	Base Difficulty Level	Notes/ Limitations
Locate Asteroid Belt	Light (+10)	
Determine number of Asteroids in Belt	Hard (-10)	
Locate Planetary Body	Routine (+30)	
Radius of Stellar Gravity Well	Light (+10)	
Locate stellar ecosphere	Very Hard (-20)	(by Human standards)
Locate moons	Easy (+20)	of one given planet
Locate Empty Orbit	Hard (-10)	
Determine Orbital Period (Year)	Medium (+0)	for one given planet
Star's Spectral Type	Routine (+30)	
Star's Stellar Brightness	Light (+10)	
Star's Stellar Class	Routine (+30)	
Star's Stellar Mass	Medium (+0)	
Star's Stellar Radius	Light (+10)	
Star's Stellar Temperature	Easy (+20)	
Visual Display of SENSR'd N-Space Area	Extremely Hard (-30)	Very scant detail

21.4 SECURITY

For some reason it seems that many groups of players spend a lot of time breaking into other peoples' homes and places of employment. Since this vulgar practice shows no sign of abatement, perhaps some clarification of rules surrounding such activity is in order.

21.41 ELECTRONIC DEVICES

The masters of electronic surveillance and security are the Crime Techs. Crime Technics skill is used to defeat all non-mechanical locks, alarms and other such 'traps'. Naturally anyone with Crime Technics skill falls into this category.

However, before the lock is picked it must be analyzed; one utilizes a Repair scanner for such a purpose. Multiscanners may be used, but their attempt will be *Extremely Hard (-30)* because of the scanner's inaccuracy. A successful scan of the electronic lock allows the lock-pick attempt to be made without any modifiers beyond the lock's base difficulty (and any environmental factors; see the *Static Action Chart*). The actual defeat of the lock is then perpetrated using Crime Technics skill. It is assumed that the Crime Tech has some sort of electronics override kit for use with locks more complex than your basic keypad. Such instruments as a Tonal Synthesizer (for audio locks), a Spectral Sequencer (for those annoying coherent light beam locks), and a variety of small, delicate tools and optical filaments and wiring for bypassing various other tricky devices. The cost for such kits is highly variable (100 — 5000 monits). The GM should sit down with a fledgling Crime Tech early in the campaign to go over the technology, what he might encounter and what might be needed. Trying to pick a lock without a scanner analysis is *Absurd (-70)*. The penalty for trying to pick one without the proper tools is highly variable.



Before the electric eye (or other 'trap') is defeated, it must be detected. The skill of Perception is used in this case. Note, however, that while Perception is a general skill, some modifiers are in order. Any character with no Crime Tech skill finds looking specifically for security traps an *Extremely Hard (-30)* endeavor.

Crime Techs find it Medium (+0) — in general. Depending on the nature of the device, a successful Repair scanner roll might provide an additional bonus to overcoming the trap. Disarming (or avoiding) the trap involves Crime Technics skill, and might also require special equipment.

21.42 MECHANICAL CONTRIVANCES

While crude mechanical locks and traps are rarely found in the milieu of ***Space Master***, they do occasionally rear their ugly springs and tumblers. They are detected and analyzed in the same manner as electronic devices above — though using a scanner to analyze any mechanical lock or trap adds 30 to the pick/disarm roll. However, Crime Technics skill may only be used at *Half* value towards defeating these crude devices. It would behoove the Crime Tech who wishes to be well-rounded to develop skill in Disarm trap and Pick Lock.

21.5 STEALTH/ELECTRONIC WARFARE

Stealth Systems, also known as Electronic Warfare (EW) systems have many uses on the ship, and to be fully utilized require a full-time operator during battle. A ship's EW rating can be used as a DB, (or to cancel an opponent's EW-caused DB) or can jam (and detonate) incoming missiles. The primary EW operator (person with highest EW skill at a console) must declare (or secretly write down) where he will allocate EW for that turn: DB, Anti-DB, Transmission Jamming or Missile Jamming. The total EW number can be split, but the decision made at the beginning of the turn is locked in until the next turn.

Example: *Duncan is the EW operator of his ship, the Defiant. He has an EW skill of 50, and the Defiant's EW rating is also 50. The sensor officer detects a ship closing, possibly hostile. Duncan activates the Defiant's EW screen and ponders how to allocate points. The sensor officer announces that he can only detect Laser Cannons as the incoming ship's armament, so Duncan sets the EW on full DB, since he is defensively minded, and there is no evidence that the other ship has missile armament. He is committed for the game turn. A round later as the ship closes and the Sensor Officer gets another roll, he detects missile tubes! Too bad, since Duncan cannot re-allocate some of the ship's EW points until next turn. If he had known, he might have devoted some EW to missile jamming, and had a better chance of stopping the potentially devastating missile attack, sure to come from the opponent.*

EW Missile Jamming

With missile jamming, the EW bonus is used as an attack against an incoming missile – the missile receiving a bonus against this EW equal to its Mk. rating. More than one missile can be acted upon in a given round, but there must either be multiple operators, or the operator's skill bonus must be split between the missiles. Note that missile jamming is the only time that the EW operator skill bonus is employed in combat. Roll 1-100 open-ended, add EW allocation, add operator skill bonus, subtract MK# of missile. If 100+, the missile is "jammed," and detonates before reaching its target.

Example: *The Defiant has been under attack, the enemy firing laser cannons, which have been ineffective till now. It is the beginning of turn two and Duncan may re-allocate his EW, based on the new sensor data. The Defiant has an EW rating of 50. Duncan, with an EW skill bonus of 50, has a number of options:*

Option 1: *He can ignore the threat of missiles and hold his full EW as a subtraction to his DB, as he has been. Flaws in this idea are that if the enemy fires missiles, they will almost certainly reach their target, and his EW-DB might already be partially annulled by the attacker's EW – if they are using theirs to thwart his.*

Option 2*: He can use his full EW on missile jamming, giving himself a good chance of destroying any that are fired. This, however, reduces the ship DB by 50.*

Option 3: *He can allocate part of the EW rating to each: for instance 20 to overall DB, and 30 to missile jamming. He decides to do Option 3.*

The opponent launches two Mk. 20 missiles at the Defiant. With two incoming missiles, and Duncan as the only EW operator, he has two choices:

1) *split his EW and try to stop both. With this option, he would need to roll 66 or above to jam each (half his bonus of 50: 25,* ***plus*** *EW committed to jamming: 30 (note full jamming EW is used against each missile, while the operator skill must be split),* ***minus*** *the missile Mk. of 20 equals 35. He adds his roll, and the total must exceed 100). A separate roll is made for each missile.*

2) *Use all of his EW against one missile and have a better chance of destroying against one missile and have a better chance of destroying one. In this case he adds his full EW: 50* ***plus*** *the allocated ship EW: 30,* ***minus*** *the missile Mk. of 20. He must roll a 41 or better.*

Note that if there were two operators (and consoles), each operator could devote his full EW skill rating and the ship's full (allocated) EW rating against a missile. Missile strike results are determined at the end of the round, after all manning attempts are made.

EW Cloaking/Stealth

This function cannot be used simultaneously with any other function. Cloaking thwarts enemy sensor detection/analysis. It is not very effective during combat, since overt use of weapons and sublight engines are easily picked up on sensors, and the 'cloak' is useless. It is useful just before combat in attempting to ambush an unsuspecting opponent. In this case, the stealthy ship's EW operator adds his EW skill bonus and the ship's EW, and rolls. The 'victim' ship is allowed a Routine sensor roll, adding the ship sensor bonus, the operator bonus, and any others applicable. If the stealthy ship's modified roll is 100 over the victim's roll, it is undetected. Less than 100 but still more than the victim indicates inconclusive data; a roll of less than the victim's indicates full detection and ship analysis. Once a ship is picked up on sensors, rolls are made every turn, but the stealthy ship must roll a modified differential of over 200 to 'vanish' again, after a sensor lock has been established.

EW Defensive Bonus

Ship's DB is increased by a factor equal to the amount of available EW designated to it.

EW Anti-Defensive Bonus

This function can be used to cancel an opponent's DB created by that opponent's EW only. EW anti-defensive bonus cannot be used to cancel other ship DB factors such as shields or Evade. For example, say the Defiant has 20 points of its EW designated for DB, the rest reserved for missile jamming. The Defiant's attacker uses 50 points of their EW rating in an attempt to cancel the Defiant's EW-DB, but only effectively cancels 20 points, because that is all that was designated.

Transmission Jamming

EW can also jam other ships' (and, necessarily, their own) transmissions by creating a large radius interference field, the generating ship at the center. Radius and intensity vary according to points designated. Each point adds 1 LS to the radius, and subtracts from a Comm Tech's attempted transmission roll. All ships within the radius are affected both for incoming and outgoing transmissions.



21.6 BREAKAGE

Although all field equipment in ***Space Master*** is designed to take a beating, sometimes field scientists manage to dish out more than your average piece of equipment can take. This can be assumed to occur in three ways, dealt with using the *Equipment Mishandling Chart.*

Character Makes a Bad Use Roll

Whenever a character uses a piece of field equipment (multiscanner, healing device, etc.), he must make a roll. An unmodified 01-02 indicates some sort instrument failure — roll 1D10 for charge depletion or malfunction: 1-7, energy charge depleted; 8-9, equipment malfunction; 10, equipment has been dropped.

Character Falls or Is Hit

This is a fairly straightforward situation. Should the character fall down (from no appreciable height), all equipment not stored (e.g. held in the hand or on the belt rather than packed in the backpack) must make a Maneuver Roll versus damage. Standard equipment has a +50 modifier versus damage. For every additional meter the item falls, - 5 from the modifier.

If the item fails (the result being 100 or less), a 1D10 severity roll is made, and a Damage Type Roll. The *Repair/Malfunction Chart* is consulted when someone who can repair the device is present, and his modifiers can be employed.

The GM might also want to have the damage severity roll modified for great heights (once it is established that the item is not miraculously undamaged), such as +1 per 5 meters. Any result over 25 is considered Extremely Severe.

MINIMUM DAMAGE FOR FALLS

Dist. Fallen	Severity Range
1-5m	Routine — Extremely Severe
6-10m	Light — Extremely Severe
11-15m	Moderate — Extremely Severe
16-20m	Severe — Extremely Severe
21-25m	Very Severe — Extremely Severe
26m+	Extremely Severe Only

Example: *Alistair Aurora is standing on the edge of a 30 meter precipice with his multiscanner. He attempts to scan the lands beyond, but rolls an 01. He rolls a 1D10 and, being a clumsy fool, he rolls a 10 (drop item). Alistair, leaning over the edge, watches his scanner tumble all 30 meters to the bottom. It has a base 50 modifier, but the 30 extra meters means (30 x 5 = 150) it is at -100. Alistair would have to roll 200 (open-ended is allowed) or over for the poor machine to be intact. Alistair fails (of course). The Cruel GM uses the Minimum damage table, so Alistair's scanner is Extremely Severely damaged.*

Criticals

When the character suffers a critical which specifically indicates damage to a tool, weapon, or area of the body where such might be located, the GM must decide whether the item is at risk of being damaged. If so, a roll should be made, modified by +50 (an intrinsic bonus for the item) and the critical severity:

A ..... -10
B ..... -20
C ..... -30
D ..... -40
E ..... -50

Should the net roll be 100 or less, the *Equipment Mishandling Chart* should be employed, modified by the severity of the critical delivered against the target.

The chart below should be rolled on to determine the type of damage, including the modifiers noted (not open-ended).

EQUIPMENT MISHANDLING CHART

-29	Your piece of equipment, in a last act of vengeance, gives you an "A" critical hit, then disintegrates into a useless lump of semiconductors.
-28 — -21	Your device is a collection of shattered circuits and cracked plastic. There is nothing worth saving; don't even bother to make a repair roll.
-20	With a loud bang, a 'poof' and a billow of smoke, every circuit in your item shorts out.
-19 — 05	The item is perfectly operational — except every time you use it, the equipment gives you a 1D10 hit electrical shock. Insulating gloves will help, but subtract 30 from any bonus.
06 — 20	The recalcitrant equipment is operational at -50.
21 — 50	If the device has more than one function (a multiscanner, for instance), it has one function is operational; otherwise it is useless until repaired.
51 — 79	You can try to use your device, but 50% of the time it doesn't work.
80	The device works fine — if you hold it upside-down (and only then). This subtracts 30 to 90 from your bonus, depending on the item's use.
81 — 89	The device is functional but at -30.
90	The equipment is functional, but it drains the energy cells at an accelerated rate. Any roll of an 03-20 during use indicates drained cells.
91 — 99	The equipment is functional but at -20.
100	The device seems to work fine; however, it is secretly burning itself out, and after 1D10 more uses the damage increases to *Extremely Severe*. It is useless until repaired.
101 — 109	Your device will function, but at 1/2 normal range until repaired.
110	Your equipment is fully operational, but the next time it must roll versus damage it is +0 (instead of the normal +50).
111 — 119	The device is fully functional but all operations are at -10.
120	A sharp slap and the item begins to function normally again. No damage except a couple of scratches.

MODIFIERS

Extremely Severe — -30
Very Severe — -20
Severe — -10
Moderate — +0
Light — +10
Routine — +20

STATIC ACTION CHART

BASIC MODIFICATIONS

Category	Condition	Speed & Strength	Hiding	Disarm Traps	Pick Locks	Perception	Maneuvers*	Misc.
Difficulty	Routine	NA	NA	+30	+30	+30	NA	+30
	Easy	NA	NA	+20	+20	+20	NA	+20
	Light	NA	NA	+10	+10	+10	NA	+10
	Medium	NA	NA	0	0	0	NA	0
	Hard	NA	NA	-10	-10	-10	NA	-10
	Very Hard	NA	NA	-20	-20	-20	NA	-20
	Extremely Hard	NA	NA	-30	-30	-30	NA	-30
	Sheer Folly	NA	NA	-50	-50	-50	NA	-50
	Absurd	NA	NA	-70	-70	-70	NA	-70
Lighting[1]	No Shadows	NA	-30	+20	+10	+20	+10	+10
	Light Shadows	NA	-20	+10	+5	+10	+5	+5
	Medium Shadows	NA	0	0	0	0	0	0
	Heavy Shadows	NA	+10	-10	-5	-10	-5	-5
	Dark	NA	+30	-30	-10	-30	-20	-20
	Pitch Black	NA	+40	-40	-20	-50	-40	-30
Shock & Pain	25-50% Hits Taken	-10	NA	-5	-5	-5	-10	-10
	51-75% Hits Taken	-20	NA	-10	-10	-10	-20	-20
	76%-up Hits Taken	-30	NA	-20	-20	-20	-30	-30
Bleeding	For each Hit/Rnd taking	-10	NA	-5	-5	-5	-10	-10
Serious Wound	For each limb out	-10	NA	-5[2]	-5[2]	-5	-10[2]	-10[2]
	Stunned	-30	NA	-50	-50	-30	-50	-50
	Down	-50	NA	-70	-70	-50	-70	-70
Combat Situation	In melee	-20	NA	-50	-50	-20	-30[3]	-30
	Under missile fire	-10	NA	-20	-20	-10	-10	-10

SPECIAL MODIFICATIONS:

Speed & Strength	For each consecutive round of preparation using 100% activity.	–	+10
Hiding	Quality of hiding place: Bad	–	-20
	Fair	–	0
	Good	–	+10
	Very Good	–	+30
	Excellent	–	+50
	Presence of Hider in the area is known to searchers.	–	-30
Disarming Traps & Picking Locks	A perception roll is successfully made by the disarmer/picker.	–	+20
	For each time the trap/lock has been tried without success.	–	-30
	Disarmer/picker has disarmed/picked this trap/lock before	–	+50
	Disarmer/picker has disarmed/picked this type of trap/lock before.	–	+30
	Disarmer/picker has the construction of the mechanism described to him.	–	+20
Perception	Player mentions the appropriate thing being perceived. (e.g. the player says he is actively looking for an ambush or trap)	–	+30
	The character making the perception roll has encountered the situation being perceived before (this specific character, not the player of the character).	–	+20
Maneuvers*	Encumbered[4] Light (one weapon and belt equipment)	–	0
	Medium (weapons/armor and belt equipment)	–	-10
	Heavy (weapons/armor and normal pack)	–	-20
	Very Heavy (all personal equipment and 50-100 lb.)	–	-30
	Burdened (all personal equipment and over 100 lb.)	–	-50

* Modifications to maneuvers are applied to a roll on the Personal Maneuver Chart

[1] These lighting conditions are for normal human eyesight, creatures that can see in the dark should ignore the dark and pitch black modifications and half the shadow modifications.

[2] If the limb that is out of action is normally required to perform the action, the GM should increase the difficulty of the action and drastically increase these modifications.

[3] In certain situations the maneuverer may withdraw from melee without his opponent(s) being able to attack him if he completes a successful maneuver.

[4] These encumbrances are approximations, absence of one of the weight categories would drop the encumbrance condition one level (e.g. a character with a normal pack, no armor and one weapon would be medium, *not* heavy).

Note: A category is all conditions between a set of lines. Only one condition from a category can have its modification applied to an action (e.g. a character attempting to pick a lock may have taken 77% of his hits, only the -20 modification is applied and not the other two).

PERSONAL MANEUVER CHART									
	Routine	**Easy**	**Light**	**Medium**	**Hard**	**Very Hard**	**Extremely Hard**	**Sheer Folly**	**Absurd**
-201	Fall down. +2 Hits. You are out 3 rounds.	Fall. Knock self out. You are out for 12 rounds. +9 Hits.	Fall. Break arms. +10 Hits. You are out for 6 rounds.	Fall. +15 Hits. Break arm. You are out for 9 rounds.	Fall. Break arms. +20 Hits. You are out 18 rounds. Arms useless.	Fall. Break both arms and neck. +30 Hits. You are out 60 rounds.	Fall sends you into a coma for 3 years. +30 Hits. Broken spine.	Fall breaks neck. You die in 3 rounds.	Fall crushes skull.
(-200) — (-151)	Fail to act.	Fall down. Lose 2 rounds. +2 Hits.	Fall down. +3 Hits. You are out for 4 rounds.	Fall. Break wrist. +10 Hits. You are out for 6 rounds.	Fall. Break leg. +15 Hits. You are out 9 rounds.	Fall. Break arms. +20 Hits. You are out 18 rounds. Arms useless.	Fall. Break back and legs. +25 Hits. Paralysis of lower body.	Fall. You smash your backbone and are in a coma for 1 year.	Fall paralyzes you from neck down.
(-150) — (-101)	10	Fail to act.	Fall down. +2 Hits. You are out for 2 rounds.	Fall down. Sprain ankle. You are at -25%. +6 Hits.	Fall. Break arm. +10 Hits. You are out 6 rounds, stunned 3 rounds.	Fall. Break leg. +15 Hits. You are out for 6 rounds.	Fall. +30 Hits. You are out 6 rounds. Shatter knee. You are at -80%.	Fall. Break both arms and neck. +30 Hits. You are out 60 rounds.	Fall. You smash your backbone and are in a coma for 1 year.
(-100) — (-51)	30	10	Fail to act.	Fall down. Lose 2 rounds. +3 Hits.	Fall down. Sprain ankle. You are at -25%. +5 Hits.	Fall. +20 Hits. You break your wrist. You are out 2 rounds. Not very smooth.	Fall. +12 Hits. Break arm. You are out for 6 rounds.	Fall. +30 Hits. You are out 9 rounds. Shatter knee. You are at -80%.	Fall. Break back and legs. +25 Hits. Paralysis of lower body.
(-50) — (-26)	50	30	10	Fail to act.	Fall down. +5 Hits. You are out 3 rounds.	Fall. Sprain ankle and tear ligament. You are at -30%. +15 Hits.	Fall. +10 Hits. Knock yourself out. You are out for 18 rounds. You lose, pal.	Fall. +12 Hits. Break arm. You are out for 6 rounds.	Fall. You are out 18 rounds. You break both arms. +25 Hits.
(-25) — 0	70	50	30	5	Fail to act.	Fall down. +5 Hits. You are out of action for 3 rounds.	Fall. Sprain ankle and tear muscle. You are at -30%. +10 Hits.	Fall. +20 Hits. You break your wrist. You are out 2 rounds. Not very smooth.	Fall. +10 Hits. You break your leg. You are at -75%. You are out 6 rounds.
01 — 20	80	60	50	10	5	Fail to act.	Fall down. +5 Hits. You are out for 3 rounds.	Fall. +5 Hits. You pull a leg muscle. You are at -25%. You are out 2 rounds.	Fall. +15 Hits. Break arm. You are out for 6 rounds.
21 — 40	90	70	60	20	10	5	Fail to act.	Fall down. +7 Hits. You take 3 hits per round. You are out for 2 rounds.	Fall. Knock yourself out. You are out for 30 rounds. +10 Hits.
41 — 55	100	80	70	30	20	10	5	Fall down. +5 Hits. You are out for 3 rounds.	Fall. Sprain ankle and tear ligament. You are at -30%. +15 Hits.
56 — 65	100	90	80	40	30	20	10	Fail to act.	Fall down. +7 Hits. You take 3 hits per round. You are out for 2 rounds.
66 — 75	100	100	90	50	40	30	20	5	Freeze for 2 rounds.
76 — 85	100	100	100	60	50	40	30	10	Fail to act.
86 — 95	100	100	100	70	60	50	40	20	5
96 — 105	110	100	100	80	70	60	50	25	10
106 — 115	110	110	100	90	80	70	60	30	20
116 — 125	120	110	110	100	90	80	70	40	30
126 — 135	120	120	110	100	100	90	80	50	40
136 — 145	130	120	120	110	100	100	90	60	50
146 — 155	130	130	120	120	110	100	100	70	60
156 — 165	140	130	120	120	120	110	100	80	70
166 — 185	140	140	130	Super move. You feel great. Subtract 4 hits from your current total.	Excellent move. You are unstunned. Add 10 to allies' rolls for 2 rounds.	120	110	90	80
186 — 225	150	140	Great move. You feel better. Subtract 4 hits from current total.	Brilliant. Move inspires all. You are unstunned. Your allies are at +10% for 2 rounds.	Move inspires your allies. Add 20 to friendly rolls for 3 rounds.	Move inspires your allies. Add 30 to friendly rolls for 2 rounds.	120	100	90
226 — 275	150	Incredible move. You feel great. Subtract 3 from your current hit total.	Brilliant. Move inspires all. You are unstunned. Your allies are at +10% for 2 rounds.	Move inspires your allies. Add 20 to friendly rolls for 3 rounds.	Move inspires your allies. Add 25 to friendly rolls for 3 rounds.	Move inspires your allies. Add 30 to friendly rolls for 3 rounds.	You have half the round to act.	100	100
276+	Incredible move. You feel great. Subtract 3 from your current hit total.	Brilliant. Move inspires all. Your allies are at +10% for 2 rounds.	Move inspires your allies. Add 20 to friendly rolls for 3 rounds.	Move inspires your allies. Add 25 to friendly rolls for 3 rounds.	Move inspires your allies. Add 30 to friendly rolls for 3 rounds.	Move inspires your allies. Add 30 to friendly rolls for 4 rounds.	Move inspires your allies. Add 30 to friendly rolls for 6 rounds.	Move stuns all foes within 30 feet. You still have half the round to act.	Move stuns all foes within 50 feet.

ALTERNATE PERSONAL MANEUVER CHART

	PICKING LOCKS AND DISARMING TRAPS:	USING HEALING EQUIPMENT:	PERCEPTION AND SENSOR/SCANNING:	INFLUENCE AND INTERACTION:	GENERAL
-26 down	BLUNDER: If picking a lock, you have broken your lock-pick equipment (if mechanical lock, the pick is stuck in the lock, rendering it unopenable until removed – this requires another roll to pick the lock by someone other than you). Any traps connected to it are set off. If disarming a trap/alarm, it is activated.	BLUNDER: You not only fail to heal your patient, you actually do damage: 75% chance you damage your equipment (make a roll of the equipment damage table), 25% you give your patient additional wounds such as you were trying to heal. If the latter, you are guilt-ridden and cannot practice medicine for 1-100 days.	BLUNDER: You not only fail to get any valid information but you pick up invalid information due to a misconception or improperly sensed details. You may never try again on the same topic in the same area. If Scanning, 10% chance you dropped the equipment or jammed the console.	BLUNDER: Your blatant attempt at coercion alienates your audience. They are influenced to do the opposite of what you were attempting to get them to do. Until a major change in circumstances occurs, any attempts by you to influence them will fail.	BLUNDER: You fail spectacularly. If possible, your static action has the opposite effect from what you intended.
-25 – 04	ABSOLUTE FAILURE: You have developed a mental block on this lock/trap and will automatically fail on any further attempts to pick/disarm it. If disarming a trap (or picking a lock with an attached trap), there is a 50% chance that the trap will be activated.	ABSOLUTE FAILURE: Confusion causes a mental lapse. The nature of the wound confounds you and you spend one minute (6 rounds) staring blankly before you can try again – and then you must do so at -30.	ABSOLUTE FAILURE: Confusion causes a mental lapse. This perception roll and any perception rolls made during the next 10 min (60 rounds) will result in failure (see 05–75 below).	ABSOLUTE FAILURE: Your audience rejects you, causing you to lose confidence and your air of authority. Any influence attempts during the next hour (360 rounds) will result in failure (see 05–75 below).	ABSOLUTE FAILURE: Utter incompetence causes a mental lapse. Any static actions attempted during the next 10 min (60 rounds) will result in failure (see 05-75 below).
05–75	FAILURE: Currently you have no further ideas on how to pick/disarm this lock/trap. After 24 hours you may make a perception roll and if it succeeds you may make another attempt to pick/disarm the lock/trap.	FAILURE: You (for whatever reason) decide that the wound you were going to heal is not the one to start on; heal someone else or another wound before trying this one again. If no others, see ABSOLUTE FAILURE.	FAILURE: You gain no information, but you think that you have learned everything available. You may not try again on the same topic in the same area for one hour.	FAILURE: You have failed. Your audience will not be receptive to any of your attempts at influence for at least 1 day.	FAILURE: You have failed. You may not try the same static action in the same place for 1 day.
76–90	PARTIAL SUCCESS: You have figured out part of the lock/trap and have an intuitive feel for the rest. However, further effort at this time will be counterproductive. Do something else for 10 minutes and then you can try again.	PARTIAL SUCCESS: You manage to heal the wound, but it takes twice the time and there will be unattractive scarring (or if bone or cartilage, the set is not quite straight; there may be a limp or other malformation). Beware of malpractice suits.	PARTIAL SUCCESS: You gain some of the information on the topic that required the perception roll, but you are not aware that you missed something. You may not try again on the same topic in the same area for 1 hour.	PARTIAL SUCCESS: Your audience is still listening. You can continue to try to influence them.	PARTIAL SUCCESS: If partial success is possible, you accomplish 20% of your static action. You may not try the same static action in the same place for 1 hour.
91–110	NEAR SUCCESS: You almost had it. If you spent two rounds thinking about your attempt (no other activity), you may try again with an extra +5 bonus.	NEAR SUCCESS: You heal the wound and in the regular amount of time, but there is some light scarring, and full recovery will take 50% longer than usual. Oh, well.	NEAR SUCCESS: You gain some of the information on the topic that required the perception roll, and you are aware that you missed something. You may try again after 3 rounds of contemplation.	NEAR SUCCESS: Keep talking, your audience is becoming more friendly. Modify your next roll be +20.	NEAR SUCCESS: If partial success is possible, you accomplish half of your static action. You may try again after 3 rounds of contemplation.
111–175	SUCCESS: The lock/trap is picked/disarmed; +50 on any future attempts to pick/disarm this lock/trap.	SUCCESS: You perform your duty with uninspired efficiency; all goes as it should and the wound is scarlessly repaired.	SUCCESS: You gain all of the information on the topic that required the perception roll.	SUCCESS: You have influenced your audience.	SUCCESS: Your static action is successful.
176 up	ABSOLUTE SUCCESS: In the future you may automatically pick/disarm (takes one round) this lock/trap or any identical lock/trap. 10 to attempts on similar locks/traps in the future.	ABSOLUTE SUCCESS: You are a medical marvel (at least this time). The wound is beautifully repaired in but half the normally required time. You get a +20 on all healing rolls for 10 minutes (60 rounds).	ABSOLUTE SUCCESS: You are aware of everything in the area that you are examining. This includes information on topics other than the one requiring the perception roll. You get a +20 on all perception rolls for 10 minutes (60 rounds).	ABSOLUTE SUCCESS: Not only did you influence your audience, but you receive a +50 bonus on influencing them until you do something to cause them to lose confidence in you.	ABSOLUTE SUCCESS: Your static action is successful and you get a +20 bonus to further static actions for the next 10 minutes (60 rounds).
	MODIFICATIONS: Difficulty – +30–Routine +0–Medium -30–Extremely Hard +20–Easy -10–Hard -50–Sheer Folly +10–Light -20–Very Hard -70–Absurd + Skill bonus for Crime Technics OR Picking Locks OR Disarming Trap.	MODIFICATIONS: +20 if using Infirmary equipment (with associated backup facilities). -30 if no Medical Scanner Diagnosis first. -30 if in a combat situation. Routine (+30), Easy (+20), Light (+10), Medium (0), Hard (-10), Very Hard (-20), Extremely Hard (-30), Sheer Folly (-50), Absurd (-70).	MODIFICATIONS: Difficulty– +30–Routine +0–Medium -30–Extremely Hard +20–Easy -10–Hard -50–Sheer Folly +10–Light -20–Very Hard -70–Absurd +20 if the player states that his character is spending time looking for specific information. The number of rounds spent affects the difficulty. +50 if Tactical Scanner. +Skill bonus for Perception OR Scanner OR Sensors.	MODIFICATIONS: Difficulty– +30–Routine +0–Medium -30–Extremely Hard +20–Easy -10–Hard -50–Sheer Folly +10–Light -20–Very Hard -70–Absurd +50–Audience is personally loyal or devoted to the character. +20–Audience is under hire to the character. + Skill bonus for Influence and Interaction NOTE: Difficulty and other modifications are based upon what the character is trying to get the audience to do.	MODIFICATIONS: Difficulty– +30–Routine +0–Medium -30–Extremely Hard +20–Easy -10–Hard -50–Sheer Folly

22.0
VEHICULAR MANEUVERS

All driving, steering or other maneuvering control of any vehicle, whether it be a bicycle, gravscooter, hovercar, hydrofoil, airplane or starship, is done using the *Vehicular Maneuver and Astrogation Chart* (pp 84-85). A few assumptions are made in this section regarding *skills*. The skills of *AFV Driver* and *Combat Pilot* refer to combat skills specifically relating to piloting under enemy fire and in tense situations.

22.1 USING THE CHART

For piloting, choose the column which most accurately reflects the vehicle being operated. If Astrogation, choose either N-Space (any orbital, in-system or intersystem sub-light plot) or Hyperspace (any faster-than-light course plot, to be used only outside of a system).

Next, the GM must determine the severity of difficulty of a chosen maneuver/course plot, and all other pertinent factors. A roll is made and the result cross-indexed. Most of the text results are fairly self-explanatory, although some GM extrapolation may be necessary. If only a number (%) is given, it must be interpreted in direct reference to a maneuver. Normally, one roll is made per hour in any type of vehicular — including air and space ship — transportation, with appropriate modifications. (Any special maneuvers require an additional maneuver roll.) No in-flight hyperspace rolls are made once the shunt is achieved.

When rolling the hourly/daily movement roll, a result of 100% means that the craft has travelled the exact distance it should according to the chosen speed by the PC. A lesser or greater percentage indicates the percentage of the supposed distance actually travelled at that velocity (within reason). The possible game-terms reasons for the fluctuations are myriad: head/tail-winds, other weather, traffic, poor road conditions, etc.

When a special maneuver roll is called for and the result is a percentage, it usually indicates the percentage of the maneuver which has been completed in the given time-span (usually one ten-second round). More than 100% indicates that the move has been done in less than ten seconds (200% means it took 5 seconds, for instance). If less than 100% is achieved, another roll is required, and with it the additional time is consumed. Note that Hyperspace piloting, and all Astrogation maneuvers require an average of one turn (6 rounds) — though there are exceptions, especially in Astrogation.

22.11 GENERAL MODIFICATIONS

Difficulty:

Routine	(+30)
Easy	(+20)
Light	(+10)
Medium	(+0)
Hard	(-10)
Very hard	(-20)
Extremely Hard	(-30)
Sheer Folly	(-50)
Absurd	(-70)
Insane	(-100)

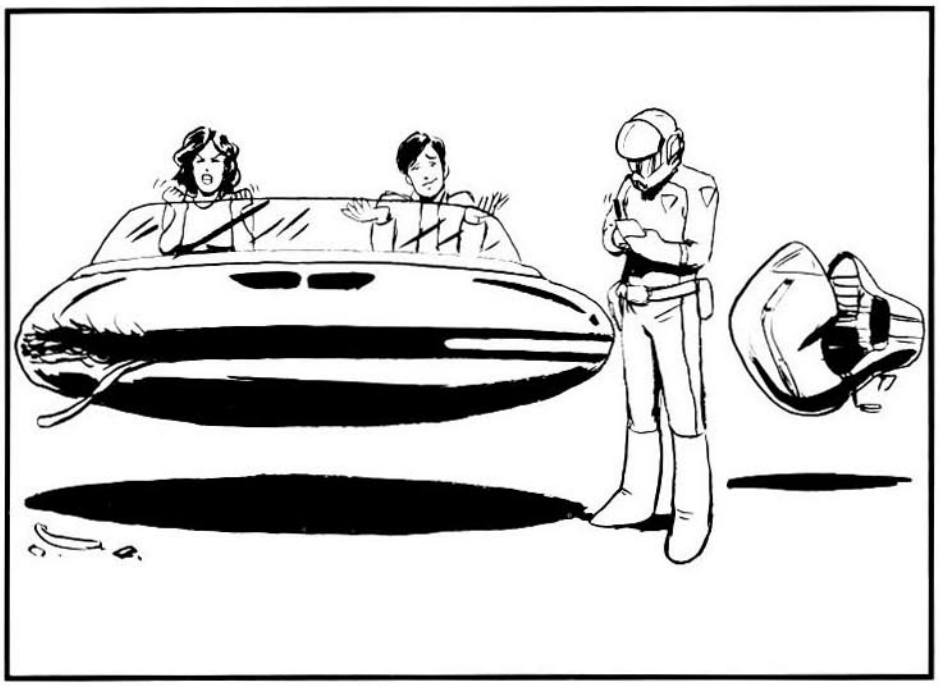
Driver/Pilot/Astrogator Condition:

25-50% of Hits taken	-10
51-75% of Hits taken	-20
76-up Hits taken	-30
For each Hit/rnd bleeding	-5
Each limb out	-10 (or more, depending)
Stunned	-50
Drunk/drugged	-10 to -50

Vehicle Damage:

Vehicle damage, other than concussion hits, is usually directly indicated by malfunctions. Any vehicle over 'max hits' is inoperative and helpless (ships are dead in the water, planes fall from the sky). In the case of starships, when a spacecraft goes over max hits the structural integrity of the hull and frame is lost. No specific additional damage is done, but if the ship attempts to maneuver, enter Hyperspace, enter a planetary atmosphere, or, additionally, land within a gravity field, it must roll on the *Damaged* column of the *Vehicular Maneuver Chart*. Any Piloting bonus will be a modifier, of course. After a roll is made on the *Damaged* column, the actual maneuver roll may be made, with any applicable modifications. Any additional damage indicated from the *Damaged* column roll is immediately applied. At 2x max hits any vehicle is irreparably destroyed.

Random Malfunctions, as designated in the *Random Malfunction Chart* (in the **Tech Book**), are rolled as follows: first, roll 1D10 to determine severity (if severity not indicated in the actual maneuver/critical). 1-5: Routine, 6: Light, 7: Moderate, 8: Severe, 9: Very Severe, 10: Extremely Severe. Second, roll on *Random Malfunction Table*, re-rolling if the result is inapplicable. If a malfunction severity is already designated on this table, ignore the first step here.



22.12 DRIVING/MARINE PILOT MODIFIERS

General Modifiers are included plus those listed below:

Precipitation:

Raining ..... -10
Sleet/snow/hail ..... -20
(more if heavy)

Visibility:

Each 50m < 1 km (fog/etc) ..... -5

Night:

If vehicle has lights ..... -10
If not ..... -50

Combat:

Vehicle under fire: ..... -25
(assuming driver does not have AFV Driver skill. If he does have that skill, it should be used instead of the regular driving/piloting skill).

Land Only:

Surface wet ..... -10
Surface Snowy ..... -30
(-10 more for every 10cm up to 1m)
Surface Icy ..... -50

Marine Only:

Each Meter of Wave height ..... -10
Each 5 kph of wind ..... -5

Speed:

Naturally this is a very important factor (making a hairpin turn at 120 kph is more dangerous than traveling in a straight line at 10 kph). Where a speed limit is posted, very generally, -1 for every 2 km over the limit is applicable. Since the 'safe' max speed will vary so much depending on the vehicle used and the maneuver though, the GM should assign danger factors based on the situation and vehicle, extrapolating from these examples:

Example: *Sanvoc is driving his late-model sportscar on an average plasphalt highway. The car is a typical inflated-tire vehicle, max speed 250 kph. Sanvoc is being pursued by Hysterical Hostiles in a low-flying gravitic craft, who are firing at him. It is night (Sanvoc has no special vision — the car of course has headlights), and raining. The safe posted speed limit is 160 kph.*

Sanvoc has 10 skill ranks in driving a car and an Ag/Qu stat bonus of +15, so starts with a +65. Due to the superior handling qualities of the car, the GM grants Sanvoc an additional +20. Total bonuses: +85. However, rain subtracts 10, night 10, and wet road 10. He is also under fire and has no ***AFV Driver*** *skill ranks, so -25. Total subtractions: -55. Sanvoc's general net add is 30. Driving along a straight highway (all else aside) at the speed limit is* ***Routine,*** *adding another 30, so making the maneuver of regular driving under these conditions will be at +70. Checking the Driving/Marine Pilot column of the Pilot/Astrogation Table, we see that Sanvoc needs to roll above a -14 (70 + [-14] = 56) to be completely (if unimpressively) successful.*

Sanvoc, however, fears that regular cruising is not evasive enough to elude his pursuers. He accelerates to 220 kph. (60 over the limit) reducing his bonus by 30, so it is now 40. Sanvoc's adversaries are still closing, and their shots nearer, so he decides to attempt a daring maneuver: turn off his headlights, then slam on the brakes, spinning the car around 180 degrees, hoping to lose them as he heads the opposite way. No lights reduces his bonus by 40, and the GM determines his spin maneuver to be ***Extremely Hard*** *(ignoring all the environmental factors, which are already incorporated!) which is 60 worse than Routine. Sanvoc is at -60. He needs to roll an unmodified 116 or higher to be completely successful. Less than complete success (a percentage, rather than an unpleasant specific failure) may mean he only spun partially, or something similar. However, this will increase the total duration of the maneuver (he needs to roll again to complete the remainder) giving his attackers a chance to figure out what is going on.*

22.13 ATMOSPHERIC AND IN-ATMOSPHERE ORBITAL MANEUVER MODS

Winds:

-5 for every 10 kph, including gusts.

Visibility:

Every km < 10 kilometers ..... -10
Night (unless special vision) ..... -20

Precipitation:

Raining ..... -10
Sleet/hail ..... -20
Snow ..... -30

Landing:

Area not paved ..... -30
Are not marked ..... -30
Pilot landed here before ..... +20
Landing at night without lights: ..... -40

Combat:

Vehicle under fire ..... -25
(Pilot does not have *Combat Pilot* Skill)

22.14 N-SPACE PILOTING MANEUVER MODS

Any of the general Pilot Condition Factors listed above, in addition to the factors below:

Ship Under Fire:

Pilot does not possess
Combat Pilot Skill ..... - 25

Autopilot:

Program Running ..... +50
Not useable in a combat or special maneuver situation; assumes Astrogation plot laid in.

Physical hazards:

Variable, depending on situation. Piloting through a dense asteroid field would be a series of *Sheer Folly* or *Absurd* maneuvers.

No Course Plotted:

'Flying by the seat of your pants' ..... -50

Note that this penalty is only applicable for complex or involved courses, such as astrogating across a star system. Also, Astrogation is inapplicable for combat; in that case the Combat Pilot skill is employed (if the pilot has no Combat Pilot skill and finds himself in combat, he is at -25 (the usual penalty when no skill ranks have been made in an area)

Example: *Jym-bob, aboard the* ***Flying Merino*** *and trying to evade officers of the Law after a misunderstanding, enters an asteroid field, hoping they are too cowardly (or reasonable) to follow. Since a course as variable and complex as this is not plot-able by any known astrogation methods (GM decision), Jym-bob must fly by the seat of his pants (-50). It is also Sheer Folly (-70); and he is under fire and does not have* ***Combat Pilot*** *skill (-25). Jym-bob is now at -145. He has a total Piloting bonus of 90, and so is at -55. The GM takes into account the width of the asteroid field and how fast Jym-bob is going, and figures how many turns it will require to get through. Jym-bob must roll every turn. For each roll of 100%, he has successfully navigated the field for the given distance. For a roll of greater than 100%, the GM adds the extra as bonus distance travelled. For a roll of below 100%, the GM decides that not only is the distance less than 100%, but for every 20% less than 100, the ship is struck by an asteroid (The GM should determine hits and if a Random Malfunction is appropriate; he may wish to refer*

to the Vehicular Encounters resolution rules, Section 23.0). So, if Jym-bob rolls a 36, he subtracts 55 and gets -19. The Table indicates no movement. The ***Flying Merino*** *is hit by five asteroids and gets nowhere. Hope your deflectors are up, Jym-bob.*

As can be seen from the example, there are many game possibilities, and the GM must extrapolate from the table data given. One additional note regarding the example above: If Jym-bob had an EW rating, it would not be useful as a DB against asteroids (they're hard to fool).

22.15 HYPERSPACE PILOTING MODS

Any of the general Pilot Condition Factors listed above, in addition to the factors below:

Attempting to Enter Hyperspace while in a Gravity Well will subtract from the Pilot Maneuver Roll. A Gravity Well is defined as being within 500 x the diameter of any sizeable celestial body, such as a planet or star. In the Sol system, for example, outside Sol's gravity well is just inside the orbit of Jupiter. For every 20 diameters within the Well, roll one Random Malfunction on the ship due to structural strain, e.g., attempting to hypershunt only 420 diameters away would cause 4 Random Malfunctions. Thus, a ship attempting to shunt while 100 diameters away from a sun would suffer 20 Random Malfunctions. If any of the malfunctions indicate Translight Drive shutdown, the ship fails to shunt entirely (but still suffers the damage).

Piloting Maneuvers — using a **Hyper-Jump** program — to enter/exit hyperspace (under no pressure) are *Medium (+0)*, and a percentage value means the percent of the way through Hyperspace shunt preparation the pilot is. Attempting Hyper-jump under the same circumstances without a program is *Very Hard (-20)*. On the average it requires one turn (6 rounds) to time of shunt. The actual Hyperspace shunt does not occur until you achieve 100% cumulative results.

If the pilot rolls less than 100% in his attempt to to drop out of hyper, each turn of delay from the correct time (as calculated by the Astrogator) displaces the ship a massive (in sublight terms) distance, usually the equivalent of hundreds of days travel at full sublight velocity — more or less, depending on individual ship engine ratios. Naturally, the only *reasonable* thing to do is have the Astrogator plot a new (very short) Hyperspace course to get the ship closer. This will require all the normal calculations and rolls.

22.16 ASTROGATION MODS

The base speed to plot an N-Space or Hyperspace course is one minute (one turn or six rounds). This time applies to course plotting difficulty up to *Medium*. *Hard* to *Extremely Hard* courses have a base time requirement of one hour, and *Sheer Folly* and *Absurd* course plots have a base of one day.

The course is plotted and ready to implement when a total of 100% is achieved, no matter how many rolls (assuming one roll equalling one minute) it takes. Astrogation is only rolled at the beginning of each plotted journey. Astrogation is assumed to be *Medium (+0)*, unless the appropriate preset course tape is used, when it is *Routine (+30)*, or if star charts are available, in which case it is *Easy (+20)*. If no Astrogation computer program is available, Astrogation becomes *Absurd (-70)*. Also, any journey under 10 LY is unmodified, but for every 1 LY more than 10 attempted in one jump, increase the complexity of the course plot by subtracting 5 from the roll.

An N-space course must be plotted every time a 'significant' interplanetary space is traversed (leaving planetary orbit and the solar system is 'significant'; changing ship orbit attitude is not) to prevent a severe *(Sheer Folly, -50)* detriment to pilot maneuver. Combat maneuvering does *not* require Astrogation, as it is done in relation only to adversary ships and does not relate to long-range courses or large, gravity-exerting bodies.

A Hyperspace course must be plotted for every Translight shunt. As mentioned above, any Hyperspace plot made to exit/enter within a system or attempting to initiate Hyperspace piloting within a solar system/star gravity well is very dangerous. Attempting to Hyperspace shunt without a course is not only *Insane*, it is probably doomed to failure. If this somehow occurs, roll percentile dice. The number is how many light-years are traversed before the ship can return to N-Space.

Note: *some very bad Astrogation rolls result in a course plotted in the usual time (usually 6 rounds, as indicated by the 100% in parenthesis at the beginning of the text) but something very wrong occurs along the route. Players theoretically are unaware of the problem until it is upon them.*



22.2 THE VEHICULAR MANEUVER/ASTROGATION CHART

	Driving/Marine Pilot	Orbital/Atmospheric Pilot	N-Space Pilot	Hyperspace Pilot	N-Space Astrogation	Hyperspace Astrogation	Damaged
-201	Total disaster. You flip your vehicle (direction and severity of impact dependent on vehicle and situation). Most likely it is badly damaged as you might well be: Vehicle should roll on the Small vehicle Critical Hit table, severity determined by GM.	Unbelievably inept attempt at controlling the ship effectively deactivates its propulsion system and computer safety overrides. Only a 100% successful Absurd maneuver by somebody on board can save you from a fiery death as the craft plummets to earth. Roll 1-4 (GM discretion) "E" Blast (or other appropriate vehicle crit, dependant on craft size) Criticals on the ship when it hits. Sorry.	Incredibly moronic maneuver. You try to engage the course plot before it is laid in and the entire Astrogation system shorts out. Very Severe damage, and the ship hurtles in a random direction at full sublight acceleration until the Astrogation console is repaired or overridden. Random hypershunt, here you come!	In a move of unparalleled, panicked stupidity, you believe that the hyperspace engine(s) are about to overload, and jettison them from the ship. (If they are not the jettisonable type, you dump the translight fuel.) Roll for % of way into journey you do this. It's a long road home at sublight...	Absolutely unbelievable. You short-circuit the Astrogation console, and in the process erase every astrogation program, star map, and pre-set course in the database. All astrogation is Absurd until the console is repaired, and *Very Hard* after that due to lack of computer aid. Have a nice orbit decay.	(100%) Say your prayers. Your course sends the ship right through a solar system. Only if the pilot rolls a total of above 200 does he/she/it notice the glaring error before entering Hyperspace. If not, roll % of the way through the journey you hit the system, at which point the ship takes 2-20 random Pierce Critical hits from debris before the computer drops you out of Hyper.	And you thought it couldn't get worse. Several key structural members buckle; the ship takes half-again max hits as 10 random Extremely Severe malfunctions occur. All drive controls short out; nearly every compartment is leaking air. Your ship is dead in space; don't even bother to try the maneuver.
(-200) — (-151)	You lose control of your vehicle and it veers wildly. If anything is within 50m (in a direction reasonable considering current craft motion) you hit it before you can recover. You are stunned 3 rounds (if not dead sooner).	Your clumsy fingers **Severely** Damage the main Pilot console (it is useless until repaired). 50% chance the ship continues in the maneuver it was previously in; 50% it makes a totally random maneuver.	In an unclever move, you override the safety systems and engage the wrong drive. Roll a new maneuver on the Hyperspace column, using of course the Insane modification if you are in-system. (If the ship is not equipped with Hyperdrive, you simply tried to abusively accelerate the Sublight Drive, delivering **Severe** damage to it and two random malfunctions).	Your mind in a haze, you misinterpret the Astrogation plot and shunt the ship off in a random direction. Roll an Absurd maneuver to drop safely out of hyperspace. For every 10 less than 100% success, the ship receives a 'Pierce' critical strike (random "A" to "E" severity, 20% chance of each) from space debris. Assuming you survive that, the Astrogator must roll an Absurd maneuver to navigate you out of wherever you are.	(100%) You think yourself very clever using a nearby gravity well to slingshot the ship and save energy. Too bad you miscalculated. 50% chance you go too low: Roll an "E" Blast critical on the ship as it hits planetary atmosphere, in addition to 3 random malfunctions due to stress; 50% chance you go too high, hurtling at high speed across the system. The Pilot must complete a *Very Hard* maneuver to stop the ship, and every round he is attempting to do so 1-2 random malfunctions occur due to structural strain.	The Astrogation console bypasses like a Christmas tree; obviously you have done something seriously wrong, and the computer confirms it: the control panel is Severely damaged, and the computer is Moderately so. There is a 25% chance you have destroyed the appropriate Astrogation program in the process.	A gut-wrenching metallic shriek accompanies your attempt to maneuver. Whatever maneuvering system you are attempting to use (thrusters, gravitics, N-Spacedrive; Translight drive) overloads and is Very Severely damaged and at - 90, as is the pilot console. No need to roll the actual maneuver.
(-150) — (-101)	Your badly executed attempt causes the vehicle to weave dangerously 1-10 meters to one side. Roll the details. Good luck.	Oops. You manhandle the controls and the craft lurches in a random direction (1000 meters if cruising; 50 meters if landing/takeoff) before you get a grip. Hopefully there was nothing in the way...	Your spastic piloting causes the ship to lurch erratically. Everyone on board and not strapped in takes an "A" Unbalancing critical. Those who are buckled in take 1-10 hits and must resist vs. nausea. One Routine random malfunction also occurs.	Clumsy execution. You miscalulate the Matter/Antimatter fuel mix and cause Very Severe damage to the Hyperspace drive engine(s). They are inoperative and you are red-faced.	(100%) In a drugger-like maneuver you plot a course in a bizarre direction, at the end of which (10 hours later, if no one makes a successful *Very Hard* Perception to notice your curious route) you are lost in space, despite any Astrogation aides. Complete a *Hard* maneuver just to figure out where you are.	(100%) You fail to notice a gravity-well along your chosen course.1-100% of the way along the trip, the ship passes through it, triggering 1-10 random malfunctions. If the Star Drive is functional, you continue on your way, but your course is altered by 10-100° in a random direction. Calculate your new destination. If you do drop out of Hyper, you must plot a new course, *Very hard*, due to the uncertainty of your location.	Sparks fly on the bridge as the already strained control systems give up. Pilot and Astrogation controls are Extremely Severely damaged and useless; Computer Pilot and Astrogation programs burned out (irretrievable). In addition, 2 Random Severe malfunctions occur. No progress on your attempted maneuver.
(-100) — (-51)	Cruel abuse of the machine causes Moderate damage to the appropriate system (brakes, steering, tires, hydrofoils, etc.) Move is 50% successful, and system is at -50 until repaired.	Insensitive handling of the ship triggers 1-4 Routine malfunctions. Roll on appropriate table.	Really weak execution. Sloppy drive engagement overloads the cooling systems. Moderate damage to Sublight Drive (speed cut in half until repaired).	A poorly orchestrated adjustment to the course causes 5 random malfunctions due to stress on the ship before the computer overrides you and drops the ship out of Hyperspace. Navigator must re-plot a course (Medium maneuver) and you must re-roll to resume your journey.	(100%) In a slovenly attempt to cut corners, you plot a course through a planetary ring/asteroid field. Roll 1-5 "B" Pierce criticals against the ship before the pilot can roll (a *Hard* maneuver) to get you out. For every round before he is 100% successful, roll another "B" Pierce crit.	(100%) You miscalculate. Fortunately, there is nothing dangerous in the way, nevertheless, you end up at a spot exactly 10 (random direction) off-course from your intended destination. Plot a new course (Very Hard).	The ship takes a "C" blast critical from strain, and 3 random Severe malfunctions. Attempt to complete your maneuver now at -100.
(-50) — (-26)	Panicked confusion on your part causes you to decelerate to half speed (unless that was the intended move, in which you accelerate to half again faster).	Sloppy execution. If landing/takeoff, you have Moderately damaged the landing gear; if cruising, Routine damage to whatever mechanisms maneuver the craft through air/space (gravitics, attitude jets or aerilon surfaces). They are functional, but at -20 until repaired.	You fail to compensate for all gravity field effects: you achieve nothing and the course must be re-plotted at -20 due to your more complex position. Your next maneuver is two difficulty levels higher.	The computer rejects your attempt to enter/leave Hyperspace as dangerous. It requires 12 rounds (2 turns) to unlock the controls and try again. If attempting to leave, see notes regarding displacement problem.	You develop a splitting headache at just the idea of plotting an inter-planetary course. Retire to your cabin for at least an hour before trying again.	Apparently you read the star-map wrong: you spend 10 turns (60 rounds) carefully plotting the course only to discover that you have done it all wrong. Try again at -20 (you're discouraged) after the appropriate delay. Hope you're not in a big hurry.	The main reactor/energizer malfunctions under the strain (if it hasn't already); the problem is Severe. You can either shut it down now (aborting the maneuver attempt) or proceed with a -100 modifier. If you press on, it will function for 1 hour, then fail completely, *Extremely Severely Damaged.*
(-25) — 0	You have a lapse and fail to attempt the maneuver. instead continuing as you were.	You mind on other things, you fail to even attempt the maneuver. (0% movement)	You fail to take any action (0% movement)	For reasons unclear even to you, you decide not to attempt to enter/leave Hyper this turn. If attempting to leave, see notes for displacement.	You stare blankly at the luminous plotter screen, watching the pretty patterns while you accomplish nothing for 6 full rounds.	(100%) Well, you lay in the course and take only a minute to do it, but the plotted route takes *twice* the time it normally would. Unfortunately, nobody figures this out until far too late. Have a nice trip.	You are forced to override the control system overload safety features. Roll your desired maneuver at -50. If you are less than 100% successful, the system shorts out before you complete the maneuver: control system and console are Very Severely damaged. You take a "B" electrocution critical.

01 — 10	10% Slowly but surely.	10%	10% Snails move faster.	10% A slow start.	10% So Rome wasn't built in a day.	10% You'll get it done eventually.	Amidst 5 random malfunctions you may attempt your maneuver at -70.
11 — 20	30%	30%	30%	30%	30%	30%	The ship shudders ominously, and suffers 2 Moderate random malfunctions. Your maneuver is at -50.
21 — 30	50%	50%	50%	50%	50%	50% It might go quicker if you didn't spend so much time playing "Space Commander" with the console.	Structural strain causes hull breaches in one random crew cabin, as well as one gun mount and the sublight engine room. Bulkhead portals seal; if in space, implement appropriate Vacuum crits to affected personnel. Roll your maneuver at -50.
31 — 45	70%	70%	70%	70%	70%	70%	The ship fights back.The manual bypassing necessary puts you at -70.
46 — 55	90%	90%	90%	90%	90%	90%	Hull breach in the cargo bay; 1 random Severe malfunction. Maneuver is at -40.
56 — 65	100% You succeed (barely).	100%	100% A complete, if uninspired, success.	100% No use rushing things.	100% No more, no less.	100%	The computer link to your console (if not already inoperative) is severed and you must act without it. Apply appropriate difficulty modifier.
66 — 85	100%	100%	100%	100%	100%	100%	The ship lurches; all not strapped in suffer a "B" Severity Unbalace critical as you attempt your maneuver at -50. +300 hits to the ship.
86 — 105	110% You have time to sigh with relief.	110%	110%	110%	110% Pilot gets 10% bonus on his first piloting roll.	110% Your skilled astrogation gives the pilot a +10 to his roll.	You push her to the brink. 3 random Moderate malfunctions (affected systems are at -50 until repaired); your roll is at -40. The ship takes 100 hits.
106 — 125	110%	110%	110%	110%	110% As 110% above.	110% The whole crew, impressed with your skill, adds 10 to their next roll.	Your engineer holds the ship together with a prayer and electro-paperclips. Make your roll at -30.
126 — 145	120%	120%	120%	120%	120% Give the pilot a 20 bonus.	120% Well done. The pilot gets to add 20 to his roll.	Make this maneuver with no modifiers, but whatever drive system employed is Severely damaged afterward.
146 — 165	120%	120%	120%	120%	120% Crewmembers add 20 to rolls for next 3 rounds.	120%	Your attempt is at -30; the ship suffers 50 hits.
166 — 185	130%	130%	130%	130%	130%	130%	The crippled craft only has one *Moderate* malfunction while you attempt this maneuver at -20.
186 — 200	150%	150%	150% Well done.	150% Apparently even the ship was inspired.	150% It takes you but two-thirds the normal time.	150% After but two-thirds the normal time the course is ready.	You attempt the maneuver at no subtraction, but the console gives you an "A" severity Electrocution critical just as you complete it (or fail utterly; whichever).
201 — 225	150% Great move. Add 10 to all crewmates' rolls for the next 3 rounds.	150% Skillfully executed. Your friends are impressed. You get to add 30 to your next related roll.	150% Your allies think you're running a clinic: all shipmates get to add 20 to all rolls for the next 3 rounds.	150% You urge every joule of energy possible from the ship. Add 20 to your next Hyperspace Pilot roll.	200% Only half the normal time and the course is plotted. The pilot gets a 30 bonus.	200% It takes you but half the regular time. Truly a whiz.	Grace under pressure: you actually recieve a +30 *bonus* to your maneuver; though the ship suffers 2 random *Light* maneuvers.
226 — 175	200% Artful maneuver displays your mastery of the vehicle. Add 20 to all friendly rolls for the next 4 rounds.	200% Superbly done. You have half the round left to act, and the adrenalin rush lets you do it with speed (one full round of activity).	200% You showed them! Any and all foes must subtract 50 from their rolls for the next 2 rounds as they gape at your artful moves. Miller time.	200% Add 50 to your next Hyperspace Pilot roll.	400% In a flash you lay in the correct course, requiring only a third the normal time.	300% With flying fingers and agile brain you lay in the course in only a third the normal time.	A swift kick to the console corrects one random malfunction. You may attempt the maneuver at no (additional) subtraction.
276+	200% Brilliant move. Your intuitive ability earns you a free 'hobby skill level' in piloting this type of vehicle. Your crewmates are inspired and add 30 to all rolls for the next 6 rounds.	200% Stunning move — literally: any non- friendly observers are stunned for 3 rounds.	200% Adrenalin (or whatever you're on) is a wonderful thing. You and your shipmates get to add 30 to all rolls for the next six rounds, and you have the second half of this one to act.	200% Zap! If just entering or leaving Hyperspace, any non-friendly observers are surprised and stunned for 3 rounds.	600% You barely need the computer's help: one sixth the usual time and it is done. The pilot may attempt to implement the course this turn if he is alert and willing to subtract 10 from his roll.	600% Almost too fast for the computer, you have the course ready in but one round. Your intuitive skill gives you a free 'hobby skill level' in Hyperspace Astrogation.	Truly amazing. You need not even roll the maneuver; it succeeds; and any random two *malfunctions* (not damage) are miraculously repaired.

23.0
VEHICULAR ENCOUNTERS

In Science Fiction Role Playing games the characters are often caught up in situations involving a variety of vehicles: cars, tanks, airplanes, jets, motor boats, star fighters, space ships, etc. This section discusses how to handle some of the most common encounters and actions involving vehicles in a *role playing* environment. This section presents a simple set of guidelines for resolving vehicular encounters and actions.

Many of the aspects of these situations are too complicated to be extensively covered in this role playing system. However they are completely presented in the other two parts of the completely compatible ***Space Master*** trilogy of games:

- ***Star Strike***, a fast-pace game of interplanetary space combat (available in the Fall of 1988);
- ***Armored Assault***, in which hovertanks, powered armor, and aircraft compete in a game of planetside vehicular combat (available in the Winter of 1988).

If a GM has these two games, he can use them instead of the simpler guidelines presented in this section. However, he may still want to use this section's methods for resolving simple encounters or encounters that he wants to handle quickly without the full-blown detail and complexity of ***Star Strike*** or ***Armored Assault***.

23.1 TRAVELING AND NATURAL ENCOUNTERS

One of the most common actions involving vehicles is "traveling", that is, getting from point A to point B. This usually only involves a few simple "vehicular maneuvers" as detailed in Section 22.0.

Most normal "natural" encounters (e.g., rockslides, storms, whirlpools, meteor storms, etc.) can be handled by vehicular maneuvers. If such a maneuver is successful, the natural encounter can be avoided. For example, a car could be stopped before hitting a rockslide, a plane could ride out a storm or climb above it, a sailing ship could maneuver past a whirlpool, and a space ship could dodge within an asteroid field.

If a vehicular maneuver to avoid a natural encounter is unsuccessful (see Section 22.0 for an example), the result can be dramatic and final (e.g., a car hits a rockslide and falls over a cliff, a ship is sucked into a whirlpool, a space ship falls into a sun, etc.) **or** the result can be damage to the vehicle (e.g., a car hits a rockslide and destroys a tire, a ship is spun around by a whirlpool and hits some rocks, a space ship is hit by an asteroid, etc.). If the possible results include both an automatic result and vehicle damage, the severity of the maneuver roll failure will give a GM an idea of which occurs.

To determine damage, the GM should assign a Mark # between 6 and 50 to the natural "attack" and resolve the attack as indicated in Section 23.6; we present a few examples below:

Natural "Attack"	Mk #
Lightening Bolt	15
Boulder	6
Reef	20
Small Asteroid	30
Medium Asteroid	40
Large Asteroid	50

23.2 DETECTION AND DETECTION AVOIDANCE

Often in a role playing game the characters will be in a vehicle and will want to travel to a location without being detected by outside forces or observers. This is easily handled for the normal senses by using *perception* (i.e., they see, hear, or smell you or they don't). However, if the detection is electronic the process outlined in Section 21.0 is followed.

23.3 FLIGHT (RUNNING AWAY)

If a vehicle wants to flee from another vehicle (its easy if there is no pursuing vehicle), pursuit should be resolved as a series of vehicular maneuver rolls (see Section 22.0). The GM should keep track of:

- The distance separating the vehicles;
- The velocity of each vehicle;
- The direction in which each vehicle is heading.

In many cases this is all that needs to be done (e.g., one car chasing another along a highway). In other cases, it is a good idea to use a display system to represent the situation (e.g., a hex grid and counters, drawing the chase on paper, etc.).

Ending the Chase

Most chases end when:

- One vehicle or the other is disabled (e.g., tires shot out, power supply disabled, etc.). See "Fighting" in the next section.
- A certain location is reached (e.g., a safe town, a friendly port, a point far enough from a star to enter hyperspace, etc.).
- The chased vehicle is stopped/captured (e.g., runs out of gas, grabbed by a tractor beam, halted by a road block, etc.).
- The vehicles can no longer detect one another
- The pursuer breaks off pursuit.
- The chased vehicle decides to fight, in which case, "a fight" occurs as described in Section 23.5.

Fighting During a Chase

After each maneuver of a chase the GM should give each vehicle a chance to "attack" another vehicle that is within range. Use the chart below to determine the range and then refer to the Range Modifier Chart. To determine how to resolve an attack see Section 23.6.

	Actual Distance to Target	
Range	Atmosphere Min/Max	Space Min/Max
Point Blank	0/100m	0/1km
Short	100m/2km	1km/10km
Medium	2km/5km	10km/25km
Long	5km/15km	25km/35km
Extreme	15km/25km	35km/50km

23.4 FIGHTING

If two or more vehicles want to "fight", combat takes place within a framework of ten-second *rounds* and one-minute *turns*. Normally, each vehicle is allowed one maneuver and one attack roll per weapon per round. The GM should use the following Vehicular Combat Sequence:

1) Target Phase
2) Maneuver Phase
3) Maneuver Result Phase
4) Missile Firing Phase
5) Non-Missile Weapon Phase
6) Missile Attack Phase
7) Disengagement Phase

Target Phase

Each combatant writes down his "target" vehicle **and** preferred engagement range (Point Blank, Short, Medium, Long, or Extreme). He must also write down how he will split his Combat Pilot or AFV Driver skill bonus between offense and defense (e.g., if his Combat Pilot/AFV Driver skill bonus is 45, he can allocate 35 to offense and 10 to defense, or 25/20, 10/35, etc.). In addition he must record how he will split his EW (see Section 21.5).

Grouping Vehicles: During this phase, all vehicles that are "friendly" and in communication must state any desired "grouping". If a combatant attacks a vehicle in a group all vehicles in the group may attack that combatant. All "group" vehicles must choose the same "engagement range" and the same "target", but each vehicle still makes its own Combat Maneuver Roll (CMN, see below) modified by an additional -25. The CMN for the group is the lowest of the individual vehicle CMNs.

Blind Spots: If the target ship has a "blind spot" (i.e., a direction from the ship in which its weapons can not fire), a combatant may write down "blind spot" in addition to a range. The combatant will receive a -30 modifier to his CMN, but if he has a higher CMN (by 25 or more) than his target he will be in his target's blind spot (i.e., the target will not be able to fire back at him).

Maneuver Phase

The written targets and ranges are revealed. Each combatant rolls on the Combat Maneuver Table and adds any applicable modifiers to obtain a Combat Maneuver Number (CMN).

Maneuver Result Phase

The range between each attacker and its "target" vehicle is determined by the higher CMN: highest CMN attacker first, second highest CMN next, etc.

- The attacker's written range is used if he has the higher CMN; or
- The target chooses Medium, Long, or Extreme range if his CMN is greater than or equal to the attacker's.

All attacks between the two combatants (attacker and target) are resolved at this range; including any return fire from the target (even if the target's own "target" vehicle is the attacker).

Missile Firing Phase

Each combatant with missiles must state their target(s) if any: lowest CMN first, next lowest second, etc. The missiles are fired in this phase, but the attacks are not resolved. See Attack Limitations in Section 23.61.

Non-Missile Weapon Phase

Each combatant states and resolves its non-missile weapon *attacks*: highest CMN first, next highest second, etc. See Attack Limitations in Section 23.61.

Missile Attack Phase

Any missile jamming attempts are now made (see Section 21.5). The *attack* of each unjammed missile (fired in phase 4) is now resolved.

Disengagement Phase

Any vehicle at Extreme range may now begin to flee as outlined in Section 23.3 and leaves this fight with a distance between it and the other vehicles equal to "Extreme" range; other combatants may either chase **or** remain in the fight. If a vehicle can not move/maneuver (e.g., it is drifting with its engine's out, it is stopped, grabbed by a tractor beam, etc.), then an attacker that is at Point Blank range may attempt to "board" (GM discretion based upon the situation and abilities of the combatants).

23.5 ATTACK RESOLUTION

In order to resolve an attack, the attacker makes an *attack roll* (high open-ended) and adds his Offensive Bonus, subtracts the Defender's Defensive Bonus, and adds the Range Modifier; this result is the Net Attack Roll (NAR). The NAR is cross-indexed on the *Vehicular Attack Chart (pg 89)* to arrive at the result of the attack.

- If the 1-100 roll is 01-02, a weapon failure occurs and the attack resolution proceeds no further; resolve weapon failure as is done with hand weapons (see **Tech Book**).
- A weapon's net attack roll cannot exceed the designated threshold for the weapon's Mark #, instead the maximum allowed result is used.
- **Net Attack Roll** =
  D100 [open-ended] + Range Modifier + Attacker's OB - Defender's DB

23.51 ATTACK LIMITATIONS

These are the limitations imposed on an attacking vehicle:

- A vehicle may only attack its "target" vehicle **and** any vehicles that attack it or its "group" (see Section 23.5).
- Each weapon may only attack once per round.
- In a given round, a combatant may only fire at a target with weapons whose "fields of fire" overlap (e.g., if a vehicle has two energy weapons that fire in 30° arcs that do not overlap, it may not fire both at the same target). However, non-overlapping weapons may fire at different targets.
- If a vehicle fires at a vehicle other than its "target" vehicle, it receives a OB mod of -25.
- The vehicle to be attacked must be within range of the weapon, see the *Range Modifiers Chart.*

23.52 OFFENSIVE BONUS

The attacker's OB is the sum of the following modifiers:

- The "Gunner's" skill bonus with the weapon (i.e., the skill bonus for Heavy Energy Projector, Projectile Gunnery, or Missiles).
- The Mk. # of the weapon.
- The Heads Up Display (HUD) bonus.
- The 'Predict' program bonus;
- The portion of the Combat Pilot/AFV Driver skill bonus allocated to Offense in Phase 1 (see Section 23.5). This bonus is only added to the OBs of attacks against the "target" vehicle.
- -25 if firing at a vehicle other than the "target vehicle.

23.53 DEFENSIVE BONUS

The Defender's DB is the sum of the following modifiers (if appropriate):

- Any special superior armor bonus.
- The "Screens" bonus.
- Any EW (Electronic Warfare) allocated to DB (see Section 21.5). This may be nullified by EW activity of the attacker.
- The 'Evade' program bonus.
- The portion of the Combat Pilot/AFV Driver skill bonus allocated to Defense in Phase 1 (see Section 23.5).

23.54 THE VEHICULAR ATTACK CHART

This chart is intended to help the GM determine how much and what kind of damage results from an attack. He should use common sense to apply these results to the variety of situations that can arise in vehicular combat.

Hits

The number part of the result is the "hit" total taken by the target.

Malfunctions (Damage)

The "Malfunctions" indicated by the chart are actually damage caused by an attack. The letter(s) indicates the malfunction severity:

A = Routine;
B = Light;
C = Moderate;
D = Severe;
E = Very Severe;
F = Extremely Severe.

A second roll (D10) should be made for each malfunction to determine what part of the vehicle is affected:

1 ..... Crew
2 ..... Power
3 ..... Motive System
4-5 ..... A Control System
6-7 ..... A Weapon
8 ..... Life Support
9-10 ..... Random

Crew: A crew "Malfunction" indicates that a crew member (GM determines randomly), takes a critical of the type that the attacking weapon would deliver (see personal weapons in the **Tech Book**). The critical's severity corresponds to the severity of the malfunction.

Non-crew and Non-random: The Power, Motive, Control, Weapon, and Life Support malfunctions should be detailed by the GM to correspond to the actual vehicle involved; use the *Random Malfunction Chart* (**Tech Book**) to get an idea of the variety of damage that can occur.

Random: When a "Random" malfunction is called for roll on the *Random Malfunction Chart* (**Tech Book**). If the result is not applicable to the vehicle, the GM can do one of four things:

1) Roll again.
2) Modify the result to apply to a different part of the vehicle.
3) Use the closest applicable result on the table.
4) Have no damage occur from that "malfunction".

COMBAT MANEUVERING CHART

Roll	RANGE				
	Point Blank	Short	Medium	Long	Extreme
01-05	F	F	0	0	0
06-25	F	15	25	20	10
26-35	20	25	35	30	15
36-45	30	35	45	40	20
46-55	40	45	60	50	25
56-65	50	55	75	60	30
66-75	60	70	100	80	35
76-85	70	90	125	100	40
86-95	80	110	150	120	60
96-100	90	130	175	140	100
100+	100	150	200	160	200

Modifiers to the Result:
-30 ..... Trying for the "Blind Spot"
-25 ..... If part of a "Group"
+ Appropriate Pilot skill bonus (Combat Pilot or AFV Driver)
+ Mk. # of vehicle's Tactics Program
+ Maneuver Thrust if in space
+ (Speed in kph ÷ 10) if on land/water
+ (Speed in kph ÷ 50) if in the air

RANGE MODIFIERS CHART

Mk. #	RANGE				
	Point Blank	Short	Medium	Long	Extreme
2-3	-100	na	na	na	na
4-5	-75	na	na	na	na
6-10	-20	-30	na	na	na
11-15	-10	-20	-50	na	na
16-20	0	-10	-40	na	na
21-25	+5	-5	-30	-50	na
26-30	+10	0	-20	-40	-50
31-35	+15	+5	-10	-30	-40
36-40	+20	+10	0	-20	-30
41-45	+25	+15	+5	-10	-20
46-50	+30	+20	+10	0	-10



VEHICULAR ATTACK CHART

Net Attack Roll	Target's Construction Armor Type (CAT)									
	30	29	28	27	26	25	24	23	22	21
01-02	F	F	F	F	F	F	F	F	F	F
03-07	0	0	0	0	0	0	0	0	0	0
08-13	0	0	0	0	0	0	0	0	1	1
14-19	0	0	0	0	0	0	0	1	2	2
20-25	0	0	0	0	0	0	1	1	3	4A
Max. Result for Mk. 2-3 Weapons										
26-31	0	0	0	1	1	1	1	2A	6A	7A
32-37	0	0	0	1	1	1A	2A	5A	9A	10A
Max. Result for Mk. 4-5 Weapons										
38-43	0	0	1	1	2	2A	4A	8A	12A	13A
44-49	0	0	1	1	3A	3A	7A	11A	15A	16A
50-55	0	0	1	2A	5A	5A	10A	14A	18A	19B
56-61	0	0	1	3A	6A	6A	13A	17A	21B	22B
62-67	0	0	2	4A	8A	8A	16A	20A	24B	25B
68-73	0	1	2	4A	9A	9A	19A	23B	27B	28B
74-79	0	1	3A	5A	10A	10B	21B	25B	30B	31B
80-85	0	1	3A	5A	11A	11B	22B	27B	33B	34B
86-91	0	2	3A	6A	12A	12B	24B	28B	34B	37C
92-97	1	2	4A	6A	12A	13B	25B	30B	36C	40C
98-103	1	2	4A	6B	13B	13C	27C	31C	37D	43D
Max. Result for Mk. 6-10 Weapons										
104-109	2	3A	4B	7B	14C	14D	28D	33D	39D	46E
110-115	2	3A	5B	7C	15C	15D	30D	34D	40E	49E
Max. Result for Mk. 11-20 Weapons										
116-121	3	4A	5B	7C	15C	16D	31D	36D	43E	53E
122-127	4A	5A	6B	8C	16D	16E	33E	39E	47E	57F
Max. Result for Mk. 21-30 Weapons										
128-133	5A	6B	6C	8D	17D	18E	37E	43E	54E	62F
134-139	5B	6B	7D	9D	19D	21E	42E	50E	62F	70G
Max. Result for Mk. 31-40 Weapons										
140-145	8C	12C	16D	18D	35D	50E	85E	95F	112G	125H
146-150	10D	18D	25E	28F	50F	80G	130G	140H	165I	175I
Max. Result for Mk.41-50 Weapons										

Key:

A = Routine Malfunction
B = Light Malfunction
C = Moderate Malfunction
D = Severe Malfunction
E = Very Severe Malfunction
F = Ext. Severe Malfunction

2nd Roll	Malfunction Type
1	Crew
2	Power
3	Motive System
4-5	A Control System
6-7	A Weapon
8	Life Support
9-10	Random

PART IV: TELEPATHY

A *Psion* is a specific Telepathic power, the equivalent of a *spell* in a Fantasy milieu. One of the basic aspects of this system is the use of Psion lists and experience levels (or just levels). The ability to cast and learn Psions is closely tied to the character's level.

Psions are grouped into lists. A Psion list is an ordering of Psions based upon the correlation of level, intricacy, and potency. All Psions in a list have common characteristics and attributes, although each may have vastly different effects and applications. Psion lists are learned in stages, as the character progresses in experience, knowledge and power. Quite often a character learns a list only to a certain level. In such a case, the character would know, and potentially be able to cast, a Psion when his experience level is greater than or equal to the level of that Psion.

If there is no Psion on a list at a given level, it signifies that no new Psion ability is gained from knowledge of that list at that level.

Psion lists are grouped into four Fields: Visions, Alteration, Control, and Self-Mastery. These Fields determine who can "learn" a given list and how much effort it will take.

NOTE: *A Telepath who learns part of a Psion list (through the normal learning process—see Section 25.0) immediately acquires the ability to use the Psions he now knows (of his level or below).*

24.0
TELEPATH TYPES

There are three types of Telepath: the *True Telepath*, the *Semi-Telepath*, and the *Non Telepath*. True Telepaths may learn Psion lists from more than one Field of Psions. Semi-Telepaths are normally allowed to learn lists from only one Field, their Base Field. Non-Telepaths are restricted to only one Field and only limited portions of those lists. Refer to the *Character Development Chart* (pp. 8-9) for the development costs for "learning" lists.

24.1
TRUE TELEPATHS

True Telepaths are characters who have chosen to pursue the learning of mental powers above all else. They have access to all of the Psion lists, but prioritize their *Fields of Endeavor*, much like other characters prioritize their weapons pick costs (see Section 3.42). The Psion Fields are Vision, Alteration, Control, and Self-Mastery; each of which include six Psion lists. Referring to the Character Development Table, in the True Telepath row under Psions there are for number-slash combinations (1/*, 2/*, 3/*, 4/*). These represent the costs for learning lists in each of the four Fields, and may be assigned to the Fields as the Telepath wishes.

The Field chosen to have a 1/* skill development cost is considered the Telepath's **Base Field**, and all of the lists within it are Base Lists. Theoretically, the True Telepath may learn Psions in these lists to 50th level, while they may only learn Psion lists in the other Fields to 20th level.

24.2
SEMI-TELEPATHS

Semi-Telepaths are a profession which combines the attributes of the Telepath with those of one of the other professions. Semi-Telepaths are normally allowed to learn lists from only one Field, their **Base Field** (see above). That Field must be chosen when the character begins development and can never be changed. A Semi-Telepath's cost for developing his Psion list is 2/*.

Note: *Optionally, the GM may allow a Semi-Telepath to learn lists in one additional Field. This option is reflected in the 5/* pick cost on the Character Development Chart. Semi-Telepaths allowed to learn lists from this second Field may only learn Psions up to 10th level in that Field (see Section 26.0).*

When he begins character development, a Semi-telepath must choose a profession to "follow" (he may not choose "Telepath"); this choice will affect his skill development costs. For example, a Semi-Telepath that "follows" the profession of Armsman is called an Armsman-Telepath and some of his skill development costs will be the same as those of an Armsman.

There are 10 Skill Development Cost Categories: Weapons Skills, Astronautic Skills, General Skills, Scientific Skills, etc. (see *Character Development Chart* on pages 8-9). A Semi-Telepath's Development Costs come from those of "chosen" profession for two of his Categories and from those of "Semi-Telepath" for the other Categories. The Semi-Telepath must decide which Categories use which Costs when he begins development and may not later change them.

Example: *Kevyk the Semi-Telepath has decided to "follow" the profession of Armsman and become an Armsman-Telepath. He looks over the Character Development Chart on pages 8-9 and decides on "Armsman" skill development costs for the Categories of Weapons Skills and Combat Skills and "Semi-Telepath" costs for the other Categories. When Kevyk fills out the skill development costs on his character development worksheet, all of the development costs will come from the Semi-Telepath row, except for his Weapons and Combat skills, which will come from the Armsman row. Kevyk decides to choose Alteration as the Field of Telepathy he wishes to concentrate in. Again checking the table, his cost is 2/* for all the Psion lists in that Field. If the GM allows Semi-Telepaths to choose lists from a second Field, Kevyk's cost for learning Psion lists in his other Field would be 5/**

24.3
NON-TELEPATHS

Non-Telepaths are characters of other professions that desire to pay the high DP cost to gain limited Telepathic Powers. Non-Telepaths are only allowed to learn portions of lists from one Base Field. That Field must be chosen when the character begins development and can never change.

25.0 LEARNING LISTS

Psion users learn lists up to and including certain levels by developing skill ranks, as is true with all other skills in ***Space Master***. However, this area diverges from the standard skill and bonus rules: a character who is trying to learn Psions (i.e., has allocated development points to learning part of a Psion list) makes a Psion Gain Roll (PGR) upon reaching each new *experience* level. This is a 1-100 roll (NOT open-ended) with a roll of 101+ required to successfully "learn" a portion of a list.

25.1 DEVELOPING SKILL RANKS FOR PSION LISTS

When a character expends development points to acquire skill ranks, he may attempt to study one and only one list of Psions by developing skill ranks for that list (see below for the only exception). Characters may **not** develop skill ranks for a variety of lists and count on the luck of the dice to give them Psion abilities. A character must develop only one "list" of Psions at a time.

Once he has "learned" a portion of that list (i.e., made a successful Psion Gain Roll), his skill ranks in that list drop to zero. Then he may begin to develop skill ranks in another list **or** new skill ranks for a higher level portion of the same list.

The cost for developing a skill rank for a list varies depending on the chosen fields of concentration of the Telepath (see Section 3.4 and the Character Development Chart for details on determining costs). Depending on cost, a Telepath may acquire several skill ranks for a list at one time. These skill ranks represent the amount of the character's development devoted to discovering the basic concepts involved in the use of those Psions, through meditation, practice, etc. The GM must be the judge of the availability and cost of that information to the character.

Note that a portion of a Psion list may be "learned" (see Section 25.3) only if the Telepath has already learned the lower level Psions on that list.

- If a character is able to allocate development points for a total of 20 skill ranks with a list (insuring its gain at the next level of experience without the use of a stat bonus), he learns the the first level Psion on that list (if any) immediately (before reaching the next level of experience) and may begin to develop skill ranks for of a second Psion list. When he gains the next level of experience, he will "learn" the appropriate portion of the first list and be entitled to make a Psion Gain Roll for the second.
- If a character, after making an unsuccessful Psion Gain Roll, wishes to begin the study of another list, he may do so, but he forfeits all skill ranks developed for the first Psion list. Such skill ranks may be neither transferred nor retained if the character wishes to switch his efforts to some other Psion list. He may, if he has enough development points, allocate development points to bring the skill rank total with the first list to 20 and then begin to develop skill ranks for the second as described above.

25.2 THE PSION GAIN ROLL

When making a Psion Gain Roll, the character rolls 1-100 (not open-ended) and adds his applicable stat bonus **and** 5 x his skill ranks in the list: a result of 101+ indicates success. Thus 20 skill ranks guarantee that the character will "learn" part of the Psion list up to a certain level (see Section 25.3).

Modification due to Skill Rank: (5 x skill rank in the list) A bonus based upon the amount of practice/training the character has performed in that particular area (list) of Telepathy; as measured by the number of skill ranks he has developed for that Psion list.

Stat Bonus Modification: True Telepaths always use their *Self Discipline* stat bonus. The stat bonus used by Semi-Telepaths varies depending on which field they choose to concentrate in:

Field	Stat Bonus
Visions	Intuition
Alteration	Empathy
Control	Presence
Self-Mastery	Self Discipline

An Unsuccessful Roll: If the PGR is not successful (i.e., less than 100), the skill ranks are not lost, rather it just means that the character has not gained a complete understanding of the forces to be utilized. After he has had time to "ponder his experiences" and has gained further "understanding of his universe" (i.e., when his experience level increases), he may make another Psion Gain Roll, gaining the full benefit of his skill ranks in the list (which he may increase by further development in the meantime). Eventually the character will learn of part of the Psion list (assuming he survives and continues to advance in experience levels).

A Successful Roll: Once a successful Psion Gain Roll is made, the character is considered to have learned the use of the Psions on the portion of the list that he was studying and may use them as long as such use complies with other rules for their use (Psion power points, time requirements, etc.). The number of skill ranks in that list is reduced to zero. The character may develop more skill ranks for that list, but they apply to learning a higher level portion of the list.

Psions, once learned, may be cast at any time by the expenditure of power points (see Section 26.1). The Psion Gain roll, successfully made, means the character is generally capable of casting the Psions on the list up to a certain level (see Section 25.3). To cast the Psion, the character states he is doing so and expends power points. The minimum number of power points to cast the Psion is equal to the level of the Psion. Thus to cast a third level Psion, the character must expend three power points.

25.3 LEARNING A "PORTION" OF A PSION LIST

When a Psion Gain Roll for a Psion list is successfully made (see Section 25.2), the character may learn *some* of the Psions on that list (called a *Portion* of that list). The Telepath may learn from one to ten new Psions for each successful Psion Gain Roll. The number and levels of the Psions learned are dependent upon:

- The profession of the Psion user.
- His Base Field (see Section 24.1).
- The Field of the list "learned".
- The portions of that list that he has already learned.

Remember that the Telepath does not gain the ability to cast a Psion until his experience level equals or exceeds its level; even then he must abide by all the normal restrictions for casting Psions.

The Learnable Portions

There are five *Portions* of Psion lists that may be learned. Generally a True Telepath or Semi-Telepath will be restricted to learning only certain Portions of certain lists (reflecting the relative difficulty of learning these lists).

"A" Portion: An "A" Portion includes all Psions on the list up to and including level 5 (1-5th level).

"B" Portion: A "B" Portion includes all Psions on the list up to and including level 10 (1-10th level).

"C" Portion: A "C" Portion can only be learned if an "A" Portion has already been learned for the Psion list and the Telepath is level 5 or higher. (In effect, he can already cast the Psions of lower level than the ones he is attempting to learn). A "C" Portion includes all Psions on the list up to and including level 10 (5-10th level).

"D" Portion: A "D" Portion can only be learned if a "B" Portion has already been learned for the Psion list and the Telepath is level 10 or higher. A "D" Portion includes all Psions on the list through level 20 (10-20th level).

"E" Portion: An "E" Portion can only be learned if the Psions on the list have already been learned to level 20 (through a "B" Portion and a "D" Portion previously learned). This Portion includes a single 25th, 30th **or** 50th level Psion. All Psions of lower level on this list must have already been learned. In addition, the Telepath must be at least the same level as that of the Psion being learned.

25.4 RESTRICTIONS

Telepaths, Semi-Telepaths, and Non-Telepaths may only learn certain "Portions" of Psion lists (see Section 25.3), dependent on their Base Field, their profession, and the Field of the list they wish to learn. These restrictions are summarized in the following chart:

	Base Field	Other Fields
True Telepaths	B,D,E	B,D
Semi-Telepaths	B,D,E	A,C*
Non-Telepaths	A	—

* If option chosen.

Example: *Suppose a Telepath reaches 26th level, and knows one of his Base Field lists to level 20, one Outside Field lists to level 20 and another to level 10. With one pick he could* ***(a)*** *learn a new Psion list up to and including 10th level, a "B" Portion;* ***(b)*** *learn the 25th level Psion on the Base Field list he already knows to 20th level, an "E" Portion; or* ***(c)*** *learn the 11th-20th level Psions on the second Outside Field list (the one he already knows to 10th level), a "D" Portion. Note that because the other Outside Field list is not a Base Field list, he could not learn its 25th level Psion as of an "E" Portion.*

26.0 CASTING PSIONS

Once a list is known (i.e., learned) to a given level, a Telepath can cast those Psions he knows at his level or lower. Normally, however, a Telepath is restricted in how long it takes to cast a Psion and how many Psions can be cast without rest.

26.1 CASTING CAPABILITIES

The number of Psions which can be thrown by a character is dependent upon his *power points* and the level of the Psions cast. The number of power points expended to cast a Psion is equal to the level of the Psion (e.g., a 5th level Psion costs 5 power points to cast). Power points, once used, can be regained by a period of sleep or meditation (usually around 8 hours for most humanoids).

26.11 INHERENT CAPABILITIES

Each Telepath has a number of power points (PP) based upon his experience level and one of his stats (see *Stat Bonuses Chart*, pg. 45). For a character of extraordinary faculties it could be as high as three or four power points for each experience level.

- True Telepaths base their PPs on *Self Discipline* regardless of their Base Field.
- Semi-Telepaths and Non-Telepaths base their power point on a statistic based upon their Base Field (see Section 4-6). If a GM allows Semi-Telepaths to learn Psions from a second Field, power points for casting those Psions are still based upon the statistic for the Base Field (i.e., each character only has one set of power points to use).

Base Field	PP Stat
Vision	Intuition
Alteration	Empathy
Control	Presence
Self-Mastery	Self Discipline

Example: *Suppose a 15th level True Telepath had a Self Discipline of 92 (1 PP per level), then the Telepath would have 15 power points each day (1/level x 15th level). If his SD were 95, then he would have 30 (2 x 15) power points per day, and if his SD were 100 he would have 45 (3 x 15) power points per day. Assuming the last power point total (45), the Telepath could cast 3 of his highest level Psions (15th), or 4 of his 10th level Psions and a 5th level Psion, or any combination of Psion levels totaling 45.*

Under certain circumstances, the GM may find it desirable to allow both Psion using professions a minimum of one PP per level. Psion using characters may be severely handicapped if their prime requisite is not high enough to allow them any inherent power points.

Power points are regenerated only after a proper rest period, usually involving 8 hours of sleep (or uninterrupted meditation, or whatever is standard for the race).

21.12 BONUS ITEMS

Certain items can enable characters to throw more Psions per day. The most "common" of these (though all such items are extremely rare) are called Focus Crystals or sometimes Psion Prisms. These gems are imbued with a psi-power of their own, which can be tapped by Telepaths and used to enhance their own Psion casting abilities. Focus crystals must be worn (usually set into a piece of jewelry) to be used. They should rarely exceed +3 or x2 in power (see below).

There also may exist artifacts of the Ancient races which predate the current spacefaring civilizations. Though even more rare than focus crystals, these items might be even more powerful and interesting, perhaps fashioned into ornamental jewelry, crowns, bracelets, etc.

Psion Multipliers: The inherent power points of a Telepath with a Psion multiplier are increased by the factor of the item. For example, a Telepath with a "x2" item and an inherent power point total of 7 has a net power point total of 14 points.

Psion Adders: Each +1 on a Psion adder means that the owning Telepath may throw (once) any one Psion which can normally be cast and not expend any power points. These Psion items can generally be used repeatedly, (after the same rest and/or meditation that enables a character to regain his own Psion points).

Example: *Suppose a 15th level Telepath in the example above had a Self Disciplineof 92 (15 power points) and a +2 Psion adder. He could cast any combination of Psions he knows costing up to 15 power points and any 2 other Psions (the levels of these two additional Psions would not matter at all for the purposes of calculating the power points he had expended). If the same Telepath had a "x2" Psion multiplier, he would have 30 power points to expend in the normal manner.*

Restrictions: GMs must be very careful in handing out Psion bonus items as they can distort the balance of the system. Any type of power point enhancer should be relatively rare and expensive. Only one item should be usable by any one character between periods of rest (possession of two x2 Psion items does not multiply your Psion points by 4), and items should be usable by only one character per day. Psion items are required to be held (or at least worn) when used (e.g., a Telepath would have to wear his +4 Focus crystal on a pendant around his neck if that were his bonus item).

26.13 MISCELLANEOUS

Various factors may be introduced to affect power points in a given situation or game. For example, proximity to a Telepathic spiritual source might result in increased power points, or proximity to areas rich or poor in unmined focus crystals would affect a Telepath's power points. This is a factor which is decided by the GM.

26.2 CASTING TIME REQUIRED

The time required to cast a Psion will be described in terms of rounds (we suggest 10 second rounds, but this may vary from game system to game system). The time required to cast a Psion is based on the level of the Telepath and the Psion he is trying to cast. Most Psions become easier to cast as the caster becomes more familiar with them, a factor that is reflected in game terms by comparing his level to that of the Psion being cast.

During Psion *preparation*, a Telepath must concentrate and be relatively inactive (10% of normal activity or movement allowed). On the round of Psion *effect* (when it is actually "cast" or "thrown"), a Telepath may operate at 25% effectiveness (which means he may not cast another Psion). If a caster is dropped, stunned, or killed during preparation, the Psion is cancelled but no power points are expended.

Note that certain Psions are instantaneous in effect and do not require preparation. Treat these as Class I Psions regardless of the level of the caster. Instantaneous Psions are marked as such on the Psion lists and in the descriptions.

Class III Psions: Class III Psions require 3 rounds to cast; two rounds of preparation and one round for effect. Class III Psions have a level equal to the caster, one level less, or two levels less (a Telepath of level 7 would have all of his 5th, 6th and 7th level Psions as class III Psions).

Class II Psions: Class II Psions require two rounds to cast; one round of preparation and one round for effect. Class II Psions have a level of three less than the caster, four less than the caster, or five less than the caster (a Telepath of level 7 would have all of his 2nd, 3rd, and 4th as class II Psions).

Class I Psions: Class I Psions require one round to cast; zero rounds to prepare and one round for effect. Class I Psions have a level of at least 6 less than the caster (our hypothetical level 7 Psion user would have all his 1st level Psions as Class I Psions, when he advanced to 8th lvl, his 2nd lvl Psions would become Class I, etc.).

27.0 RESOLVING PSION EFFECT

Once a Psion is cast, the effect of the Psion must be resolved. In many cases the results are automatic, but when the target is a living creature or unusual object, various results can occur. These results range from the Psion failing to operate correctly to the Psion being overwhelmingly successful.

27.1 NON-ATTACK PSIONS

Non-attack Psions include all Psions which cannot adversely effect an opponent. These are indicated in the Psion descriptions and include all those marked: informational, defensive, etc. When a non-attack Psion is cast, the caster makes a roll. If the roll is 03-00, the Psion succeeds, but if the roll is 01-02 the Psion fails. In the case of a failure, another roll is made (NOT open-ended), the roll is modified by -10 and applied to the Psion Failure Chart ; then the result is immediately applied to the Psion or caster.

27.2 DIRECTED ATTACK PSIONS

Directed attack Psions (DAPs) manipulate elemental forces to directly attack a target, and thus do not involved a *resistance roll* (see Section 27.32). Direct attack psions are resolved by making an attack roll (high open-ended), modifying it, and then applying the result to the appropriate Weapon Attack Table (see **Tech Book**). For example, *Energy Bolt* is a direct attack Psion that concentrates energy into an attack that is resolved on the Laser Attack Table. Normal OB and DB modifications (except for the caster's skill bonus) apply and are based upon the Weapon Attack Table used for the Psion (e.g., OB and DB modifications that apply to laser attacks also apply to *Energy Bolt* attacks).

Skill Bonus: The skill bonus for a directed attack Psion is based upon the attacker's skill in "Directed Psions" **not** his skill for the corresponding weapon. Directed Psion skill must be developed separately for each type of directed attack Psion (e.g., skill for *Energy Bolt* must be developed separately from skill for *Hurling*).

Psion Failure: Psion failure is based upon the Psion itself and not the corresponding Weapon Attack. If the directed Psion attack roll is 03-00, the Psion succeeds and the attack proceeds normally. But if the roll is 01-02 the Psion fails. In the case of a failure, another roll is made (NOT open-ended), the roll is modified by +20 and applied to the Psion Failure Chart ; then the result is immediately applied to the Psion or caster (whichever is indicated by the table).

27.3 BASE ATTACK PSIONS

Base attack Psions (BAPs) include all Psions which are not non-attack Psions (how surprising) and which are not "Directed Attack Psions". Base attack Psions are resolved by the caster making an attack roll (NOT open-ended) and then applying the results to a *resistance roll* (open-ended) made by the target (or GM). This net resistance roll will indicate if the Psion has affected the target.

27.31 PSION ATTACK ROLL

The Psion Attack Roll (PAR) is NOT open-ended and represents the effectiveness of the caster's Psion.

UNMODIFIED ROLLS

An unmodified roll of 01-02 indicates automatic Psion failure, while a roll of 96-00 indicates a higher than normal resistance roll modification (none of the modifications below apply to such rolls).

Modifications to the PAR

The following modifications are additions or subtractions to the base attack roll tha t apply if the original roll was not 01-02 or 96-00. If the Psion Attack roll thus modified is less than 03 then the net base attack roll is 03, if the modified roll is greater than 95 then the net base attack roll is 95. These modifications are summarized in the *Psion Attack Roll Modifiers Chart*..

Level of Caster: If the caster is a pure Telepath, the level of the caster is added to the PAR (Psion Attack Roll). Semi-Telepaths do not get this bonus.

Range: The distance from the caster to the target can modify the PAR. The modifications are printed on the *Psion Attack Chart*. They range from +30 if the caster is touching the target to -30 if the range is greater than 300 feet.

Cover and Situation : Certain situations can result in modifications being given by the GM. For example, if the target is detected but not seen, a subtraction of -20 might be given.

Race or Unusual Material: Certain creatures and races are especially hard to affect. These creatures should be given a modification by the GM based upon his world system. Similar modifications should be given to certain unusual materials.

Shields: Certain shields may modify PARs the *Psion Attack Roll Modifiers Chart*..

Effects of the PAR

The net PAR is used on the Psion Attack Chart to obtain a result.

Psion Failure : A "F" result on the *Psion Attack Chart* means the Psion has failed. In the case of a failure, another roll is made (NOT open-ended), the roll is modified by +10 and applied to the *Psion Failure Chart*; then the result is immediately applied to the Psion or caster (whichever is indicated by the chart).

Resistance Roll Modification: A result of a positive or negative number indicates a result which must be added to the resistance roll.

27.32 RESISTANCE ROLL

The target of a base attack Psion MUST make a resistance roll (RR) if the Psion has not failed. This roll represents the target's innate resistance to the effects of the Psion and may be modified a number of factors. This roll is open-ended and thus always represents a chance that the target may not be affected by a very powerful Psion **or** may fail to resist a very weak Psion.

Modifications to the RR

Modifications to the RR are additions or subtractions to the RR which result in a net RR.

Modification from the PAR: The modification indicated by applying the PAR to the *Psion Attack Chart*.

Statistic Bonus: The target may add his Self Discipline stat bonus to his RR.

Items and Psions: Certain items or Psions may give a target a modification to his RR. These modifications depend upon the item or specific Psion.

Race: Certain races are unusually resistant to Telepathic power and may be given a modification by the GM based upon his galactic system. These modifications for the standard ***Space Master*** races are given in the *Racial Statistics Chart*, p.31.

Willing Targets: Certain targets may submit themselves as willing participants in a Psion, in such a case, the RR should be modified by -50, and the level of the target should be one for the RR.

Special Attack Psions: A few Psions are very difficult to resist and have their own additional modification to any RR made against them (e.g., any RR versus *Ventriloquism* on the Illusions list is subjected to a special -30 "Mod")..

Resistance Roll Table

To use the *Resistance Roll Chart*, cross-index the attack level (usually to the level of the caster) with the level of the target. If the net resistance roll is greater than or equal to the result of this cross-indexing, the target has successfully resisted the Psion. Otherwise, the target has not resisted the Psion and suffers the results given in the description of that Psion (see Section 28.0 for details of individual Psion effects).

Critical Hit Tables: Some Psion attacks require for a roll on one of the Critical StrikeTables (see **Tech Book**). In these cases, the PAR and Resistance Rolls are made as usual, and if the Target fails their RR, the Telepath casting the Psion then makes an unmodified roll on the appropriate column of the chart indicated.

result* / # failure:** Certain Psions will indicate a total result based upon the difference between the net RR and the result from the resistance table. This difference divided by the **#** (round off) indicates how many increments of the ***result are applied

Example: *If a target fails his RR by 47 against* Paralyze *on the Mind Assault list, he will be paralyzed for 5 rounds because the Duration is "1 rnd / 10 failure" (47 ÷ 10 = 4.7 which rounds to 5).*

27.4 PSION CHARTS

PSION FAILURE CHART

(-19)-05 — Lose Concentration due to strain. Psion lost, but not Power Points.

06-20 — You have second thoughts. Psion lost, but not Power Points.

21-35 — Indecision, mild mental lapse. Delayed 1rnd; but may be cast next rnd.

36-50 — Serious mental lapse. Psion lost; not PPs. -30% activity for 3 rnds.

51-65 — Moderate but serious strain. Psion and PPs lost. Stunned for 1 rnd.

66-79 — Subconscious fear. Psion and PPs lost. Stunned 2 rnds. Psion internalized. +15 hits. Stunned 3-300 rnds.

80 — Caster internalizes Psion. +15 hits. Knocked down. Stunned for 1 hour.

81-86 — Serious strain. Psion lost, but not Power Points. Stunned 3 rnds.

87-89 — Internalization; sense overload. +20. Blinded & deaf for 60 rnds.

90 — Strain causes mild stroke. +20 hits. Knocked out for 12 hours.

91-96 — Severe strain causes misfire. +5 hits. Stunned for 3 rnds.

97-99 — Target's powerful mind causes Psion to backfire. Reverse roles of target and caster in Psion effects.

100 — Identity crisis. Lose Psion casting capabilities for 2 weeks.

101-106 — Extreme mental pressure causes misfire. Knocked down. +10 hits. Stunned for 6 rnds.

107-109 — Caster internalizes Psion. Lose all Psion casting abilities for 3 wks. +25 hits. Unconscious for 3 hrs.

110 — Strain causes severe stroke. Paralyzed from the waist down.

111-116 — Psion strays; travels to a point 5m right of target. All in line takes an unmodified attack. Stunned 3 rnds.

117-119 — Psion strays; travels to a point 5m left of target. All in line takes an unmodified attack. Stunned 3 rnds.

120 — Mental Collapse. Psion is cast in direction opposite to intended line. Lose all Psion casting ability for 100 days.

Modifications *:

-20 Non-attack Psions that affect only the caster
-10 Non-attack Psions that involve matter/ energy only
0 Non-attack Psions that involve another living creature
+10 Base Attack Psions
+20 Directed Attack Psions

** Use only largest applicable modifier.*

PSION ATTACK CHART

	Roll	RR Modifier
UM	01-02	F
	03-04	+80
	05-08	+70
	09-12	+65
	13-16	+60
	17-20	+50
	21-24	+45
	25-28	+35
	29-32	+30
	33-36	+20
	37-40	+15
	41-44	+5
	45-48	0
	49-52	0
	53-56	-5
	57-60	-10
	61-64	-15
	65-68	-20
	69-72	-25
	73-76	-30
	77-80	-35
	81-84	-40
	85-88	-45
	89-92	-50
	93-95	-55
UM	96-97	-75
UM	98-99	-100
UM	100	-125

PSION ATTACK ROLL MODIFIERS

Category	Effect	Note
Level of Caster	+1 per level	True Telepaths only.
Race/Unusual Material	+/- (variable)	GM determination.
Cover and Situation:		
Full Cover	-20	Detected, but not sighted.
Partial Cover	-10	Less than 1/2 of target sighted.
Static Target	+10	Applies only if no cover.
Shields:		
Velocity Shield	0	—
Absorption Shield	-5	—
Deflector Shield	-10	—
Barrier Shield	-15	—
Range:		
Touching	+30	Target or what he is wearing.
From 0m up to 3m	+10	—
From 3m up to 15m	0	—
From 15m up to 30m	-10	—
From 30m up to 100m	-20	—
More than 100m	-30	—

BASE ATTACK ROLL MODIFICATIONS

Category	Effect	Note
PAR Modification	-125 to +80	Apply result from Psion Attack Chart.
Target's SD Bonus	-25 to +35	Self Discipline Stat Bonus, See page 45.
Race	+/- (variable)	See page 31.
Psion Modification	+/- (variable)	Depends on Psion, "**Mod**" in Psion description.
Items	+/- (variable)	—
Willing Target	-50	Target wants psion cast at/on him

RESISTANCE ROLL CHART

Target Level	Attack Level † 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	> 15 *	Target Level
1	50	55	60	65	70	73	76	79	82	85	87	89	91	93	95	*	1
2	45	50	55	60	65	68	71	74	77	80	82	84	86	88	90	*	2
3	40	45	50	55	60	63	66	69	72	75	77	79	81	83	85	*	3
4	35	40	45	50	55	58	61	64	67	70	72	74	76	78	80	*	4
5	30	35	40	45	50	53	56	59	62	65	67	69	71	73	75	*	5
6	27	32	37	42	47	50	53	56	59	62	64	66	68	70	72	*	6
7	24	29	34	39	44	47	50	53	56	59	61	63	65	67	69	*	7
8	21	26	31	36	41	44	47	50	53	56	58	60	62	64	66	*	8
9	18	23	28	33	38	41	44	47	50	53	55	57	59	61	63	*	9
10	15	20	25	30	35	38	41	44	47	50	52	54	56	58	60	*	10
11	13	18	23	28	33	36	39	42	45	48	50	52	54	56	58	*	11
12	11	16	21	26	31	34	37	40	43	46	48	50	52	54	56	*	12
13	9	14	19	24	29	32	35	38	41	44	46	48	50	52	54	*	13
14	7	12	17	22	27	30	33	36	39	42	44	46	48	50	52	*	14
15	5	10	15	20	25	28	31	34	37	40	42	44	46	48	50	*	15
> 15 *	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	>15

* For each level over 15, the attack level raises the result by 1; the target level lowers it by 1.
† The Attack Level is the level of the psion caster.

THE FIELD OF VISIONS

EMPATH

1) Transfer I *
2) Clotting III * s
3) Cut Repair I * s
4) Pain Relief True * s
5) Tissue Repair * s
6) Clotting True * s
7) Fracture Repair * s
8) Mask Pain * s
9) Cut Repair True * s
10) Transfer True *
11) Neutralize Poison * s
12) Tissue Repair True * s
13) Mask Pain True * s
14) Fracture Repair True * s
15) Regeneration * s
20) Lord Empath *
25) Regeneration True * s
30) Empathic Trance * s
50) Empath * s

INTERFACE

1) Configuration Scan
2) Interface I
3) Utilize Language
4) Locate Data
5) Data Copy
6) Override Security I
7) Enhance I c
8) Data Search I c
9) Override Security III
10) Interface True
11) Enhance V c
12) Add Data c
13) Delete Data c
14) Override Security V
15) Enhance True c
20) Alter Data c
25) Purge Data
30) Alter Data True c
50) Interface Master

MIND'S TRUTH

1) Emotion Touch
2)
3)
4) Thought Scan
5) Truth I *
6) Thought Analysis
7)
8) Truth III *
9)
10) Far Thought Scan (100m/lvl)
11) Truth V *
12) Mind Scan
13)
14) Truthtrance I
15) Far Mind Scan (100m/lvl)
20) Truthtrance III
25) Mind Probe
30) Truth True *
50) Truthsaying

MIND DETECTION

1) Presence * c •
2)
3) Mind Pattern * c
4)
5) Pattern Store *
6) Pattern Analysis *
7) Mind Location (30m/lvl) c
8) Mind Compass (300m/lvl) c
9) Presence True * c
10) Awareness * c
11)
12) Proximity Warning * s
13) Mind Tracking
14) Mass Patterning * c
15) Awareness True * c
20) Proximity Warning True * s
25) Mind Location (10 km/lvl) c
30) Mind Compass True c
50) Mind Location True c

MIND'S EYE

1)
2) Intuition I
3)
4) Death's Vision
5) Forewarning I s
6)
7)
8) Fate's Vision
9)
10) Empathic Warning s
11) Forewarning III s
12)
13) Empathic Vision s
14) Death's Vision True
15) Far Empathic Warning s
20) Forewarning True s
25) Fate's Vision True
30) Far Empathic Vision s
50) Far Empathy True s

MIND IN THE PAST

1) Origins
2) Flash Behind (1 day/lvl)
3)
4)
5) Item Purpose
6) Past Sight (1 day/lvl) c
7)
8) Flash Behind (1 yr/lvl)
9) Delving
10) Past Patterning
11) Past Sight (1 yr/lvl) c
12) Past Compass
13) Flash Behind True
14) Past Location
15) Past Sight (10 yrs/lvl) c
20) Event Lock
25) Past Analysis
30) Past Sight (1000 yrs/lvl) c
50) Past Sight True c

THE FIELD OF ALTERATION

TELEKINETICS

1) Manipulate I c
2) Levitation I
3) Mind's Hand I c
4) Deflection I *
5) Levitation (15m/rnd)
6) Manipulate True c
7) Flight
8) Mind's Hand (10 kg/lvl) c
9) Deflections II *
10) Hurling I
11) Levitation (100 kg/lvl)
12) Deflections III *
13) Landing True *
14) Mind's Hand (100 kg/lvl) c
15) Deflections V *
20) Deflections True *
25) Hurling III
30) Reaiming *
50) Mind's Hand (1000 kg/lvl) c

MIND INTO ENERGY

1) Energy Perception c
2) Drain Energy
3) Radiation Shield
4) Electric Charge
5) Human Battery c
6) Energy Dispersal I *
7) Drain Energy (10m/lvl)
8) Radiation Armor
9) Cloaking
10) Energy Dispersal III *
11) Charge Power Supply c
12) Power Surge
13) Energy Dispersal V *
14) Energy Retaliation *
15) Human Battery True
20) Energy Dispersal True *
25) Power Enhancing c
30) Power Routing c
50) Power Enhancing True c

MIND OVER MATTER

1) Warm Matter
2) Cool Matter
3) Portal Jam
4) Heat Matter
5) Chill Matter
6) Psion Shield * c
7) Refresh Atmosphere
8) Vacuum
9) Shatter
10) Disintegration
11) Psion Armor *
12) Heat Matter (10 cumet/lvl)
13) Chill Matter (10 cumet/lvl)
14) Undoor
15) Great Vacuum
20) Unstone
25) Mold Matter c
30) Eyes of Disintegration
50) Transmutation

ARMOR

1)
2) Radiation Shield *
3) Shield I
4) Armor (AT4)
5)
6) Radiation Armor I *
7) Armor (AT8)
8) Shield II
9)
10) Armor (AT12)
11) Radiation Armor III *
12) Shield III
13) Radiation Armor 3m R * c
14) Armor (AT16)
15) Shield V
20) Lord Armoring (AT20)
25) Radiation Armor V *
30) Hull Armoring I c
50) Hull Screen c

TELEPATHY

1) Phrase *
2) Speak (T) *
3) Phrase (10m/lvl) *
4) Speak (3m/lvl) *
5) Phrase (10 km/lvl) *
6) Listen (T) * c
7) Speak (10 km/lvl) *
8) Mass Speech * c
9) Speech True (10m/lvl) *
10) Telepath (10m/lvl) * c
11) Master of Speech (10m/lvl) *
12) Mass Speech True *
13) Far Phrase (1 LM/lvl) *
14) Telepath True (10m/lvl) *
15) Distant Phrase *
20) Lord Telepath *
25) Far Speak* c
30) Far Telepath True *
50) Distant Telepath True *

CONCEALMENT

1) Overlook I c
2) Chameleon
3) Cloaking I
4)
5) Hiding c
6) Overlook III c
7) Cloaking III
8) Hiding True c
9)
10) Invisibility
11) Overlook V c
12) Cloaking V
13)
14)
15) Cloaking X
20) Cloaking True
25) Invisibility True
30) Cloaking True c
50) Invisibility True

THE FIELD OF CONTROL

THOUGHT MASTER

1) Detect Tampering
2) Forget (1 min)
3) Confusion
4) Lapse
5) Mind Blank
6) Forget (10 min)
7) Mind Restoration
8) Unlearning (1 min)
9) Forget (1 hour)
10) Implant Thought
11) Unminding
12) Forget True
13) Unlearning (1 day)
14) Amnesia
15) Implant Memory
20) Cruel Unminding
25) Unlearning True
30) Mind Break
50) Implant Thought Pattern

POSSESSION

1)
2) View
3) Pattern Store *
4)
5) Sense **c**
6) Metempsion *
7) Transferral
8) Far View **c**
9) Far Sense **c**
10) Knowing Transferral
11)
12) Ready Metempsion * **s**
13) Distant View **c**
14) Distant Sense **c**
15) Metempsion True * **s**
20) Lord Metempsion * **s**
25) Transferral True
30) Transferral Mastery
50) Psionic Body

VOICE

1)
2) Question
3)
4) Befriend
5) Command
6) Fear
7) Suggestion
8) Beguile
9) Holding Word **c**
10) Control
11) Sow Suspicion
12) Seduce
13) True Command
14) Mass Suggestion
15) Control II
20) Lord Control
25) Control True
30) Great Control
50) Mass Control

MIND ASSAULT

1) Distraction **c**
2) Touch of Unconsciousness
3) Disorientation
4) Firenerves
5) Blinding
6)
7) Paralyze
8) Unconsciousness
9) Firenerves True
10) Mind Shout (10mR) *
11) Transferral
12) Coma
13)
14) Sensory Deprivation
15) Mind Shout (20mR) *
20) Lord Paralyze
25) Great Shout (30mR) *
30) Transferral True
50) Great Shout True (30mR) *

THOUGHT INTO PAIN

1) Numbing **c**
2) Pain **c**
3) Choke **c**
4) Unbalance
5) Touch of Disruption
6) Agony **c**
7) Pain III **c**
8) Choke True
9)
10) Energy Channel **c**
11)
12) Agony III **c**
13) Disruption
14) True Agony
15) Mass Pain **c**
20) Energy Channel True **c**
25) Torment **c**
30) Disruption True
50) Thought Into Pain **c**

ILLUSION

1) Refraction
2) Ventriloquism **c**
3) Audio Impersonation
4) Deafness I
5) Visual Impersonation
6) Facade
7) Displacement I
8) Visual Illusion I
9) Phantasm I
10) Silent Fence
11) Audio Impersonation True
12) Visual Impersonation True
13) Visual Illusion III
14) Phantasm III
15) Displacement II
20) Displacement III
25) Facade True
30) Mirage
50) Mirage True

THE FIELD OF SELF-MASTERY

MIND'S DEFENSE

1) Inkling * **s**
2)
3) Psion Shield I
4) Mind Alert * **s**
5) Psion Armor I
6) Psion Shield III
7)
8) Mind Block * **c**
9) Psion Armor II
10) Ready Block * **c s**
11) Psion Shield
12) Retaliation
13)
14) Psion Armor III
15) Mind Block True * **s**
20) Lord Retaliation
25) Psionic Defense * **s**
30) Retaliation True * **s**
50) Psionic Citadel * **s**

MIND DISCIPLINE

1) Detect Probe * •
2) Concentration I *
3)
4) Recall
5) Memory Trance
6) Observation
7) Concentration III *
8) False Pattern * •
9) Unpresence **c**
10) Mind Block
11) Concentration V
12) False Presence True * •
13) Correlation
14) Sensitivity
15) Total Recall
20) Observation True
25) Sensitivity True
30) Correlation True
50) Mind Master

TELEPORTATION

1)
2) Blink
3)
4) Phasing (1 min/lvl)
5) Leaving (30m)
6) Merge
7) Long Door (30m)
8) Leaving (100m)
9) Phasing True
10) Teleport
11) Passing
12) Long Door (100m)
13)
14) Merging True
15) Mind's Portal
20) Long Door (300m)
25) Passing True
30) Mind's Portal True
50) Teleport True

BODY DISCIPLINE

1) Touch I *
2) Leaping *
3) Speed III *
4) Dodging I *
5) Flip I *
6) Hold Breath *
7) Great Leap *
8) Dodging III *
9) Touch III *
10) Haste III *
11) Flip III *
12) Speed V *
13) Landing True *
14) Haste V *
15) Wallrunning *
20) Dodging True *
25) Haste X *
30) Ceilingrunning *
50) Master of Self *

CHANGING

1) Contortions
2) Study *
3) Mask
4) Merge
5) Shape-shift **c**
6) Mask True
7) Passing
8) Great Merge
9) Shape-shift True
10) Metamorph
11)
12) Merge True
13)
14) Metamorph True
15) Passing True **c**
20) Lord Metamorph
25) Shifting
30) True Change
50) Master Metamorph

METABOLIC CONTROL

1) Clotting I * **c**
2) Pain Relief I * **c**
3) Unstun I * **s**
4) Mask Pain (25%) * **s**
5) Cut Repair I **c**
6) Tissue Repair **c**
7) Fracture Repair **c**
8) Unstun III * **s**
9) Vessel Repair **c**
10) Resist Poison * **c s**
11) Mask Pain (50%) * **s**
12) Tissue Repair True
13) Pain Relief True * **s**
14) Fracture Repair True
15) Neutralize Poison * **c s**
20) Regeneration *
25) Resist Stun * **s**
30) Trance * **s**
50) Renewal True * **s**

28.0
PSION LISTS

28.1
FIELD OF VISIONS

EMPATH

Note: *The Empathy list differs from the* **Metabolic Control** *list primarily in that it can be used to heal wounds on other beings. Some of these Psions act more quickly than those in the* **Metabolic Control** *list. It should be noted that Empaths are rare individuals. An Empath may consciously keep a subconscious healing Psion from activating.*

1) Transfer I (H*) **D:** P **R:** T The Telepath need only touch the injured party, and the wound is transferred to the Telepath in only one round (both must be 'static'). This transfer costs 1 Psion Point per wound (GM discretion; though in general an area or critical type could be considered one wound, e.g., a 25-hit wound bleeding 3 hits/rnd is all one injury. This designation bears no resemblance to the process needed to *heal* the injury from the Telepath.) Even a 1st-lvl Telepath could transfer any injury — though he might not survive long afterwards. Once transferred, the injuries are as if the Telepath had actually received them (e.g. they bleed, etc.), and can be healed using the Psions below. Most of the Psions are *Subconscious* — triggered automatically by the Telepath's unconscious mind. In this way the Telepath might *Transfer* wounds, pass out from the pain/hits/etc., and his body will automatically heal until he has 0 PPs. Empaths have an intuitive understanding of how much they can take before assuming a fatal burden and normally their instinct for self-preservation would prevent a fatal *Transferral.*

2) Clotting III (HS*) **D:** P **R:** S Will close a wound of up to 3 hits bleeding severity/rnd Patient cannot move appreciably or the wound will reopen.

3) Cut Repair I (HS*) **D:** P **R:** S As *Clotting* except one hit of bleeding is permanently stopped every round. Wound is fully healed.

4) Pain Relief True (HS*) **D:** P **R:** S 1 hit/rnd of concussion damage is relieved, this Psion's effects will continue until the caster has 0 hits. If he is conscious, caster may keep this Psion from "Subconsciously" activating.

5) Tissue Repair (HS*) **D:** P **R:** S Caster is able to repair one damaged (but not "destroyed") muscle or tendon (or similar tissue). This requires 10 minutes.

6) Clotting True (HS*) **D:** P **R:** S Any one bleeding wound is instantly closed. *Cut Repair* is necessary to completely heal the wound, however.

7) Fracture Repair (HS*) **D:** P **R:** S This Psion will repair bone or cartilage which is broken but not shattered or destroyed. The process takes ten minutes.

8) Mask Pain (HS*) **D:** P **R:** S Allows the caster to absorb an additional 50% of the hits he or she could normally before losing consciousness.

9) Cut Repair True (HS*) **D:** P **R:** S As *Clotting True* except bleeding wound is completely closed and healed.

10) Transfer True (H*) **D:** P **R:** T Utilizing this Psion, the Empath may Transfer as many wounds as desired upon himself, moving from patient to patient if desired.

11) Neutralize Poison (HS*) **D:** P **R:** S Consider the poison to be the Psion target, and it must make a RR vs attack. RR failure means that the poison is permanently rendered harmless (and the Empath is immune from this poison forever). The process takes 1 minute.

12) Tissue Repair True (HS*) **D:** P **R:** S Caster is able to repair one damaged muscle or tendon (or similar tissue) in but 1 minute. A destroyed tissue may be regenerated in 10 minutes (though the caster must remain immobile).

13) Mask Pain True (HS*) **D:** P **R:** S Allows the caster to absorb twice the hits he or she could normally before losing consciousness. Note that hits may *never* exceed hit capacity plus Constitution.

14) Fracture Repair True (HS*) **D:** P **R:** S Caster is able to repair one damaged (including shattered) bone or cartilage in 1 minute. A destroyed bone may be regenerated in 10 minutes (though the caster must remain immobile).

15) Regeneration (HS*) **D:** P **R:** S Caster can regenerate lost limbs, damaged or destroyed organs (basically any body parts except the brain) while in a trance. If caster is supposed to die from such a wound, this Psion will not save him unless the repair is completed before he 'dies'. Time required varies: ~ 5-100 days for a limb (finger to leg); ~ 10 days for a damaged organ; ~ 50 days for a destroyed organ. If the heart, liver, etc is destroyed or damaged, the caster will die unless he is in a Medstasis unit or otherwise kept artificially alive. If the organ is a kidney, eye, etc., he will likely hold out.

20) Lord Empath (H*) **D:** P **R:** 30m With this Psion the Empath may "reach out" Psionically and take upon him/herself a wound from up to 30 meters away. Because of the strain and complexity, only one wound may be taken and healed at a time in this way.

25) Regeneration True (HS*) **D:** P **R:** T Caster is able to regenerate lost limbs, damaged or destroyed organs (not the brain) while in a trance. Because of the nature of such injuries, the wound is not actually "transferred" (though a *Transferral* Psion must be cast in order to link the Empath and patient nervous systems). The patient's limb/organ is regenerated in 1-100 minutes (GM discretion; varies with severity) and kept alive in the meantime by the Empath's body. After the healing, the Empath lapses into a coma for 1-100 hours (hours equal minutes of healing required) while he recovers.

30) Empathic Trance (HS*) **D:** V **R:** S Allows the Empath the unique ability to cast more than one healing Psion on themselves *simultaneously.* The normal limit is one per 10 levels at a time, but more are possible if the Empath's life is endangered otherwise. The Empath may also draw on as many as 3x per 10 levels their normal daily allotment of Psion Points, but is incapable of casting any Psion until they "catch up" (e.g., if the next three days worth of Psions ar used, they are unable to cast any for the next 3 days). He is in a Trance for the duration of regeneration.

50) Empath (H*) **D:** V **R:** S Once this Psion is cast, the Empath has free use of any of the Psions below. The only limitation is that a new *Empath* Psion must be cast for every set of injuries (e.g., the Empath takes on a group of injuries, casts *Empath*, heals, takes on another group of injuries, must cast *Empath* again).

MIND'S EYE

2) Intuition I (I) **D:** — **R:** S Caster gains vision of what probably will happen to him if he takes a specified action within the next minute.

4) Death's Vision (I) **D:** — **R:** S Caster gets a vision of the events surrounding the death of any 1 dead being through the eyes of the deceased. He also gets a view of the killer (if any). Caster must be within 3m of the corpse, who must have died within a number of years equal to the caster's level.

EMPATH	MIND'S EYE	MIND'S TRUTH
1) Transfer I *	1)	1) Emotion Touch
2) Clotting III * s	2) Intuition I	2)
3) Cut Repair I * s	3)	3)
4) Pain Relief True * s	4) Death's Vision	4) Thought Scan
5) Tissue Repair * s	5) Forewarning I s	5) Truth I *
6) Clotting True * s	6)	6) Thought Analysis
7) Fracture Repair * s	7)	7)
8) Mask Pain * s	8) Fate's Vision	8) Truth III *
9) Cut Repair True * s	9)	9)
10) Transfer True *	10) Empathic Warning s	10) Far Thought Scan (100m/lvl)
11) Neutralize Poison * s	11) Forewarning III s	11) Truth V *
12) Tissue Repair True * s	12)	12) Mind Scan
13) Mask Pain True * s	13) Empathic Vision s	13)
14) Fracture Repair True * s	14) Death's Vision True	14) Truthtrance I
15) Regeneration * s	15) Far Empathic Warning s	15) Far Mind Scan (100m/lvl)
20) Lord Empath *	20) Forewarning True s	20) Truthtrance III
25) Regeneration True * s	25) Fate's Vision True	25) Mind Probe
30) Empathic Trance * s	30) Far Empathic Vision s	30) Truth True *
50) Empath * s	50) Far Empathy True s	50) Truthsaying

5) Forewarning I (IS) **D:** 1 hour **R:** 1m/lvl Caster is alerted as far as one minute in advance if someone within range is planning violence against him. Caster receives no details of who or exactly where, however.

8) Fate's Vision (I) **D:** — **R:** 3m If target of Psion is likely — as determined by the GM — to meet a violent death or near-death (assassination, heart attack, etc.) within 25 hours, caster receives a momentary vision of the event, including the perpetrator (if any).

10) Empathic Warning (IS) **D:** until triggered (can be days, weeks, etc.) **R:** 10 km/lvl Caster can key this Psion to one being previously *Pattern Stored*. If the keyed entity is killed or in an *immediately* life-threatening situation within the range of the Psion, the caster is immediately aware of it. Caster cannot have more than one *Empathic Warning* active at one time, but can cancel and cast a new one.

11) Forewarning III (IS) As *Forewarning I* except duration and range are tripled.

13) Empathic Vision (IS) As *Empathic Warning*, except caster gets a vision of target's death as in Death's Vision.

14) Death's Vision True (I) **D:** — **R:** S Caster gets a vision of the events surrounding the death of any 1 being within 3m. Caster gets an understanding of the reason(s) the deceased died, exactly who the killer was (if any), and who was ultimately responsible (if anyone). Corpse may be of any age as long as it is (reasonably) intact. A couple of bones or teeth fragments is *not* 'intact'; a complete skeleton is.

15) Far Empathic Warning (IS) As *Empathic Warning*, except range is 1 light-year/lvl

20) Forewarning True (IS) As *Forewarning*, except that duration is until triggered and range is up to 10m/lvl

25) Fate's Vision True (I) As *Fate's Vision*, except caster has a vision of the (most likely) ultimate fate of target, no matter how far in the future.

30) Far Empathic Vision (IS) As *Empathic Vision*, except caster's range is 10 LY/lvl

50) Far Empathy True (IS) Allows caster to have as many *Far Empathic Visions* (or lesser Empathic Visions or Warnings) simultaneously keyed as he desires.

MIND'S TRUTH

1) Emotion Touch (I) **D:** 1 rnd **R:** T Caster receives detailed information about target's current emotional state (e.g., depressed, angry, happy, frightened).

4) Thought Scan (IM) **D:** 1 rnd/lvl **R:** 20m Caster receives surface thoughts from target. If target makes his RR by 25 or more he realizes what is happening.

5) Truth I (I*) **D:** — **R:** 5m Caster is able to tell whether a specific statement is a deliberate lie. Psion must be cast immediately before statement is made. Also, target may make a RR (at -50) against lie detection with any *Acting* skill bonus. If the RR succeeds, caster is uncertain, but is not fooled into believing that a lie is truth. Caster must have at least 5 skill ranks in language being used.

6) Thought Analysis (IM) As *Thought Scan*, except caster also gets reasoning and patterns behind surface thoughts.

8) Truth III (I*) **D:** 3 min **R:** 10m As *Truth I*, except caster may determine the Truth of any 3 statements within the duration and range of the Psion.

10) Far Thought Scan (IM) As *Thought Scan*, but the range is 100m/lvl Target must have been *Pattern Stored* previously if out of sight.

11) Truth V (I*) As *Truth III* except Psion holds for 5 minutes or five statements.

12) Mind Scan (IM) As in *Thought Analysis*, except caster can also scan target's conscious memories.

14) Truthtrance I (I) **D:** 1 hour **R:** 10m More powerful than the *Truth* Psions, all deliberate lies within range and duration are detected. Unlike the *Truth* Psions above, caster is immobile and unable to speak except to declare lie or truth during the trance, and requires 3 rnds to enter or leave the state. Truthsayer must be physically present for full effect; Targets get a RR as in *Truth* if electronic surveillance used. Caster can be awakened before the hour if his name is called.

15) Far Mind Scan (IM) As *Mind Scan*, except caster's range is 100m/lvl Target must have been *Pattern Stored* previously if out of sight.

20) Truthtrance III (I) As *Truthtrance I*, except duration is 3 hours.

25) Mind Probe (IM) As in *Mind Scan* except caster can probe target's subconscious memories (i.e., all experiences).

30) Truth True (I) As *Truth I*, except duration is 1 statement or 1 min per lvl.

50) Truthsaying (I) As *Truthtrance I*, except duration is up to 5 hours, caster is able to speak freely, and is at -50 to other activity (no other Psions may be cast).

INTERFACE

Note: *The Interface list deals with a Telepath's ability to tap into electronic data storage systems. The computer being scanned/affected receives a RR based on it's Mk. # (Mk # equals level). If an Android, the Android level is used. Note that the designation "touch" for most means that the Telepath must be within 1 meter of the Central Processing Unit or in contact with a full-function terminal. Telepaths may use their Computer Technics skill as a direct bonus versus computer resistance rolls (not useable against Androids).*

1) Configuration Scan (U) **D:** — **R:** T Telepath gains a basic understanding of the computer's nature: Mk. #, programs in memory, languages utilized. It also will provide the level and profession of an Android. It normally needs to be cast before the Telepath is able to utilize most of the Psions below.

2) Interface I (U) **D:** 1 minute/lvl **R:** T Allows the Telepath to directly link his nervous system with the circuits of a computer. It must be cast before the Telepath can employ the Data access and other Psions below.

3) Utilize Language (U) **D:** V **R:** T Allows the Telepath to understand any one language used by the computer currently Interfaced with. This might be necessary in order to gain access to certain data, attempt a security override, etc.

4) Locate Data (U) **D:** — **R:** T Caster may scan the database for specific (unrestricted) information related to one key term (such as a name) and read one file related to that term. This is not as sophisticated as *Data Search*, which allows the caster to quickly scan through all records related to a topic and select the one(s) desired. It is not very useful when dealing with large ship or planetary databases, being more appropriate for small equipment memory.

5) Data Copy (U) **D:** — **R:** T Allows the caster to copy into his own memory one file located via Data scan (or called up using normal methods).

6) Override Security I (F) **D:** — **R:** T Using this Psion, a Telepath may attempt to bypass a Level I security system. The security system resists at 10th level. Should the Telepath fail, he may try again after 25 hours. Once the Telepath has overridden a certain security program, a regular computer operator may then access the files (until log-off).

7) Enhance I (F) **D:** C **R:** T By using this Psion, an *Interfaced* Telepath can enhance any computer processor by one Mk#. Normally the Telepath cannot perform in this manner for more than 1 minute per level per day.

8) Data Search I (U) **D:** C **R:** T Caster may search a large database for any information which relates to a given topic, and quickly scan such for what is desired. Concentration is required, and the time may vary with complexity of the search.

9) Override Security III (F) As *Override Security I*, except that caster may attempt to defeat Level II (20th lvl) or III (30th lvl) security programs.

10) Interface True (F) **D:** 10 min/lvl **R:** T This Psion bypasses the need to cast *Configuration Scan* and *Utilize language*, and also has a longer duration.

11) Enhance V (F) Similar to *Enhance I*, except caster may increase a computer's processing capacity by five Mk #'s.

12) Add Data (F) **D:** C **R:** T Caster may add information to any memory storage system. He cannot add information to existing files (that is considered "alteration").

13) Delete Data (F) **D:** C **R:** T Caster may delete part or all of one datafile. Programs, command files and basic system files cannot be deleted.

14) Override Security V (F) As *Override Security I* except caster may attempt to defeat level IV (40th lvl) and level V (50th lvl) security.

15) Enhance True (F) As *Enhance I*, but allows the caster to enhance a computer by Mk. #'s equivalent to his level. In cases where a computer's processing is crippled or destroyed, the Telepath can even act as the processor (up to their level in processing capacity). Normally the Telepath cannot perform in this manner for more than 10 minutes per level per day.

20) Alter Data (F) **D:** C/V **R:** T Allows caster to alter the information on one datafile.

25) Purge Data (F) **D:** — **R:** T Allows the caster to purge any datafile, group of datafiles related to a key term (e.g., a name) or any command, program or system file.

30) Alter Data True (F) **D:** C **R:** T Allows caster to alter certain data every time it occurs, even in very large datafiles. Also allows the caster to alter a program.

50) Interface Master (F) **D:** 10 min/lvl **R:** T After casting this Psion, the Telepath may freely cast any other Psions on the list.

MIND DETECTION

1) Presence (P*•) **D:** C **R:** 3m/lvl Caster is aware of the presence of all sentient/thinking beings within his range.

3) Mind Pattern (P*) **D:** C **R:** 3m/lvl Caster gets general idea of the race and level of one entity being scanned; entity must first (if not in sight) be located via *Presence*.

5) Pattern Store (P*) **D:** — **R:** 3m/lvl Caster stores mental pattern of target; can be later used to locate that specific sentient through *Mind Pattern, Mind Location,* or *Mind Compass*.

6) Pattern Analysis (I*) **D:** — **R:** 3m/lvl Caster gets race, profession, and level of target.

7) Mind Location (I) **D:** C **R:** 30m/lvl Caster gets direction and distance to any one unshielded mind which he has *Pattern Stored*.

8) Mind Compass (I) **D:** C **R:** 300m/lvl Caster gets direction to any unshielded *Pattern Stored* mind he desires.

9) Presence True (P*) **D:** C **R:** 30m/lvl Caster can discern presences in one 10 meter radius up to 50 meters away.

10) Awareness (I*) **D:** C **R:** 3m/lvl As *Presence*, plus a general knowledge of the actions of each being in range (e.g., being is firing a weapon, but not what kind of weapon, or at whom).

12) Proximity Warning (S*) **D:** 1 hr/lvl **R:** 3m/lvl Caster is immediately alerted (even awakened from sleep) when a Presence enters the range. Comrades' presences can be 'filtered' to not trigger the Psion, if *Pattern Stored*.

13) Mind Tracking (I) **D:** 1 hr/lvl **R:** 30m/lvl As *Mind Location* except caster is constantly aware of the location of the target in relation to himself.

14) Mass Patterning (I) As *Mind Pattern*, except caster may 'pattern' one being per round.

15) Awareness True (I) As *Awareness*, except that caster is aware of more specific information (e.g., someone is firing a laser at target x).

20) Proximity Warning True (S*) As *Proximity Warning*, except caster immediately gains data from the intruding presence(s) as if *Pattern Analysis* and *Pattern Store* had been cast.

25) Mind Location (I) As above, except range is 10 km/lvl

30) Mind Compass True (I) As above, except range is unlimited.

50) Mind Location True (I) As above, except range is unlimited, *and* caster can have *Awareness* 20mR around the target.

INTERFACE	MIND DETECTION	MIND IN THE PAST
1) Configuration Scan	1) Presence * **c** •	1) Origins
2) Interface I	2)	2) Flash Behind (1 day/lvl)
3) Utilize Language	3) Mind Pattern * **c**	3)
4) Locate Data	4)	4)
5) Data Copy	5) Pattern Store *	5) Item Purpose
6) Override Security I	6) Pattern Analysis *	6) Past Sight (1 day/lvl) **c**
7) Enhance I **c**	7) Mind Location (30m/lvl) **c**	7)
8) Data Search I **c**	8) Mind Compass (300m/lvl) **c**	8) Flash Behind (1 yr/lvl)
9) Override Security III	9) Presence True * **c**	9) Delving
10) Interface True	10) Awareness * **c**	10) Past Patterning
11) Enhance V **c**	11)	11) Past Sight (1 yr/lvl) **c**
12) Add Data **c**	12) Proximity Warning * **s**	12) Past Compass
13) Delete Data **c**	13) Mind Tracking	13) Flash Behind True
14) Override Security V	14) Mass Patterning * **c**	14) Past Location
15) Enhance True **c**	15) Awareness True * **c**	15) Past Sight (10 yrs/lvl) **c**
20) Alter Data **c**	20) Proximity Warning True * **s**	20) Event Lock
25) Purge Data	25) Mind Location (10 km/lvl) **c**	25) Past Analysis
30) Alter Data True **c**	30) Mind Compass True **c**	30) Past Sight (1000 yrs/lvl) **c**
50) Interface Master	50) Mind Location True **c**	50) Past Sight True **c**

MIND IN THE PAST

1) Origins (I) **D:** — **R:** T Gives the area of origin of the item (a planet, if the item is extra-terrestrial), the race of the being who made it, and when it was made (within 10% of total actual age).

2) Flash Behind (1 day/lvl) (I) **D:** one second **R:** T Caster gets a 'flash' silent image of an event associated with a given item or place, up to 1 day in the past per level of caster. Image is of a random, but relatively significant event. Flash is too quick for caster to make out more than most prominent persons or nearby objects.



5) Item Purpose (I) **D:** — **R:** T Caster gains detailed understanding of a given item or place's original intended purpose.

6) Past Sight (1 day/lvl) (I) **D:** C **R:** T As *Flash Behind*, except the view of the past lasts as long as the caster concentrates (is in a trance, in this case). Caster also receives aural input, and can travel up and down the time range at up to 10x normal time speed. Time range of Psion is 1 day/lvl of caster.

8) Flash Behind (1 yr/lvl) (I) As *Flash Behind (1 day/lvl)* , except time range is 1 year per level.

9) Delving (I) **D:** — **R:** T Combines the abilities of *Origins* and *Item Purpose*, also providing the name of the creator, the *exact* date and location of construction, and the material makeup if an item.

10) Past Patterning (I*) **D:** — **R:** S Caster may cast this Psion while in a *Past Sight* ; it saves the image/mental pattern of a person that can later be used with another *Past Sight* to key in on the saved image in another place or time. This Psion may be cast even though *Past Sight* requires concentration.

11) Past Sight (1 yr/lvl) (I) As *Past Sight (1 day/lvl)* above, except time range is 1 year per level.

12) Past Compass (I) **D:** V **R:** T When cast before a *Past Sight* it allows the caster to scan the past very rapidly, seeking the temporal location of significant events.

13) Flash Behind True (I) As *Flash Behind*, except time range is unlimited. Image is usually of most significant event in item's past (e.g., death of a ring's wearer while it was worn).

14) Past Location (I) **D:** — **R:** S If caster has a general description concerning an event or place relating to an item to be used in a *Past Sight*, casting this Psion first will key on to the event or place in time most closely matching the description.

15) Past Sight (10 yrs/lvl) (I) As *Past Sight* above, except time range is 10 yrs/lvl.

20) Event Lock (I*) **D:** 1 min/lvl **R:** S Allows caster to stop concentration while using *Past Sight*. He is, in essence, locked in the past time and place. Though he has not *physically* travelled there, he is able to cast Psions from the **Mind Detection** and **Mind's Eye** lists for the Psion duration. ***Note:*** *A GM may wish to associate an element of danger with this Psion: for every 10 yrs in the past, there is a chance (.1% x 1 minute stayed, round down) however, that the caster is unable to return; his body a mindless vegetable in the present while his mind is caught up in the past.*

25) Past Analysis (I*) **D:** — **R:** 3m Allows the caster, while using a *Past Sight* Psion, to perform a *Pattern Analysis* (6th lvl **Mind Detection**) on anyone in the *Sight*. This Psion does not entail any risks, unlike *Event Lock*. This Psion may be cast even though *Past Sight* requires concentration.

30) Past Sight (1000 yrs/lvl) (I) As *Past Sight* above, except time range is 1000 yrs/lvl

50) Past Sight True (I) As *Past Sight* above, except time range is unlimited.

28.2 FIELD OF ALTERATION

TELEKINETICS

1) Manipulate I (F) **D:** C **R:** 3m/lvl Caster is able to operate one control switch, button, lever, etc., for the duration. Only one control may be manipulated per Psion, and it must be of a type operable by one finger (e.g., not a huge lever).

2) Levitation I (F) **D:** 1 min/lvl **R:** S Allows caster to move up and down vertically 3m/rnd, horizontal movement is possible only through normal means.

3) Mind's Hand (F) **D:** C **R:** 30m Caster can move one object, up to 1 kg/lvl in mass, .5m/second with no acceleration. Living beings or items in contact with a living being get normal RR based on the being's level. Items moved about with *Mind's Hand* do not have enough kinetic force for an effective attack. See *Hurling.*

4) Deflection I (F*) **D:** — **R:** 30m Deflects one missile attack (includes thrown weapons) or projectile attack (up to Mark V or equivalent; not an energy attack). A "Burst" attack from a projectile weapon receives a -20 modification **or** one missile or projectile (Mark I-V or equivalent; not an energy attack) receives a -100 mod. In order for the caster to "deflect" an attack, it must be in the his field of vision and must pass within 30m (it need not be directed at him)

5) Levitation (F) As above, except rate is 15m/rnd.

6) Manipulate True (F) **D:** C **R:** 3m/lvl As *Manipulate* above, except Caster may operate the number of controls equal to his level each round.

7) Flight (F) **D:** 1 min/lvl **R: S** Caster can fly at a rate of 5m/rnd (or 1.8 kph).

8) Mind's Hand (F) As above, except object of up to 10 kg/lvl may be moved.

9) Deflections II (F*) As *Deflection I* with one of the following additional options: **a)** "deflect" one additional attack; **or b)** increase the "deflect" mod. of one missile/projectile attack by -100 (not a "burst" attack) **or c)** increase the "deflect" mod. of one "burst" attack by -20 **or d)** "deflect" a second attack in the next Fire Phase (e.g., one in Fire Phase A and one in Fire Phase B); **or e)** increase the range to the "deflected" attack by 30m. ***Example:*** *This Psion can* ***a)*** *"deflect" two attacks;* ***or b)*** *"deflect" one missile/projectile attack with a -200 modification;* ***or c)*** *"deflect" (-40 mod) one "burst" attack;* ***or d)*** *"deflect" two attacks in sequence (e.g., one in Fire Phase A and one in Fire Phase B);* ***or e)*** *"deflect" one attack passing within 60 m.*

10) Hurling I (F) **D:** — **R:** 60m Caster may "hurl" one object of 1 kg or less mass with sufficient force to deliver an Impact Critical Hit. The attack is made on the Melee Weapon Attack Table (see Tech Book) as a normal "Thrown Weapon" attack. The caster may modify the attack roll by his Em/SD (average) stat bonus **and** his Directed Psion skill rank bonus **and** a range modifier (+50 - 1/meter).

11) Levitation (F) **D:** 10 minutes/lvl **R:** 3m/lvl Note that this levitation allows the caster to lift other objects than himself, but allows no lateral movement. Mass limit is 100 kg/lvl, and object can be moved as quickly as 3m/rnd in the vertical plane — as long as object does not pass out of range.

12) Deflections III (F*) As *Deflections II* except caster may use two of the additional options with the *Deflection I* Psion (the same option may be selected twice). ***Example:*** *"Deflect" 3 attacks* ***or*** *"deflect" one attack within 90m* ***or*** *"deflect" one "burst" attack with a -60 mod* ***or*** *etc.*

13) Landing True (F*) Caster can land safely from a fall of any height, in any gravity field (up to 10x Terran normal) 99% of the time.

14) Mind's Hand V (F) As above, except caster may move an object up to 100 kg/lvl, or a number of objects equal to his level, each massing 100 kg, or any combination between. Caster can control and move the objects simultaneously and independently as long as the remain within range.

15) Deflections V (F*) As *Deflections II* except caster may use four of the additional options (the same option may be selected more than once).

20) Deflections True (F*) All missile/projectile attacks (up to and including Mark V attacks) made against caster during the round of Psion effect are at -100 **or** one missile/projectile attack up to and including Mark X is at -100.

25) Hurling III (F) As *Hurling I*, except caster may hurl up to three objects, each of 1 kg/level in mass, at one target. The caster must divide his stat bonus and Directed Psion skill bonus between the attacks, but each attack receives the mod. for range and a +2 bonus/kg of mass.

30) Reaiming (F*) **D:** — **R:** S All missile/projectile attacks made against caster are reversed towards their source with a +10 mod. (i.e., make the normal attack for the "reaimed" missile with a +10 mod.).

50) Mind's Hand (F) As below, except range is 10m/lvl and caster may move an object up to 1000 kg/lvl in mass.

MIND OVER MATTER

1) Warm Matter (F) **D:** 25 hrs **R:** T Caster can warm up to 1 cubic meter/level of solid material to 40° Centigrade.

2) Cool Matter (F) **D:** 25 hrs **R:** T Caster can cool up to 1m³/level of solid material to 0° Centigrade. If trying to affect a very hot object (such as an overheating reactor) caster can reduce the temperature by 30° (but never lower than 0).

3) Portal Jam (F) **D:** 25 hrs **R:** T Caster can cause any portal (as large as 3m x 3m x 5cm) to jam by manipulating temperature and/or humidity. Door can only be opened by breaking through, or by casting another *Portal Jam* to reverse the first — which receives a RR. Door can be jammed open or shut.

4) Heat Matter (F) **D:** 1 min/lvl **R:** T As *Warm Matter*, except temperature can be raised to 200° C. at the rate of 50° per round. Caster is immune to this heat.

5) Chill Matter (F) **D:** 1 min/lvl **R:** T As *Cool Matter*, except caster can lower temperature to -50° C. or cool something as much as 100° — but never lower than -50. Caster is immune to the cold.

6) Psion Shield (D*) **D:** C **R:** S Creates a shimmering, transparent energy shield in front of the caster, which subtracts 20 from all frontal Psion Attack Rolls. If the Caster performs no other actions during the round, he can 'parry' one Psion attack. Parry consists of diverting his own normal Psion attack bonus (normally +1/lvl)to defense (in addition to the +20), therefore subtracting it from the attack roll being made against him.

7) Refresh Atmosphere (F) **D:** P **R:** T Caster can convert up to 10 cubic meters of air per level. Stale, carbon-dioxide laden air is altered to a fresh, breathable mix. Poison gases make a RR against this Psion based on their attack level.

8) Vacuum (F) **D:** — **R:** 30m Creates a 5m radius near-perfect vacuum for an instant; all within the radius take a "B" Impact critical as the air leaves, then returns implosively.

9) Shatter (F) **D:** — **R:** 3m/lvl Causes any one non-metallic object of up to 1000 cm³ (10x10x10) to shatter. Target must be a single piece of material, not a multi-part object. Those nearby may suffer damage: a Mark I or II Shrapnel Grenade attack (GM: base the Mark # on size and composition of object).

10) Disintegration (F) **D:** P **R:** T Caster can cause an object of up to 1 kg in mass or 100cm in volume to disintegrate into dust. This could include an entire 'unit' (such as a small gun or other assembled device).

TELEKINETICS	MIND OVER MATTER	TELEPATHY
1) Manipulate I **c**	1) Warm Matter	1) Phrase *
2) Levitation I	2) Cool Matter	2) Speak (T)*
3) Mind's Hand I **c**	3) Portal Jam	3) Phrase (10m/lvl) *
4) Deflection I *	4) Heat Matter	4) Speak (3m/lvl) *
5) Levitation (15m/rnd)	5) Chill Matter	5) Phrase (10 km/lvl) *
6) Manipulate True **c**	6) Psion Shield * **c**	6) Listen (T) * **c**
7) Flight	7) Refresh Atmosphere	7) Speak (10 km/lvl) *
8) Mind's Hand (10 kg/lvl) **c**	8) Vacuum	8) Mass Speech * **c**
9) Deflections II *	9) Shatter	9) Speech True (10m/lvl) *
10) Hurling I	10) Disintegration	10) Telepath (10m/lvl) * **c**
11) Levitation (100 kg/lvl)	11) Psion Armor *	11) Master of Speech (10m/lvl) *
12) Deflections III *	12) Heat Matter (10 cumet/lvl)	12) Mass Speech True *
13) Landing True *	13) Chill Matter (10 cumet/lvl)	13) Far Phrase (1 LM/lvl) *
14) Mind's Hand (100 kg/lvl) **c**	14) Undoor	14) Telepath True (10m/lvl) *
15) Deflections V *	15) Great Vacuum	15) Distant Phrase *
20) Deflections True *	20) Unstone	20) Lord Telepath *
25) Hurling III	25) Mold Matter c	25) Far Speak* **c**
30) Reaiming *	30) Eyes of Disintegration	30) Far Telepath True *
50) Mind's Hand (1000 kg/lvl) **c**	50) Transmutation	50) Distant Telepath True *

11) Psion Armor (D*) **D:** — **R:** S All Psion Attack Rolls made against the caster this round are modified by -50.

12) Heat Matter (F) As above, except that volume is 10 cubic meters/lvl and caster can raise temperature as high as 500° (or until material melts).

13) Chill Matter (F) As above, except that volume is 10 cubic meters/lvl, and caster can cool objects by as much as -200° C.

14) Undoor (F) **D:** P **R:** 3m Causes any single door or portal (as large as 3m x 3m x 5cm) to vaporize totally.

15) Great Vacuum (F) **D:** — **R:** 30m As *Vacuum*, except that the target radius is 10 m, and a "D" severity Impact critical is delivered to all within the radius.

20) Unstone (F) **D:** P **R:** 10m Caster can disintegrate as much as 100 cubic meters of rock or earth per level. Metal, living flesh and artificial substances are unaffected.

25) Mold Matter (F) **D:** P/C **R:** T Caster may shape up to 1000 cubic centimeters of any matter by molding it with his hands like putty. Material is soft while caster concentrates; rehardens in new form immediately afterwards.

30) Eyes of Disintegration (F) **D:** 1 rnd/lvl **R:** 3m/lvl Caster can use any one of the following Psions once per round for the duration and at the range of *this* Psion: *Shatter, Disintegration, Undoor*, and *Unstone*. Caster need only look at the target and will the Psion to be cast.

50) Transmutation (F) **D:** P **R:** T Caster can transmute 10 grams of any element into 10 grams of any other element that the caster has a sample of. Useable but once per 25 hour day.

TELEPATHY

Note: *all Telepathic communication is instantaneous.*

1) Phrase (I*) **D:** 3 words/images; 1 rnd **R:** T The Caster may mentally 'speak' to any one other sentient being. Unless the other being perceives reality in a radically different way, communication should be fairly clear, as Telepathy translates into thought-images rather than words. Note that caster can speak with this Psion, but cannot get a reply (unless he casts *Hear* or the other is also a Telepath and casts *Phrase* or *Speak*.)

2) Speak (I*) **D:** C **R:** T As *Phrase*, except caster may 'speak' as long as he wishes to concentrate.

3) Phrase (I*) As above, except range is 10 meters/lvl.

4) Speak (I*) As above, except range is 3 meters/lvl.

5) Phrase (I*) As above, except range is 10 kilometers/lvl.

6) Listen (I*) **D:** C **R:** T Caster is able to 'hear' communication produced in the mind of another sentient. Sentient must understand what he/it is to do (can be told via *Speech*), wish to cooperate, and be in physical contact with caster. Note that, to carry on a conversation, the caster will have to cast a Psion every time he speaks and listens (until he can cast one of the 'True' Psions below).

7) Speak (I*) As above, except range is 10 km/lvl.

8) Mass Speech (I*) **D:** C **R:** 30m Caster may mentally speak to a number of individuals equal to his level within range. All 'hear' everything the caster 'says'.

9) Speech True (I*) **D:** 1 rnd/lvl **R:** 10m/lvl As above, except caster need not concentrate. Note that caster can only speak to one target at a time; to change focus he must re-cast the Psion.

10) Telepath (I*) **D:** C **R:** 10m/lvl Caster may mentally *Speak* and *Listen* to one other sentient for as long as he concentrates.

11) Master of Speech (I*) **D:** 1 rnd/lvl **R:** 10m/lvl Caster can interchange the powers of *Speak* and *Mass Speech* at will for the duration of the Psion.

12) Mass Speech True (I*) **D:** 1 minute/lvl **R:** 10m/lvl As *Mass Speech*, except caster need not concentrate.

13) Far Phrase (I*) **D:** — **R:** 1 Light-minute/lvl As above, except range is interplanetary in scope.

14) Telepath True (I*) **D:** 1 minute/lvl **R:** 10m/lvl As *Telepath*, except caster need not concentrate.

15) Distant Phrase (I*) **D:** — **R:** 10 Light-years/lvl As above, except range is interstellar.

20) Lord Telepath (I*) As *Telepath True*, except caster may speak and listen to as many as 20 people over the duration of the Psion.

25) Far Speak (I*) **D:** C **R:** 1 Light-minute/lvl As *Speak*, except range is interplanetary in scope.

30) Far Telepath True (I*) As *Telepath True*, except range is 1 Light-minute/level.

50) Distant Telepath True (I*) As *Telepath True*, except range is 10 Light-years/level.

MIND INTO ENERGY

1) Energy Perception (P) **D:** C **R:** 3m/lvl Caster is able to trace and perceive energy potentials and flows (such as in power supplies and circuits). Adds +10 to all repair rolls on such devices.

2) Drain Energy (F) **D:** — **R:** T Allows caster to totally drain the power from one personal equipment power supply (non-flamer) in one round (a cell, cartridge or pack; but *not* a reactor). Caster must touch the power supply itself, not simply the machine it is in. Energy is radiated harmlessly by the caster.

3) Radiation Shield (D) **D:** 1 min/lvl **R:** S Caster's radiation protection level is raised by 1 factor (Radiation criticals are reduced in severity by 1).

4) Electric Charge (F) **D:** — **R:** T Caster delivers an "A" Electricity critical to target that fails to resist.

5) Human Battery (F) **D:** C **R:** T Caster is able to power any piece of equipment which normally requires one non-flamer "cell". If 10 power points are used, the caster can provide power in place of a "cartridge". If 15 power points are used, the caster can provide power in place of a "pack".

6) Energy Dispersal I (F*) **D:** — **R:** S Caster can absorb part of the effects of one energy attack (e.g., laser, blaster, plasma rifle) directed against him. Attack is at -100. (attacker must be in caster's field of vision).

7) Drain Energy (10m/lvl) (F) As above, except caster can drain a personal equipment power supply (non-flamer) up to 10m/lvl away. Power supply may be in a weapon or device, and can be in operation. Items on a person's living body, however, receive a RR based on the person's level.

8) Radiation Armor (D) As *Radiation Shield*, except caster's radiation protection factor is raised by 2 factors.

9) Cloaking (F) **D:** C **R: S** Allows caster to 'warp' scanner and sensor beams so that he has a chance of not being so detected. Bonus is base 10, +2 per level.

10) Energy Dispersal III (F*) As *Energy Dispersal I*, except caster may subtract 100 from any three attacks made against him. Alternatively, caster may subtract 300 from one attack, or any combination between. Attacker(s) must be in caster's field of vision.

11) Charge Power Supply (F) **D:** C,V **R:** T Caster draws energy from about him to charge a personal equipment power supply (non-flamer). If there is a reactor or similar high-energy source nearby (within 10m), caster requires: 1 min. for an cell, 10 min. for a cartridge, and 15 minutes for a pack. A GM may allow larger power supplies to be recharged (e.g., 2 hrs for a vehicular energy cell cluster). If no high-energy source near, charge times are multiplied x10.

12) Power Surge (F) **D:** — **R:** T Caster is able to cause a damaging power surge in a device or system; item which must be already activated or charged. Level of damage is dependant upon PP's expended: 1x (12PP) grants a *Routine* malfunction. 2x (24PP) causes a *Light* malfunction, etc. (See the Malfunction/Repair Table in the Tech Book **or** make a percentile roll and treat as minutes x multiplier for time to repair.) The system invariably ceases functioning, then the GM should make the roll on the table to determine severity.

13) Energy Dispersal V (F*) As *Energy Dispersal III*, except caster can subtract 100 from any five attacks made against him **or** form an energy burst attack from one weapon. Attacker(s) must be in caster's field of vision.

14) Energy Retaliation (F*) **D:** — **R:** S Caster can reverse any one energy attack made against him. The original attacker must receive the energy attack with a +10 bonus.

15) Human Battery True (F) **D:** 1 rnd/lvl **R:** 1m As *Human Battery*, except caster need not concentrate to maintain the Psion, and the item to be powered must only be within 1 meter.

20) Energy Dispersal True (F*) As *Energy Dispersal*, except all energy attacks made against the caster in the round the Psion is cast are at -100. Caster need not be able to see the attacker(s).

25) Power Enhancing (F) **D:** C (max 15 hours/day) **R:** T Caster is able to increase the power output of any system by one increment. Telepath must, in this case, stay in the engine room with hands on the drives. ***Note:*** *In* ***Star Strike*** *and* ***Armored Assault*** *this would translate into Mark Number, Function Rating or Displacement Rating (e.g., a starship with Sublight Acceleration Rating (SAR) of 6, if this Psion was used on it, would have an effective SAR of 7).*

30) Power Routing (F) **D:** C **R:** 30m Caster is able to act as a human power conduit and transformer. He can tap into reactor as far as 30m away and charge a power supply 30m in the other direction, as per *Charge Power Supply* for time required. If there is a ship critical indicating "severed power conduit..." he can annul it by acting as the conduit.

50) Power Enhancing True (F) As *Power Enhancing* except caster can *double* a system's function rating. ***Note:*** *In* ***Star Strike*** *and* ***Armored Assault*** *this does not necessarily mean that the net output (DB, Acceleration, etc.) is doubled. Consult the declining return ratios detailed in the construction rules.*

CONCEALMENT

Note: *Concealment allows the Telepath to hide himself from visual and electronic detection.*

1) Overlook I (M) **D:** C **R:** 30 m **Mod:** -20 Caster is able to cause one person to "overlook" him. Caster cannot move, and any stimulus target receives other than visual regarding caster will annul the Psion. ***Example:*** *Burke Carter, Interstellar spy and Telepath, is searching a room when he hears someone coming. As the target enters, Burke casts* Overlook I. *The target fails and does not see Burke standing in the corner. However, poor Burke cannot control a sneeze. Immediately the target looks in Burke's direction and sees him.*

2) Chameleon (U) **D:** 1 min/lvl **R:** S Caster (including all garments and equipment) will change color to match the nearest surroundings. This adds +60 to Hiding, +30 to Stalking.

3) Cloaking I (P) **D:** 1 min/lvl **R:** S Caster gains +10 vs detection by electronic means (scanners, sensors, radar). It is *not* cumulative with electronic or mechanical EW equipment.

5) Hiding (M) **D:** C **R:** S **Mod:** -20 Similar to *Overlook I* except caster is "Invisible" to all (each target may still make a Resistance Roll). Caster must remain immobile; any movement or noise will cancel the Psion.

6) Overlook III (M) As *Overlook I*, except caster may affect 3 types of sensory input of one target (sight, hearing, touch, taste, smell) **or** up to 3 separate targets. ***Note:*** *because this Psion affects areas of the brain rather than actual senses, it can be used to inhibit Kashmerian ability to detect Replicants .*

7) Cloaking III (P) As *Cloaking I* except caster is able to modify detection attempts by -30.

8) Hiding True (M) **D:** C **R:** S As *Hiding*, except no RRs are made; caster is truly "invisible". He must remain immobile.

10) Invisibility (U) **D:** 1 min/lvl **R:** S Caster cannot be seen by normal visual means, and is able to move freely. Any offensive action (firing a weapon, striking someone, activating a personal energy shield) will cancel the Psion.

MIND INTO ENERGY	CONCEALMENT	ARMOR
1) Energy Perception **c**	1) Overlook I **c**	1)
2) Drain Energy	2) Chameleon	2) Radiation Shield *
3) Radiation Shield	3) Cloaking I	3) Shield I
4) Electric Charge	4)	4) Armor (AT4)
5) Human Battery **c**	5) Hiding **c**	5)
6) Energy Dispersal I *	6) Overlook III **c**	6) Radiation Armor I *
7) Drain Energy (10m/lvl)	7) Cloaking III	7) Armor (AT8)
8) Radiation Armor	8) Hiding True **c**	8) Shield II
9) Cloaking	9)	9)
10) Energy Dispersal III *	10) Invisibility	10) Armor (AT12)
11) Charge Power Supply **c**	11) Overlook V **c**	11) Radiation Armor III *
12) Power Surge	12) Cloaking V	12) Shield III
13) Energy Dispersal V *	13)	13) Radiation Armor 3m R * **c**
14) Energy Retaliation *	14)	14) Armor (AT16)
15) Human Battery True	15) Cloaking X	15) Shield V
20) Energy Dispersal True *	20) Cloaking True	20) Lord Armoring (AT20)
25) Power Enhancing **c**	25) Invisibility True	25) Radiation Armor V *
30) Power Routing **c**	30) Cloaking True **c**	30) Hull Armoring I **c**
50) Power Enhancing True **c**	50) Invisibility True	50) Hull Screen **c**

11) Overlook V (M) As *Overlook III* except one sense of 5 targets or all five senses of one target may be affected.

12) Cloaking V (P) As *Cloaking I*, except caster is able to reduce detection attempts by 50.

15) Cloaking X (P) As *Cloaking I*, except detection attempts are modified by -100.

20) Cloaking True (P) **D:** 1 min/lvl **R:** 3m R As *Cloaking I* except caster may "cloak" all within 3 meters, subtracting 1 per level from electronic detection attempts (e.g., at 25th level, all scanner and sensor rolls are at -25).

25) Invisibility True (P) **D:** 1 min/lvl **R:** 3m/lvl R Allows the caster to cause up to one individual per five levels to become invisible (thus, five — including himself — at 25th level). Each person's invisibility is treated as a separate Psion for cancelling effects.

30) Cloaking True (F) **D:** C **R:** 3m/lvl R This very powerful Psion enables the caster to 'cloak' an area up to 3 meters per level around him (a 180 meter diameter sphere at this level) from Electronic detection, subtracting 1 per level from such attempts (+30 to cloaking at this level). The Psion must be applied to one object (such as a vehicle or spacecraft). It is *not* cumulative with electronic EW/Stealth equipment.

50) Invisibility True (F) **D:** 1 hour/lvl **R:** 3m/lvl R The ultimate stealth Psion, *Invisibility True* not only subtracts 100 from all electronic detection attempts (Sensor Scans) but also renders a single craft within the radius *invisible*. It will be cancelled by offensive actions or activating deflector shields.

ARMOR

Note: *Armor deals with the manipulation of energy to protect the Telepath from physical attacks and radiation.*

2) Radiation Shield (F*) **D:** 1 min/lvl **R:** S The cast creates a frontal radiation barrier, reducing any radiation critical by one severity level. (e.g., a "C" radiation critical becomes a "B", etc.)

3) Shield I (D) **D:** 1 min/lvl **R:** S Caster projects a shimmering force barrier which subtracts 10 from all frontal attacks. He may also parry attacks using his Directed Psion skill bonus developed for this purpose.

4) Armor (AT4) (D) **D:** 1 min/lvl **R:** S For the duration of the Psion, caster is enveloped in an energy field which acts as Armor Type 4.

6) Radiation Armor I (F*) **D:** 1 min/lvl **R:** S As *Radiation Shield*, except caster is protected from all directions.

7) Armor (AT8) (D) **D:** 1 min/lvl **R:** S Caster is enveloped in an energy field which acts as Armor Type 8.

8) Shield II (D) **D:** 1 min/lvl **R:** S As *Shield I* except frontal DB bonus is 20.

10) Armor (AT12) (D) **D:** C **R:** S Caster is enveloped in an energy field which acts as Armor Type 12.

11) Radiation Armor III (F*) **D:** 1 min/lvl **R:** S As radiation Armor I, except severity of radiation is reduced by 3 levels (a "D" becomes a "A", a "C" or below is ignored, etc.).

12) Shield III (D) **D:** 1 min/lvl **R:** S As *Shield I* except frontal DB bonus is 30.

13) Radiation Armor 3m R. (F*) **D:** C **R:** S As *Radiation Armor I*, except caster is able to protect everyone in a 3 meter radius (provided the radiation source is not within the radius as well).

14) Armor (AT16) (D) **D:** 1 min/lvl **R:** S Caster is enveloped in an energy field which acts as Armor Type 16.

15) Shield V (D) **D:** 1 min/lvl **R:** S As *Shield I* except frontal DB bonus is 50.

20) Lord Armoring (AT20) (D) **D:** 1 min/lvl **R:** S Caster is enveloped in an energy field which acts as Armor Type 20.

25) Radiation Armor V (D) **D:** 1 min/lvl **R:** S Caster is immune to all *Radiation* criticals (not including *Heat* and *Electricity* critical).

30) Hull Armoring I (D) **D:** C **R:** T This Psion allows the caster to increase the hull strength of any Construct Armor Type vehicle he is in contact with by one level (to a maximum of 28). Caster is limited in that he cannot reinforce the hull of a craft massing more than 1000 tons x his level (e.g., a 30th level Telepath could raise a 30,000 ton craft of CAT 25 to CAT 26). Due to the powerful nature of the Psion, the caster must concentrate throughout. Only one such Psion can be in effect on a given construct.

50) Hull Screen (D) **D:** C **R:** T Allows the caster to create or augment an energy screen around a craft he is in contact with. Same mass restrictions as *Hull Armoring I* apply. The screen defensive bonus is 1 per level, so a 50th level would add 50 to a ship's DB. ***Note:*** *for any critical delivered which indicates that screens are down or damaged, caster must make a Psion Failure Roll.*

28.3 FIELD OF CONTROL

VOICE

Note: *All Psions on this list (which specifically mention that the caster speaks) are ineffective unless the target has at least two skill ranks in the language used. Regarding Psions with extended durations, once the target has failed the initial attack, the caster can continue to control him via vocal communication, though with each such command there is a 10% chance the target will snap out of the control.*

2) Question (M) **D:** — **R:** 3m Target must answer one, single-concept question truthfully.

4) Befriend (M) **D:** 1 min/lvl **R:** 10m Target believes that caster is his friend (but will not necessarily obey an order from caster). Caster must speak to target at least once per round, though this does not require concentration.

5) Command (M) **D:** — **R:** 10m Target will obey a single command (up to 3 words) from caster, e.g., "drop your gun!". If the command is for inaction (such as "don't move!"), the target is at 25% of activity and technically 'static' for the remainder of the round.

6) Fear (M) **D:** 1 min/10% failure **R:** 30m Target fears caster and will attempt to flee from his sight.

7) Suggestion (M) **D:** V **R:** 3m Target will follow a single suggested act that is not completely alien to him (e.g., will not suicide, will not blind himself, etc.)

8) Beguile (M) **D:** V **R:** 3m Caster may speak one lie to the target, who will believe it to be absolute truth until presented with irrefutable evidence to the contrary.

9) Holding Word (M) **D:** C **R:** 10m Caster speaks the word "Hold!" Target is forced to meet the caster's eyes and is paralyzed until caster breaks eye contact (stops concentrating).

10) Control (M) **D:** 10 min/lvl **R:** 3m Target must obey the caster as specified in *Suggestion*, but for the duration of the Psion.

11) Sow Suspicion (M) **D:** 1 min/lvl **R:** 10m Caster can use this Psion to turn opponents against each other by making insinuating statements. Targets failing to resist forget the caster and argue amongst themselves.

12) Seduce (M) **D:** 1 hour/lvl **R:** 10m **Mod:** -30 If target of appropriate sexual preference and same race, caster is able to emotionally, sensually, or sexually seduce the target, who will also obey him as in *Control* for the duration. There is a 20% chance that the target is *permanently* emotionally tied to the caster afterwards.

13) True Command (M) **D:** — **R:** 30m **Mod:** -50 As *Command*, except for range and modifier (to target's detriment) and if target ordered to freeze, he is paralyzed for 1 rnd/10 failure.

14) Mass Suggestion (M) **D:** V **R:** 10m R As *Suggestion*, except caster may affect a number of targets equal to his level. Those who fall under the suggestion will automatically attempt to convince any who resist to also follow it (though they will not use force).

15) Control II (M) As *Control*, except caster may simultaneously control two targets.

20) Lord Control (M) **D:** 1 hour/lvl **R:** 30m **Mod:** -20 As *Control*, but with increased effectiveness.

25) Control True (M) As *Lord Control*, except target will obey caster in *all* things, including murder, suicide, etc.

30) Great Control (M) **D:** P **R:** V As *Control True*, except Psion is permanent, until caster dies or annuls it.

50) Mass Control (M) As *Lord Control*, except caster can affect *everyone* in a 100 meter radius.

THOUGHT INTO PAIN

1) Numbing (F) **D:** C **R:** 30m Random limb is numb and useless.

2) Pain (F) **D:** C **R:** 30m Target feels pain, and operates at -30.

3) Choke (F) **D:** C **R:** 3m Target feels something around his neck. First round he is at -10, second round -20, etc., until after 10 rounds he is unconscious (max hits). If the caster wishes to concentrate 10 more, target is dead.

4) Unbalance (F) **D:** — **R:** 30m Target is unbalanced. If he is moving he trips and falls (1-4 rnds to recover); if performing a maneuver he must attempt it at -100.

5) Touch of Disruption (F) **D:** P **R:** T Bones and tissues of target's body are disrupted as if he had fallen a long distance. If target fails his RR, by (1-10) he takes an "A" Impact critical; (11-20) = "B"; (21-30) = "C"; (31-40) = "D"; (41+) "E".

6) Agony (F) As *Pain*, except target operates at -60

7) Pain III (F) Caster may cause *Pain* to three individuals.

8) Choke True (F) As *Choke*, except caster need not concentrate for the Psion to "choke" the target until he is unconscious (takes 10 rounds, but the caster may cancel the Psion at any time). Alternatively, he may concentrate and the target will *immediately* be at -90; then if the caster holds the "Choke" for 10 rnds the target will loses consciousness; if the caster holds the "Choke" for 10 more rnds the target will die.

10) Energy Channel (F) **D:** C **R:** 3m **Mod:** -30 A destructive channeling of raw Psion power. Caster extends hands and bolts of energy lance out to strike the target, who is immediately at -50 and receives one "B" severity Electricity critical per round. Caster must expend 10 PP's *every round* Psion is in effect. (Target only receives the one initial RR.)

12) Agony III (F) Caster may cause *Agony* to three individuals.

13) Disruption (F) As *Touch of Disruption*, except range is 30m

14) True Agony (F) As *Agony*, except duration is 1 rnd/10 failure.

15) Mass Pain (F) Caster may affect a number of targets equal to his level with *Pain*.

20) Energy Channel True (F) **D:** C **R:** 10m **Mod:** -50 As *Energy Channel*, except target is at -90 and receives a "E" Electricity critical every round.

25) Torment (F) As *Pain*, except target is at -90 due to intensity of the discomfort.

30) Disruption True (F) **Mod:** -20 **R:** 60m As *Touch of Disruption*, except for modifier and range, and target takes an "E" Impact if he fails to resist.

50) Thought Into Pain (F) **D:** C **R:** 100m Caster may use any one of the Psions on this list at the rate of one per round as long as he concentrates.

VOICE	THOUGHT INTO PAIN	THOUGHT MASTER
1)	1) Numbing **c**	1) Detect Tampering
2) Question	2) Pain **c**	2) Forget (1 min)
3)	3) Choke **c**	3) Confusion
4) Befriend	4) Unbalance	4) Lapse
5) Command	5) Touch of Disruption	5) Mind Blank
6) Fear	6) Agony **c**	6) Forget (10 min)
7) Suggestion	7) Pain III **c**	7) Mind Restoration
8) Beguile	8) Choke True	8) Unlearning (1 min)
9) Holding Word **c**	9)	9) Forget (1 hour)
10) Control	10) Energy Channel **c**	10) Implant Thought
11) Sow Suspicion	11)	11) Unminding
12) Seduce	12) Agony III **c**	12) Forget True
13) True Command	13) Disruption	13) Unlearning (1 day)
14) Mass Suggestion	14) True Agony	14) Amnesia
15) Control II	15) Mass Pain **c**	15) Implant Memory
20) Lord Control	20) Energy Channel True **c**	20) Cruel Unminding
25) Control True	25) Torment **c**	25) Unlearning True
30) Great Control	30) Disruption True	30) Mind Break
50) Mass Control	50) Thought Into Pain **c**	50) Implant Thought Pattern

THOUGHT MASTER

1) Detect Tampering (M) **D:** — **R:** 3m Allows caster to detect whether the target's mind has been telepathically tampered with (as with the Psions on this list and **Mind Assault** especially). Original 'tampering' Psion may resist detection at the level of the original Psion's caster.

2) Forget (M) **D:** P **R:** 10m Target forgets a 1 min. block of time from his memory; the time lost is the caster's choice.

3) Confusion (M) **D:** 1 rnd/5 failure **R:** 30m Target is incapable of making decisions or taking offensive action. He may continue to fight a current foe or act in self-defense.

4) Lapse (M) **D:** 1 rnd **R:** 30m Target momentarily forgets how to do whatever he was planning to do that round (e.g., the ability to fire his laser he just drew, how to cast a certain Psion, etc.) In addition, he has a -25 modification for one hour to whatever activity/skill was involved. A target making a superior orientation roll might be able to act upon another option that round.

5) Mind Blank (M) **D:** 1 rnd **R:** 30m Target's mind is temporarily blank and he can do nothing.

6) Forget (M) As *Forget*, except duration of lost memory is ten minutes.

7) Mind Restoration (M) **D:** P **R:** T This Psion acts to reverse the effects of other Mind Control and Mind Assault Psions. The original attack Psion must fail a RR (the attack level is the level of the caster of this Psion, the defense level is the level of the caster of the original Psion). If the original attack Psion is not cancelled, the caster of this Psion may not try to cancel it again until he has advanced another experience level. However, another Telepath may try.

8) Unlearning (M) **D:** 1 minute **R:** 30m One of the target's skills has its skill rank reduced to 0 for the duration of the Psion **and** the skill has a -25 mod. for one hour after that. Caster must know that target has the skill before he can make the target *Unlearn* it. (though seeing a blaster in the target's hand is enough for the caster to assume that the target has skill with a blaster ...).

9) Forget (M) As *Forget*, except lost period of memory is one hour.

10) Implant Thought (M) **D:** P **R:** 30m Caster is able to implant one single-concept thought in the target's head. The thought must not be absolutely contrary to the target's normal lines of thinking, or target is at a +50 for his RR. If target resists by more than 25, he perceives what is being attempted.

11) Unminding (M) **D:** 1 rnd/5 failure **R:** 30m Target's mind is completely blank for the duration. He cannot perceive events, time, or activity; he is stunned 1 round after his mind wanders back.

12) Forget True (M) As *Forget*, except period of time lost is up to 1 hour/level.

13) Unlearning (M) As above, except duration is one standard day.

14) Amnesia (M) **D:** 1 day/5 failure **R:** 30m Target forgets who he is, who his friends are, and his entire life background for the duration. He *does* retain all of his skills and Psion knowledge (if any).

15) Implant Memory (M) Caster can implant one memory in target's mind, causing the target to believe that he did or said something in the past. Same restrictions as per *Implant Thought* above.

20) Cruel Unminding (M) **D:** 1 rnd/5 failure **R:** 30m Similar to *Unlearning*, except target "forgets" *all* skills, and is unaware that he has forgotten each one until he tries to use it. Each attempt to cast a Psion inevitably ends in failure; any maneuver or attack is resolved with a skill rank bonus of -25.

25) Unlearning True (M) As *Unlearning*, except effect of Psion is permanent. Target *is* allowed to learn the skill again as if he had never known it.

30) Mind Break (M) **D:** 1 day/lvl **R:** 30m Target's Reasoning, Intuition, and Memory drop to 02 for the duration of the Psion. He may be led about and fed, but is essentially a mindless buffoon and useless. He can take **no** independent action.

50) Implant Thought Pattern (M) **D:** V **R:** 30m Caster can alter target's entire way of thinking (i.e., change his personality, who he thinks his friends are, his 'alignment'). His old memories are repressed, but skills remain unaffected. Target gets to try to resist (and thus cancel) the Psion's effects once every 10 standard days. If cast immediately after an *Amnesia*, the target's RR is modified by -30, and target get's no further RR for the duration of the amnesia.

MIND ASSAULT

1) Distraction (M) **D:** C **R:** 30m Target is at -30 for all actions.

2) Touch of Unconsciousness (M) **D:** — **R:** T Target falls into a state resembling natural sleep. He can be awakened, but is at -25 for the first two rounds afterwards.

3) Disorientation (M) **D:** 1 day/5 failure **R:** 30m Target must subtract 25 from all orientation and initiative rolls.

4) Firenerves (M) **D:** 1 min/lvl **R:** 30m Target's brain receives pain stimulus: target *in effect* receives 50% of his remaining hits. These hits are 'relieved' when the Psion duration expires — unless the target takes more hits than his "total hit points" in the meantime, in which case they become real.

5) Blinding (M) **D:** C **R:** 30m Target is blind and at -90 for all activity.

7) Paralyze (M) **D:** 1 rnd/10 failure **R:** 30m Target is paralyzed.

8) Unconsciousness (M) As *Touch of Unconsciousness*, except range is 30 m.

9) Firenerves True (M) As *Firenerves*, except target's "hits taken" total is increased to 10 less than his "total hit points".

10) Mind Shout (M*) **D:** 1 rnd/10 failure **R:** 3m R Everyone within the radius is a target, and all failing to resist are stunned. As with all of the *Shout* Psions, targets have a +30 to RRs if they are unable to actually hear the shout.

11) Transferral (M) **D:** V **R:** 30m Target's mind and caster's mind are interchanged. The caster can operate at -50 in the target's body. Target in caster's body is inactive but aware. Caster may cancel the Psion at any time (takes 1 rnd); the target can only cancel the Psion if he makes a successful RR (which he gets to attempt every hour). If either body is destroyed (i.e., killed), the Psion is broken and the dead body's original mind is also destroyed. The other mind is returned to its original body, but he is in a coma for one day.

12) Coma (M) **D:** 1 hour/10 failure **R:** 30m Target is in a coma (unconscious and unwakeable).

14) Sensory Deprivation (M) **D:** 1 day/10 failure **R:** 30m Target is totally deprived of sensory input; virtually incapable of action without artificial aid. Mental breakdown may result if condition lasts more than 5 days (GM discretion).

15) Mind Shout (M*) As above, except radius of effect is 20m R

20) Lord Paralyze (M) **D:** 1 min/10 failure **R:** 30m **Mod:** -20 Target is paralyzed.

25) Great Shout (M*) As *Mind Shout* except radius is 30m and all failing their RR by more than 50 are unconscious and at max hits.

30) Transferral True (M) As *Transferral*, except caster can operate at -10 effectiveness in target's body, and target may only make RRs once per day.

50) Great Shout True (M*) **D:** V **R:** 30m R **Mod:** -20 to all Telepaths Those failing to resist are unconscious as per *Great Shout*; those failing to resist by more than 50 are dead.

ILLUSION

Note: *Psions on this list allow a Telepath to alter the way that the target(s) senses things and so a RR is involved for the target(s). Normally, a RR may be made each rnd to "disbelieve" a Illusion; after the first successful RR for a given target, all following RRs against the same Illusion by that target are modified by +30. A GM may give special mods for RRs against Illusions that a target has a reason to believe is unreal (e.g., if you put your hand into an illusionary wall, you will find it easier to "disbelieve" it).*

1) Refraction (P) **D:** 10 min/lvl **R:** 30m Makes an inanimate object (up to 100 cubic feet) appear to be 10' to one side of its actual location.

2) Ventriloquism (P) **D:** C **R:** 30m Caster can speak and his voice will appear to come from a point within 100'. (Point must be in his field of vision.)

3) Audio Impersonation (M) **D:** 1 min/lvl **R:** S Caster is able to (seemingly) imitate the voice of any one person he has heard in the last 25 hours — to all who fail their resistance rolls. Those Resisting by 01-50 simply hear the caster as he normally is; while those resisting by 51+ realize what the caster is trying to do.

4) Deafness I (M) **D:** 1 min/10 failure **R:** 30m By suppressing certain brain patterns the Telepath can cause deafness.

5) Visual Impersonation (M) **D:** 1 min/lvl **R:** S As *Audio Impersonation* except caster can appear to be any person he has seen within 25 hours. Same RR rules apply.

6) Facade (M) **D:** 1 min/lvl **R:** S **Mod:** -30 Creates a visual warping of a two dimensional area of up to 100 square meters. Caster can create whatever images he desires on the Facade. No RR.

7) Displacement I (M) **D:** 1 min/lvl **R:** S **Mod:** -100 Caster appears to be off-set from where he really is; all attacks have no effect 10% of the time. Each time a foe misses him, the chance of that foe missing again goes down 5%.

8) Visual Illusion I (M) **D:** 1 min/lvl **R:** 30m **Mod:** -30 Cast may create a three-dimensional illusion of up to 5 meters in radius. The illusion is very detailed, and remains in place even when touched (or passed through). No RR.

9) Phantasm I (M) **D:** 1 min/lvl **R:** 30m **Mod:** -30 Creates the image of one object or being, that will move however the caster desires while he concentrates. When the caster stops concentrating the image remains, but is immobile (the caster can resume concentration later and move the phantasm again). The phantasm may be of any size to fit in a 1m radius sphere.

10) Silent Fence (F) **D:** 1 min/lvl **R:** 30m Enables caster to create a sonic barrier, either flat up to 100 square meters or a hemisphere of 5 meter radius. Sounds cannot pass through the barrier in either direction.

11) Audio Impersonation True (M) **D:** 1 hr/lvl **R:** S **Mod:** -30 As *Audio Impersonation* except for duration and modifier, and caster may also impersonate someone he has *Pattern Stored*.

12) Visual Impersonation True (M) **D:** 1 hr/lvl **R:** S **Mod:** -30 As Audio Impersonation True except visual stimulus is affected.

13) Visual Illusion III (M) **D:** 1 hr/lvl **R:** 300m **Mod:** -30 As Visual Illusion I, except for range and duration, and caster may triple the size or subtract 30 from all RRs

14) Phantasm III (M) **D:** 10 min/lvl **R:** 30m **Mod:** -30 As *Phantasm I*, except caster has three images.

15) Displacement II (P) **D:** 1 min/lvl **R:** S **Mod:** -100 As *Displacement I*, except chance of missing is 20%

20) Displacement III (P) **D:** 1 min/lvl **R:** S **Mod:** -100 As *Displacement I*, except chance of missing is 30%

25) Facade True (M) **D:** 1 day/lvl **R:** 300m **Mod:** -50 As *Facade I* except image is as large as 10,000 square meters.

30) Mirage (M) **D:** 1 day/lvl **R:** 1 km/lvl **Mod:** -50 Caster is able to create a three-dimensional illusion of great complexity up to 10 km in radius (town, spaceship, etc). It can be made to move if the caster concentrates.

50) Mirage True (M) **D:** Until dispelled **R:** 10,000 km/lvl **Mod:** -50 As Mirage, except caster can create a 100 km/lvl radius illusion (an illusory planet, even!). Of course, even the most basic sensor scan will reveal that there is nothing there.

MIND ASSAULT	ILLUSION	POSSESSION
1) Distraction **c**	1) Refraction	1)
2) Touch of Unconsciousness	2) Ventriloquism **c**	2) View
3) Disorientation	3) Audio Impersonation	3) Pattern Store *
4) Firenerves	4) Deafness I	4)
5) Blinding	5) Visual Impersonation	5) Sense **c**
6)	6) Facade	6) Metempsion *
7) Paralyze	7) Displacement I	7) Transferral
8) Unconsciousness	8) Visual Illusion I	8) Far View **c**
9) Firenerves True	9) Phantasm I	9) Far Sense **c**
10) Mind Shout (10mR) *	10) Silent Fence	10) Knowing Transferral
11) Transferral	11) Audio Impersonation True	11)
12) Coma	12) Visual Impersonation True	12) Ready Metempsion * **s**
13)	13) Visual Illusion III	13) Distant View **c**
14) Sensory Deprivation	14) Phantasm III	14) Distant Sense **c**
15) Mind Shout (20mR) *	15) Displacement II	15) Metempsion True * **s**
20) Lord Paralyze	20) Displacement III	20) Lord Metempsion * **s**
25) Great Shout (30mR) *	25) Facade True	25) Transferral True
30) Transferral True	30) Mirage	30) Transferral Mastery
50) Great Shout True (30mR)	50) Mirage True	50) Psionic Body

POSSESSION

Note: *The* ***Possession*** *list is devoted mainly to the concept of the Telepath controlling or 'inhabiting' the body of another being.*

2) View (I) **D:** C **R:** 3m/lvl **Mod:** -20 Allows caster to "view" a scene through another's eyes; target must be within range and sight, or within range and have been *Psionic Locked*.

3) Pattern Store (P*) **D:** — **R:** 3m/lvl Caster records a mental pattern of the target for future reference (including casting of other Psions on this list).

5) Sense (M) **D:** C **R:** 3m/lvl **Mod:** -20 Like *View*, except allows caster to experience all senses of the target; caster is in a trance and Extremely Hard (-30) to awaken while using this Psion.

6) Metempsion (M*) **D:** P **R:** 3m/lvl Caster, on the threshold of death (to be determined by the GM) is able to transfer his "soul" to another living body within range. Psion may only be attempted once (per death-threshold experience). Caster's spirit (assuming the Psion is successful) will drive out and destroy the resident consciousness and have full control of the body, and retain all of his own skills — but gain none of the body's learned skills. Should the caster attempt to inhabit an animal, he will gain all instincts (GM may wish to devise rules governing the control of such instinct as well). The Psion is permanent, and Caster can live out a life in the body — even Metempsioning to a new body when that one is exhausted. Caster may even transfer to a plant — but of course will be immobile...

7) Transferral (M) **D:** 10 min/lvl **R:** 30m A temporary (and less drastic) version of *Metempsion*. Caster and target's consciousnesses are exchanged; the caster is able to operate in the target's body at 90% of normal capacity, while the target is helpless and immobile in the caster's body. Target may try to break the transferral once every 10 min. by making a RR (at -20); caster may cancel at any time. If either body is destroyed (i.e., killed), the Psion is broken and the dead body's original mind is destroyed. The other mind returns to its original body, but is in a coma for 1-10 days.

8) Far View (M) **D:** C **R:** 30m/lvl As *View* except, with the aid of Pattern Store, caster may see through target's eyes to a greater range.

9) Far Sense (M) **D:** C **R:** 30m/lvl As *Sense* except, with the aid of Pattern Store, caster may experience target's senses to a greater range.

10) Knowing Transferral (M) **D:** 10 min/lvl **R:** 30m/lvl Like *Transferral*, except target consciousness remains in his own body, so the two "share" consciousness. This is most often done with a willing target (and so a 50 bonus to success), but can be performed on an unwilling one. This could very well incapacitate the body, however. Bodies must remain within range or the Psion is cancelled.

12) Ready Metempsion (MS*) **D:** P **R:** 300m/lvl **Mod:** -30 As *Metempsion*, except caster may preset target (using Pattern Store). Target must be in range at time of death or caster fails.

13) Distant View (M) **D:** C **R:** 10 km/lvl As *Far View*, except for range.

14) Distant Sense (M) **D:** C **R:** 10 km/lvl As Far Sense, except for range.

15) Metempsion True (MS*) **D:** P **R:** 10 LY/lvl **Mod:**-70 This Psion is designed for use with a willing target (the Mod. includes the bonus). The caster's soul may travel up to the Psion's range to unite with a predetermined, willing "co-host". The two will share consciousness until death of the body, or Transferral of one of the consciousnesses.

20) Lord Metempsion (MS*) **D:** P **R:** 10 LY/lvl **Mod:** -20 As *Metempsion True*, except Caster may attempt to seize the body of an unwilling host.

25) Transferral True (M) **D:** 1 day/lvl **R:** 30m to cast, then 10 km/lvl **Mod:** -20 As *Transferral*, except caster has 100% control of body, and target cannot attempt to cancel the Psion. In fact, when target returns to his body, he has no sense of time passage.

30) Transferral Mastery (M) **D:** P **R:** Unlimited after touching (to cast) Caster may exchange consciousnesses of two targets, move a consciousness from one target to another, etc. It takes 30 rnds to cast because of its complexity.

50) Psionic Body (M) **D:** 1 hour/lvl or P **R:** S Caster is able to function without his body. If his body is destroyed, he maintains an invisible, noncorporeal existence, able to cast Psions as normal (including inhabiting another body). The body is invulnerable to physical and energy attacks, and is at -100 to Psionic attacks. Should the caster utilize this Psion while his body is intact, he must return to it before the duration is over or it will die.

28.4 FIELD OF SELF-MASTERY

MIND'S DEFENSE

Note: *By utilizing* ***Mind's Defense****, the Telepath is able to better defend himself against Psionic attacks.*

1) Inkling (PS*) **D:** — **R:** 30m Caster (if conscious and generally alert) is warned one round before someone is about to Psionically attack him (assuming the attacking Psion requires preparation). If attacker succeeds in a RR, this Psion is not triggered.

3) Psion Shield I (D) **D:** 1 min/lvl **R:** S Provides +10 to casters RR (or DB if a physical attack Psion such as Energy Channels) vs all frontal Psion attacks.

4) Mind Alert (PS*) **D:** — **R:** S **Mod:** -20 Similar to *Inkling* except caster can be instantly awakened, is aware of the nature of the impending attack and its direction.

5) Psion Armor I (D) **D:** 1 min/lvl **R:** S As *Psion shield I*, except provides +10 to caster's RR (or DB) vs all frontal Psion attacks in any direction. Not Cumulative with *Psion Shield*.

6) Psion Shield III (D) **D:** 1 min/lvl **R:** S As *Psion shield I*, except provides +30 to casters RR (or DB) vs all frontal Psion attacks.

8) Mind Block (D*) **D:** C **R:** S Caster is able to shield his mind from probes (not attacks) as if he were twice his actual level. The caster must have this Psion cast before he is actually attacked.

9) Psion Armor II (D) **D:** 1 min/lvl **R:** S As *Psion Armor I*, except provides +20 to caster's RR (or DB) vs all frontal Psion attacks in any direction.

10) Ready Block (DS*) **D:** C **R:** S As *Mind Block*, but caster is able to shield his mind from probes (not attacks) as if he were three times (3x) his actual level. This Psion is activated automatically by the Telepath's subconscious.

11) Psion Shield V (D) **D:** 1 min/lvl **R:** S As *Psion shield I*, except the bonus is +50.

12) Retaliation (M) **D:** 1 min/lvl **R:** 30m Caster not only gains +20 to his RR vs one Psion, should he resist successfully, the attacking Psion is reversed on the original caster. Psion must be recast after a successful *Retaliation*; other Psions cannot be cast while this one is active.

14) Psion Armor III (D) **D:** 1 min/lvl **R:** S As *Psion Armor I*, except provides +30 to caster's RR (or DB) vs all frontal Psion attacks in any direction.

15) Mind Block True (D,S*<) **D:** 1 min/lvl **R:** S As *Ready Block* but Telepath resists probes as if he were five times (5x) his actual level, and does not need to concentrate. He cannot cast any other Psions while blocking, however.

20) Lord Retaliation (M) **D:** 1 min/lvl **R:** 100m As *Retaliation*, except caster is able to retaliate one Psion/rnd up to twenty (or he fails a RR).

25) Psionic Defense (DS*) **D:** 1 min/lvl **R:** S As *Mind Block True*, except caster resists *all* Psion attacks as indicated..

30) Retaliation True (DS*) **D:** 1 min/lvl **R:** S As *Lord Retaliation*, except caster has +1/lvl to his RR, can retaliate a number of Psions up to his level (as many as 3 per round) and the Psion is activated automatically when he is attacked.

50) Psionic Citadel (DS*) **D:** 1 min/lvl **R:** S As *Mind Block True* except caster may cast Psions while using the *Citadel*, is immune to all Psions below 20th lvl, and has a +1/lvl RR bonus vs all attacks.

TELEPORTATION

2) Blink (F) **D:** 1 rnd/lvl **R:** S Caster is able to 'blink' out of normal space-time for up to a number of rounds equal to his level. Caster must decide when casting the Psion how long he intends to stay 'blinked out'. While 'blinked out', he has no perception of events during his absence, and in fact has no sense of time passage. He returns to exactly the same spot with the same orientation as before.

4) Phasing (F) **D:** 1 minute/level **R:** S Allows caster to put himself and his personal equipment 'out of phase', Caster's perception while out of phase is at -50, and he cannot be hit by any weapon, nor can he attack or cast Psions. Caster is visible as three images of himself overlapping imperfectly: one blue, one red, one yellow. He may move at a rate of 10m/rnd, but at a risk of 'dissembling'. For each meter (or fraction) moved, caster has a 1% chance of "dissembling" in a colorful display (takes 1-10 "E" Electricity criticals). Roll is made when Psion is terminated.

5) Leaving (F) **D:** — **R:** S Caster teleports himself to a point up to 30m away, but there can be no intervening physical or energy barriers (shields) in a direct line between the caster and the point (for these purposes a barrier is anything he could not physically go through; a closed door is a barrier, a pit is not).

6) Merge (F) **D:** 1 min/lvl **R:** S Allows caster to merge (body + 10cm depth) into any normal material. Caster cannot move or see while merged.

7) Long Door (F) As *Leaving*, except caster can pass through barriers by specifying exact distances. An attempted *Long Door* which would put the caster inside a solid object or send him through an energy shield simply bounces him back where he started (he must also roll a Psion Failure).

8) Leaving (F) As above, except range is 100m

9) Phasing True (F) **D:** 1 min/lvl **R:** S As *Phasing*, except caster's perception is only -25, and he can move 10m/rnd safely. Attempting to move any faster will risk "dissembly" as above.

10) Teleport (F) As *Long Door*, except movement range is 10 kilometers/lvl This is also more risky. The following chances for failing (in addition to the normal failure roll) exist: Never seen target point (only described) = 25%; Studied (25 hours) = 10%; Studied carefully (10 days) = 1%; Lived there (100 days) = .01%. In case of teleport failure, first determine direction of end-point error, then distance (open-ended roll for number of meters). In case of regular Psion Failure, caster never leaves departure point.

11) Passing (F) **D:** 1 min/lvl **R:** S Caster is able to shift his molecules and so pass through any normal material of thickness up to 10 centimeters/lvl. If the caster attempts to pass through an activated energy shield of any type (he will sense the proximity of energy shields), he must resist versus a 1st level attack or his molecules will be hopelessly scrambled (he is dead). A successful RR cancels the Psion and bounces him back safely into a normal state.

12) Long Door (F) As above, except range is 100 meters.

14) Merging True (F) As *Merge* except caster can turn around and see out.

15) Mind's Portal (F) As *Teleport*, except there is no additional failure danger if caster is in mental communication (*Telepathy*) with a friendly entity at the destination point.

20) Long Door (F) As above, except range is 300 meters.

25) Passing True (F) As *Passing*, except caster may pass through up to 1 meter of material per level.

30) Mind's Portal True (F) As *Mind's Portal*, except caster's travel range is unlimited — even to interstellar distances.

50) Teleport True (F) As *Teleport*, except caster's travel range is unlimited.

MIND'S DEFENSE	TELEPORTATION	CHANGING
1) Inkling * **s**	1)	1) Contortions
2)	2) Blink	2) Study *
3) Psion Shield I	3)	3) Mask
4) Mind Alert * **s**	4) Phasing (1 min/lvl)	4) Merge
5) Psion Armor I	5) Leaving (30m)	5) Shape-shift **c**
6) Psion Shield III	6) Merge	6) Mask True
7)	7) Long Door (30m)	7) Passing
8) Mind Block * **c**	8) Leaving (100m)	8) Great Merge
9) Psion Armor II	9) Phasing True	9) Shape-shift True
10) Ready Block * **c s**	10) Teleport	10) Metamorph
11) Psion Shield	11) Passing	11)
12) Retaliation	12) Long Door (100m)	12) Merge True
13)	13)	13)
14) Psion Armor III	14) Merging True	14) Metamorph True
15) Mind Block True * **s**	15) Mind's Portal	15) Passing True **c**
20) Lord Retaliation	20) Long Door (300m)	20) Lord Metamorph
25) Psionic Defense * **s**	25) Passing True	25) Shifting
30) Retaliation True * **s**	30) Mind's Portal True	30) True Change
50) Psionic Citadel * **s**	50) Teleport True	50) Master Metamorph

CHANGING

Note: *With the* ***Changing*** *list the Telepath learns to control the molecular bonding of his body. By shifting the bonds without actually affecting the structures, they skilled Telepath can assume different forms — or even learn to pass through 'solid' objects. Note that Passing is learned much earlier on this list than on* ***Teleportation****. The concepts of Passing are more related to a molecular shift than to a spontaneous matter/energy transfer.*

1) Contortions (P) **D:** V **R:** S Allows the caster to slightly alter his muscles, limbs, and trunk; this facilitates escaping from bonds and small places.

2) Study (I*) **D:** — **R:** 100' Caster studies and memorizes the appearance and mannerisms of a being, for later use in other Psions on this list.

3) Mask (P) **D:** 10 min/lvl **R:** S Allows caster to alter the form of his face; if he *Studied* a being he can take on the exact form.

4) Merge (P) **D:** 1 min/lvl **R:** S Allows caster to merge (body +25 cm depth) into any solid material. Caster cannot move while merged. Caster is also unable to pass through force barriers (shields).

5) Shape-shift (P) **D:** C **R:** S Caster can alter his body to the form of another humanoid race (no increase in mass). This cannot be a specific person.

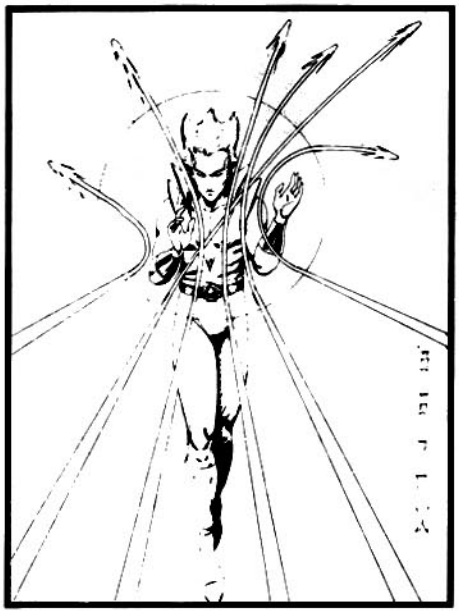
6) Mask True (P) **D:** Until cancelled **R:** S As *Face Shifting* except for extended duration.

7) Passing (P) **D:** — **R:** S Caster may pass through any material up to 1 meter thick (Psion simply does not activate when attempting to pass through thicker material.

8) Great Merge (P) **D:** 10 min/lvl **R:** S As *Merge* except caster may turn while merged and view the outside from within the object.

9) Shape-shift True (P) **D:** 10 min/lvl **R:** S As *Shape-shift*, except caster need not concentrate, and is able to appear exactly the same as a specific individual.

10) Metamorph (P) **D:** 10 min/lvl **R:** S As *Shape-shift*, except caster may adopt any life form within 20% of his normal mass. Caster must take on a form similar to his own (a human could become a Transhuman V or even an Idorian, but not a Trilopter or Aoemaran.



12) Merge True (P) **D:** 10 min/lvl **R:** S As *Great Merging*, except caster may cast Psions on himself while merged.

14) Metamorph True (P) **D:** 10m/lvl **R:** S Caster is able to assume any form within 50% of his own mass and even assume fairly different physical shapes (such as a Snee or a Trilopter — but not a Wihr-Kohl or a Aoemaran.

15) Passing True (P) **D:** C **R:** S Caster is able to pass through as much as 1 meter/lvl of solid material.

20) Lord Metamorph (P) **D:** 1 hr/lvl **R:** S As Metamorph True, but caster also gains the abilities as well as the outward form he has assumed (the Snee Armor Type and strength, the Trilopter trinary brain capabilities, etc.).

25) Shifting (P) **D:** 1 hr/lvl **R:** S As *Shape-shift True*, except caster may change form at will without casting another Psion (1 rnd is required per change).

30) True Change (P) **D:** 10 min/lvl **R:** S Caster is able to assume the form of any fairly solid object (no more liquid than a very viscous fluid) of between 50 and 200% of his actual mass. Caster can even assume the form of an inanimate object, such as a chair or door.

50) Master Metamorph (P) **D:** Until cancelled **R:** S As *Lord Metamorph* and *True Change* except caster can increase his mass by 5x or decrease it to 10% of his actual mass. He can assume any Caster may also change form at will without casting another Psion (1 rnd is required per change).

MIND DISCIPLINE

1) Detect Probe (I*•) **D:** — **R:** S Psion is triggered whenever caster's mind is being probed, attacked or monitored, and probing Psion fails a RR modified by -25.

2) Concentration I (U*) **D:** — **R:** S Adds 10 to any maneuver (not combat).

4) Recall (U) **D:** — **R:** S Caster gets a 25% chance of recalling some key fact or occurrence from his subconscious, which could relate to the current situation (could be from his background or something he has forgotten).

5) Memory Trance (P) **D:** P **R:** S Caster enters a trance-like state where he is unable move or talk, and is in fact not consciously aware of his surroundings. He is able, however, to absorb and flawlessly memorize audio or visual information at 10x normal speed. The session can last up to 5 hours, and the caster can pre-arrange the ending time, or have the computer (or whatever is feeding the information) give a signal which terminates the trance. Otherwise the trance is difficult to come out of, and the caster is groggy for 2-20 rounds if disturbed or wakened by someone unaware of the 'trigger'. Useable once per day only.

6) Observation (U) **D:** — **R:** S Caster gains insight or facts by observing a person or thing (as far away as 30m or equivalent with high-quality equipment) with intense concentration.

7) Concentration III (U*) As *Concentration*, except bonus is 30.

8) False Pattern (P*•) **D:** — **R:** S This Psion is triggered any time someone attempts to *Mind Pattern* or *Pattern Store* the caster and fails to resist detection (with a 50 modification to the Patterner/Storer's detriment). It generates a false Mental pattern, different every time. Patterner/Storer is unaware that he has taken a false pattern.

9) Unpresence (P) **D:** C **R:** S Caster is undetectable by *Presence, Mind Pattern* and similar Psions.

10) Mind Block (P) **D:** 1 min/lvl **R:** S Caster gains a +20 to his RR vs all Psionic Attacks (i.e., attacks involving a Psionic Attack Roll, PAR).

11) Concentration V (U*) As *Concentration* except caster has a +50 bonus.

12) False Presence True (P*•) **D:** 1 day/lvl **R:** S As *False Pattern*, except caster may pre-set any false pattern he desires.

13) Correlation (P) **D:** 1 topic **R:** S Caster is able to correlate known facts to obtain conclusions (i.e., help is given by the GM based on a roll).

14) Sensitivity (P) **D:** — **R:** S Similar to *Observation*, except using all senses in concert (caster must be physically present to utilize the Psion). Caster might detect hidden presences by breathing or heartbeat, note air patterns, minor temperature changes, odors, sounds (or lack thereof) and thus deduce useful data. Caster should roll, using Perception bonus. Range is about 100m

15) Total Recall (P) As *Memory Trance*, except caster is fully aware of his surroundings and can break the Psion at any time.

20) Observation True (P) **D:** 1 min/lvl **R:** S As *Observation* except virtually nothing escapes the notice of the caster. There is a duration, which implies that the caster is constantly receiving input — including from other persons in the room: nervous gestures, significant glances, body language, etc. The GM should be aware of the enormous amount of information which the truly observant can gain.

25) Sensitivity True (P) **D:** 1 min/lvl **R:** S As *Sensitivity*, but with the added potential as discussed in *Observation True* above multiplied by all senses.

30) Correlation True (P) As *Correlation*, except no roll is involved and conclusions are obtained automatically, based even on scant information.

50) Mind Master (P) **D:** 10 min/lvl **R:** S Caster is able to freely use *Total Recall, Sensitivity True*, and *Correlation True* at will for the duration of the Psion.



BODY DISCIPLINE

1) Touch I (U*) **D:** one maneuver **R:** S Caster gains superior tactile sensitivity, enabling him to perform small maneuvers (repairs, picking a lock, a surgical procedure) at +10. Can be cumulative with *Concentration*.

2) Leaping (F*) **D:** 1 rnd **R:** S Allows caster to leap 20m laterally or 5m vertically (on Terran-normal gravity) in the round that the Psion is cast.

3) Speed III (F*) **D:** 3 rnds **R:** S Caster may act at twice his normal movement rate, but must spend a number of rounds equal to the rounds 'Speeded' at half-rate (immediately afterwards). Caster must still act within the round sequence.

4) Dodging I (F*) **D:** 1 rnd **R:** S Allows caster to dodge (-50 to attack roll) one nonenergy attack (missile, projectile or melee). The attack must be in caster's field of vision.

5) Flip I (F*) **D:** 1 rnd **R:** S Allows caster to somersault in midair, landing up to 3m away, fully oriented and facing any direction. +30 to DB while 'flipping'.

6) Hold Breath (U*) **D:** 1 rnd/lvl + 6 rnd base **R:** S Caster is able to hold his breath for an extended period by conserving oxygen.

7) Great Leap (F*) As *Leaping*, except limit is 3m/lvl laterally and 2m/lvl vertically (on Terran-normal gravity).

8) Dodging III (F*) As *Dodging I* except 3 attacks can be dodged.

9) Touch III (U*) As *Touch* except 30 is added to the maneuver.

10) Haste III (F*) As *Speed III* except no half-rate rounds are assessed.

11) Flip III (F*) As *Flip*, except 3 rapid 'flips' may be executed in quick succession.

12) Speed V (F*) As *Speed III* except caster is 'Speeded' for five rounds.

13) Landing True (F*) **D:** until landing **R:** S Allows the caster to land safely in a fall of up to 15m/lvl

14) Haste V (F*) As *Haste III* except caster is 'hasted' for five rounds.

15) Wallrunning (F*) **D:** 1 min/lvl **R:** S Caster is able to walk or run on any solid surface up to 90° from the gravity source as if he were on 'flat ground'.

20) Dodging True (F*) As *Dodging* except all (including energy) attacks against caster are at -50.

25) Haste X (F*) As *Haste III* except caster is 'hasted' for ten rounds.

30) Ceilingrunning (F*) **D:** 1 min/lvl **R:** S Caster can walk or run on *any* solid surface as if he were acting against his homeworld gravity. This includes surfaces on which no gravity field is operating (e.g., the outside of a spaceship) as well as 'ceilings'.

50) Master of Self (F*) **D:** 1 rnd/lvl **R:** S Caster may utilize any one of the non *Speed/Haste* Psions on this list every rnd.

MIND DISCIPLINE	BODY DISCIPLINE	METABOLIC CONTROL
1) Detect Probe * •	1) Touch I *	1) Clotting I * **c**
2) Concentration I *	2) Leaping *	2) Pain Relief I * **c**
3)	3) Speed III *	3) Unstun I * **s**
4) Recall	4) Dodging I *	4) Mask Pain (25%) * **s**
5) Memory Trance	5) Flip I *	5) Cut Repair I **c**
6) Observation	6) Hold Breath *	6) Tissue Repair **c**
7) Concentration III *	7) Great Leap *	7) Fracture Repair **c**
8) False Pattern * •	8) Dodging III *	8) Unstun III * **s**
9) Unpresence **c**	9) Touch III *	9) Vessel Repair **c**
10) Mind Block	10) Haste III *	10) Resist Poison * **c s**
11) Concentration V	11) Flip III *	11) Mask Pain (50%) * **s**
12) False Presence True * •	12) Speed V *	12) Tissue Repair True
13) Correlation	13) Landing True *	13) Pain Relief True * **s**
14) Sensitivity	14) Haste V *	14) Fracture Repair True
15) Total Recall	15) Wallrunning *	15) Neutralize Poison * **c s**
20) Observation True	20) Dodging True *	20) Regeneration *
25) Sensitivity True	25) Haste X *	25) Resist Stun * **s**
30) Correlation True	30) Ceilingrunning *	30) Trance * **s**
50) Mind Master	50) Master of Self *	50) Renewal True * **s**

METABOLIC CONTROL

1) Clotting I (H*) **D:** C **R:** S Reduces hits/rnd by 1, and after one minute of concentration the stoppage is permanent.

2) Pain Relief I (HS*) **D:** C **R:** S Takes off one concussion hit/minute.

3) Unstun I (HS*) **D:** — **R:** S Caster is relieved of one round of accumulated stun.

4) Mask Pain (HS*) **D:** 1 min/lvl **R:** S Caster is able to sustain an additional 25% of his total concussion hits before losing consciousness. Hits are still taken and remain when the Psion lapses.

5) Cut Repair I (H) As *Clotting I*, except 1 hit of bleeding is permanently stopped every round.

6) Tissue Repair (H) **D:** P/C **R:** S Caster is able to repair one damaged (but not 'destroyed') muscle or tendon (or similar tissue). This requires one hour of concentration.

7) Fracture Repair (H) As *Tissue Repair* except this Psion will repair bone or cartilage which is broken, cut or torn (but not 'shattered' or 'destroyed').

8) Unstun III (HS*) As *Unstun I* except three rounds of stun are immediately relieved.

9) Vessel Repair (H) As *Tissue Repair*, except repairs one vein or artery.

10) Resist Poison (HS*) **D:** C **R:** S Delays the effect of a poison as long as the caster concentrates.

11) Mask Pain (HS*) As *Mask Pain*, except additional 50% hits can be taken.

12) Tissue Repair True (H) As *Tissue Repair* except caster need not concentrate. Wounded area must be kept immobile, however. Will repair a 'destroyed' muscle or tendon (or similar tissue) in 25 hours while caster is in a trance.

13) Pain Relief True (HS*) As *Pain Relief I* except 1 hit/round is relieved, and caster need not concentrate. If he is conscious, caster may keep this Psion from "Subconsciously" activating.

14) Fracture Repair True (H) As *Tissue Repair True*, except will repair bones and cartilage.

15) Neutralize Poison (HS*) **D:** C/V **R:** S The poison is the target and must make a RR vs the attack by this Psion. Failure means that the poison is permanently rendered harmless. Caster must concentrate for 1 hour to completely destroy the poison, and the effect is delayed for as long as the caster concentrates in any case.

20) Regeneration (HS*) **D:** V **R:** S Caster is able to regenerate lost limbs, damaged or destroyed organs (not the brain) while in a trance. Note that, if caster is supposed to die from such a wound in a given period, this Psion will not save him unless it completes the repair before that time. Time required varies: 5-100 days for a limb (finger to leg); 10 days for damaged organ; 50 days for destroyed organ. Naturally, if the heart, liver, etc is destroyed or damaged, the caster will die unless he is in a Medstasis unit or otherwise kept artificially alive. If the organ is a kidney, eye, etc., he will be able to hold out.

25) Resist Stun (HS*) **D:** — **R:** S Any stun delivered to caster is immediately annulled.

30) Trance (HS*) **D:** V **R:** S If caster is struck a death-blow, this Psion places him in a trance-like state. He does not die, but is in suspended animation. If caster is able to subconsciously utilize the repair Psions above (or, ideally, *Renewal True*, below) the trance will last until he is able to regain consciousness — even if it requires days.



50) Renewal True (HS*) **D:** V **R:** S If caster is forced to revert to *Trance* (above) or otherwise rendered unconscious, this Psion is triggered, and it utilizes all Psions necessary to repair the caster, at a total cost of only 50 PP's.

28.5 PSION DEFINITIONS AND NOTATION

Psion Abbreviations

D: = Duration:

R: = Range:

Mod: = special modification to a RR

rnd or **rd** = round (a battle round of approximately 10 seconds)

lvl = level (normally of caster)

min = minute(s)

hr = hour(s)

R or **Rad** = radius

km = kilometer(s)

m = meter(c)

kph = kilometers per hour

RR = Resistance Roll

PP = Power Points

pt = point

Psion Classifications

• = free; Psion does not require Power Points to cast

* = Instantaneous; psion does not require preparation

U = Utility Psion; a general use Psion that doesn't physically affect anyone of anything but the caster.

S = Subconscious Psion; a Psion that is triggered by the subconscious. Most do not require the conscious casting of the caster.

I = Informational Psion; a Psion which gathers information.

P = Passive Psion; a general use Psion that usually involves another person or thing, but not actively.

D = Defensive Psion; allows caster to resist of withstand the effects of a Psion, the elements, etc.

F = Force Psion; involves the manipulation of matter, energy, the elements, etc. through the use of a Psionic force.

M = Mental attack Psion; an attack Psion affecting the target's mind.

Psion Range

S = Self; Psion can only be cast on the caster himself.

T = Touch; the caster must touch the target (or what he is wearing) in order to cast the Psion.

***Distance* R** = Effect is felt in an area with a radius equal to *Distance*. The center point of such area Psions must be within the Psion's range.

***Distance* / lvl** = Psion can take effect anywhere within: [*Distance*] x [level of the caster].

Psion Duration

— = Instantaneous (or negligible time); Psion's effect is instantaneously applied.

(C) = Concentration required, except duration cannot exceed the given limit.

P = Permanent; Psion has a permanent effect in the sense of creating a physical or mental condition. After the casting process is complete (or after the caster has no longer concentrates) the effect may be altered by outside forces (i.e., the Psion effects may be cured, disturbed, eroded, etc. by another Psion or physical forces). For example, if a Psion creates a "permanent" ice cube, it will melt and evaporate normally after the Psion is cast (or its duration expires).

V = Variable; depends on the Psion.

C = Concentration required; caster can perform only 50% activity until the concentration is stopped (i.e., as if he moves 50% of normal in a given round, thus he may only move 50% of normal, fire once in a round, melee at -50). Caster cannot cast any other Psions while concentrating. Any action other than simple movement will require a maneuver to avoid losing concentration.

***Time* / lvl =** Duration is the *Time* multiplied by the caster's level.

***Time* / # failure** = Duration of the effect is: [the amount that the target's RR is below the minimum needed to resist the Psion] ÷ [the #] x [the *Time*].

29.0 ADDITIONAL PSIONS

This section presents a number of Psions which conceptually fit within the Psion list structure, but are either "High-Powered" Psions (above 50th level) **or** supplemental additional Psions below 50th level. Psions are organized by field and list.

Both types are optional concepts to be used at the GM's discretion. In some cases a new Psion will have a level and list designation which places it at the same spot as an already existing Psion. The GM has the option of making the player choose which Psion their character has learned **or** allowing knowledge of both Psions at that level. If the first case is chosen, the GM may allow the player to learn that section of the list a second time to obtain the use of both sets of Psions.

29.1 FIELD OF ALTERATION

TELEKINETICS

1) Landing (F*) **D:** Varies **R:** S Caster can land safely in a fall/jump of up to 20'/lvl, and can take that distance off the severity of any longer fall.

60) Telekinetic Tow (F) **D:** C **R:** 10,000 km/lvl Allows the Telepath to hold or pull an object up to 100 kg/lvl mass as a Mk. 10 *Tractor Beam* (see ***Star Strike***).

90) Telekinetic Tow True (F) **D:** 1 hr/lvl **R:** 100,000 km/lvl As *Telekinetic Tow*, except mass is 1000 kg/lvl, caster need not concentrate, and has Towing power equal to half his lvl (*Tractor Beam* Mk. #).

MIND OVER MATTER

6) Fog 5m R(F) **D:** 1 min/lvl **R:** 10m/lvl Allows caster to create a dense fog up to 5 mR, with the center up to 10m a lvl away. Fog can only be created where it could occur naturally (fog need not be water based; a methane fog could be created in such an environment). Fog disperses naturally after Psion duration.

9) Unfog (F) **D:** 10 min/lvl **R:** S Caster is the center of a clear zone up to 10m in radius where any fog, smoke, or vision-restricting gas is completely dispersed.

12) Fog 50m R (F) **D:** 10 min/lvl **R:** 100m/lvl As *Fog* above, except for extensions.

25) Clouds (F) **D:** 10 min/lvl **R:** 1 km/lvl Caster is able to summon (or disperse) clouds. This Psion has the same environmental restrictions as *Fog*.

40) Tremors (F) **D:** 1 rnd **R:** 30 meters/lvl Caster is able to create a very minor earthquake — approximately 5.5 on the Richter scale. It is string enough to make loose objects rattle, but most structures would remain undamaged. On unstable planets, there is a small chance that it could trigger a more serious earthquake.

60) Quakes (F) **D:** V **R:** T (extent varies) Enables caster to trigger an earthquake, which can be delayed up to 1min/ lvl. Severity of quake is determined by a roll: (01-20) = 5.5, (21-45) = 6, (46-65) = 6.5 (66-80) = 7.0, (81-89) = 7.5, (91-95) = 8.0, (96-98) = 8.5, (99-100) = 9.0. Note that the Richter progression is exponential not linear, so that the upper numbers are many times more severe than lower ones. Sever quakes can be felt decaklicks (tens of kilometers) away, have several aftershocks, and even trigger a natural series of quakes if near natural fault lines.

TELEPATHY

60) Telepath (I*) **D:** 10 min/lvl **R:** V As *Telepath True* except range is unlimited.

MIND INTO ENERGY

1) Energy Bolt Mk I (F) **D:** — **R:** V Caster is able to channel raw Psionic energy into a concentrated bolt. Treat as a "Mini Laser" attack for ranges, Mark #, and attack table (Master Weapons Charts, **Tech Book**). Skill bonus is the caster's Energy Bolt Directed Psion skill bonus.

5) Energy Bolt Mk II (F) As *Energy Bolt I* except attack is a "Laser Pistol" attack.

10) Energy Bolt Mk III (F) As *Energy Bolt I* except attack is an "Assault Laser" attack.

15) Energy Bolt Mk IV (F) As *Energy Bolt I* except attack is a "Laser Rifle" attack.

20) Lord Energy Bolt (Mk V) (F) As *Energy Bolt I* except attack is as a "Heavy Laser".

25) Energy Drain (F) **D:** 1 min/lvl **R:** 100 m/lvl For the duration of the Psion, caster is able to reduce the power output of any reactor by 20%.

30) Energy Absorption (F) **D:** C **R:** T Enable caster to absorb energy from a reactor and convert it to PPs. Conversion rate is 1 point per round, and caster's total number of Points cannot exceed what he is normally allotted for the day.

35) Lord Energy Drain (F) **D:** 10 min/lvl **R:** 10 km/lvl As *Energy Drain* except for range, duration, and reactor output is decreased to half normal.

60) Energy Bolt True (F) **D:** — **R:** V As *Lord Energy Bolt* except that it is treated as an "Ordnance Energy Weapon" (GM discretion: Mark 6-10, see ***Star Strike*** and ***Armored Assault***).

ARMOR

40) Hull Armoring III (F) **D:** C **R:** T As *Hull Armoring I* except caster may increase a hull's integrity by 2-3 CAT lvls (28 max).

60) Hull Armoring V (F) **D:** C **R:** T As *Hull Armoring I* except caster may increase a hull's integrity by 4-5 CAT lvls (28 max).

29.2 FIELD OF SELF-MASTERY

TELEPORTATION

20) Teleport II (F) **D:** — **R:** 10 km/lvl As *Teleport* except caster may take one other entity (massing no more than 50% over Caster's mass) along. Caster must be touching 'passenger'.

30) Mind's Portal II (F) **D:** — **R:** 10 km/lvl As *Mind's Portal* except caster may take one other entity (massing no more than 50% over Caster's mass) along. Caster must be touching 'passenger'.

40) Mind's Portal True II (F) **D:** — **R:** unlimited As *Mind's Portal II* except there is theoretically no range limitation.

60) Teleport True II (F) **D:** — **R:** unlimited As *Teleport II* except for unlimited range.

70) Teleport True III (F) **D:** — **R:** unlimited As *Teleport True II* except caster may take along two entities.

CHANGING

90) Metamorphosis (P) **D:** 1 hr/lvl **R:** S As *Master Metamorph* except caster is able to assume any form he wishes (liquid, gaseous) and is subject to full benefits (and penalties) of the form.

BODY DISCIPLINE

1) Landing (F*) **D:** V **R:** S Caster can land safely in a fall/jump up to 20'/lvl, and can reduce the severity of any longer fall.

5) Strength (U*) **D:** 1 rnd/lvl **R:** S Caster gains great strength for a short period of time, adding +20 and doubling hits delivered by melee and thrown weapon attacks. Caster is also able to perform feats of great strength, exact limits of which to be determined by the GM (they should not exceed what is theoretically possible by a humanoid, however).

10) Wallwalking (F*) **D:** 1 min/lvl **R:** S Caster is able to walk on any solid surface up to 90° from the gravity source as if he were on 'flat ground'.

11) Strength True (U*) **D:** 1 min/lvl **R:** S As *Strength*, except caster has +30 and triples all strength-related hits delivered by melee and thrown weapon attacks. Caster also has 'superhuman' strength. Suggested limits: lift 100 kilos/lvl

35) Haste True (F*) **D:** 1 rnd/lvl **R:** S As *Haste* except for duration.

METABOLIC CONTROL

25) Rejuvenate (H) **D:** V **R:** S Caster is able to reverse ten years of aging from his body. This includes regeneration of any organs which have deteriorated (except the brain; though it does retard brain cell death). Rejuvenating process takes about a decaday. Caster is only able to utilize this Psion safely once per year, at which time ten more years can be removed, until caster reaches post-adolescence (about 20). Psion must them be cast once/year to maintain youth, or accelerated aging begins: 1 yr/decaday until caster returns to real age (or perhaps death). If Psion is cast more frequently than once a year, caster risks genetic damage and malformation. ***Note:*** *The GM must decide whether this Psion will confer immortality or extended life, or if caster can just remain youthful until death catches up at the 'appointed time'.*

60) Rejuvenation (H) **D:** P **R:** S Caster is returned to a youthful form in about 10 min. This Psion is ongoing and need not ever be cast again; caster remains locked in a youthful state until (whatever).

ALTERATIONS

TELEKINETICS
1) Landing *
60) Telekinetic Tow
90) Telekinetic Tow True

MIND OVER MATTER
6) Fog 5m R
9) Unfog
12) Fog 50m R
25) Clouds
40) Tremors
60) Quakes

TELEPATHY
60) Telepath *

MIND INTO ENERGY
1) Energy Bolt Mk I
5) Energy Bolt Mk II
10) Energy Bolt Mk III
15) Energy Bolt Mk IV
20) Lord Energy Bolt (Mk V)
25) Energy Drain
30) Energy Absorption **c**
35) Lord Energy Drain
60) Energy Bolt True (Mk 6-10)

ARMOR
40) Hull Armoring III
60) Hull Armoring V

SELF-MASTERY

TELEPORTATION
20) Teleport II
30) Mind's Portal II
40) Mind's Portal True II
60) Teleport True II
70) Teleport True III

CHANGING
90) Metamorphosis

BODY DISCIPLINE
1) Landing *
5) Strength *
10) Wallwalking *
11) Strength True *
35) Haste True *

METABOLIC CONTROL
25) Rejuvenate
60) Rejuvenation

29.3 FIELD OF CONTROL

MIND ASSAULT

20) Lord Mind Shout (M) **D:** Varies **R:** 30m **MOD:** -50 Similar to *Mind Shout* except there is only one target, who is at a significant RR disadvantage (-50). Failure means unconsciousness for 1 rnd/5 failure; failure by more than 50 means death.

40) Death's Shout (M) **D:** V **R:** 300m **MOD:** -50 As *Lord Mind Shout* except failure means instant death.

POSSESSION

15) Mind Slayer (M) D:P **R:** 30m A brutal twist on the *Transferral* concept: caster drive's target's consciousness out of his body, rendering it comatose. Target's consciousness is not destroyed; simply 'lost'.

30) Mind Slayer True (M) **D:** P **R:** 30m **MOD:** -30 As *Mind Slayer* except target's consciousness is utterly destroyed.

60) Transcendent Transfer (U) **D:** P **R:** T Allows the caster to recall the conciousness of another being (provided it has not been destroyed) and reunite it with the body.

29.4 FIELD OF VISIONS

EMPATH

15) Neutalize Disease (HS*) As Neutralize Poison except that diseases may be "neutralized" and it takes 1 hour.

25) Rejuvenate (H) As Psion by the same name on the *Metabolic Control* list.

40) Empathic Bond (HS*) **D:** P (until cancelled) **R:** 1 km/lvl Empath must be touching target when the Psion is initially cast; afterwards, any wounds taken by the target (as long as he is in range) are automatically transferred to the caster. Caster may break the Psion either permanently or temporarily at any time. Caster's unconscious will suspend it in any case if he is on the brink of death.

60) Rejuvenation (H) As Psion by the same name on the *Metabolic Control* list.

80) Empathic Bond True (HS*) **D:** P **R:** Unlimited As Empathic Bond except range is limitless.

90) Reconstitution (H) **D:** P **R:** T Caster is able to completely reconstruct a being from a few tissue cells; age of the cells is not a factor. The original being must be dead for this Psion to function; it is not a "clone" ***Note:*** *The GM must decide whether there is such a thing as 'genetic memory' in which the reconstituted being's memories are somehow intact, or if the consciousness is elsewhere. Combining Reconstitution and an appropriate Transferral Psion could restore a transferred consciousness back to a reconstituted body.*

MIND'S EYE

5) Penetrating Sight (P) **D:** C **R:** S Caster is able to see through any solid material up to 1 meter thick.

7) Watch (P) **D:** C **R:** 3m Caster may choose a point up to 3 meters away and he will have a field of vision from that point; he can rotate the view but not move it.

8) Far View (P) **D:** C **R:** 3m/lvl Caster's point of vision may be moved independently of him, but he would have to physically be able to go there (e.g., the View cannot travel through solid objects, a closed door, etc.).

10) See Invisible (P) **D:** C **R:** S Caster is able to see invisible objects (including those made invisible by Psions and Electronic cloaking).

15) Watch 3m/lvl (P) **D:** C **R:** S As *Watch* except range is 3m/lvl

20) Lord Sight (P) **D:** C **R:** 30m/lvl As *Far View*, except caster's "View" is able to pass through solid objects. The View may travel at 10m/rnd

25) Watch True (P) **D:** 1 min/lvl **R:** S As *Watch 3m/lvl*, except caster need not concentrate.

30) Sight True (P) **D:** 1 min/lvl **R:** 30m/lvl As *Lord Sight* except caster need not concentrate while the View is motionless.



50) Mind's Eye (P) **D:** 10 min/lvl **R:** 10 km/lvl As *Sight True* except for extended range. The "View" may travel at 10 km/rnd

60) Far Sight (P) **D:** 10 min/lvl **R:** 100,000 km/lvl As *Sight True* except for extended range. The "View" travels at 1,000,000 km/rnd

90) Sight Master (P) **D:** 10 min/lvl **R:** 1 LY/lvl As *Sight True* except for extended range. The "View" travels at 10 LY/rnd

MIND'S TRUTH

Note: *If using these Psions, the GM may wish to decide that all of the standard Mind's Truth Psions in Section ??? are designed to judge truth in the humaniod mind. Due to the vastly different configuration of alien (Xenohuman) minds, more powerful Psions have been added here which enable the Truthsaying Telepath to accurately interpret such thoughts. If using these Psions, all Psions on the original list should be designated as designed for use on the humanoid (of the caster's race!) mind, and have a 25% error rate if used on a different type of mind (25% chance the caster makes a wrong interpretation). Xeno Psions are identical in all other ways to their normal counterparts.*

3) Xeno Emotion Touch

6) Xeno Thought Scan

7) Xeno Truth I

7) Thought Search (IM) **D:** C **R:** 30m Allows caster to use a key word/phrase/picture to key on a specific surface thought group. One of the *Scan* Psions must be used to actually read the thought.

9) Xeno Thought Analysis

10) Xeno Truth III

13) Memory Search (IM) **D:** C **R:** 30m As *Thought Search* except caster is able to locate a specific memory.

13) Xeno Truth V

15) Xeno Mind Scan

16) Xeno Truthtrance I

18) Xeno Truthtrance III

30) Xeno Mind Probe

35) Xeno Truth True

60) Deep Mind Probe (IM) **D:** C **R:** 30m As *Thought Scan* except caster is able to probe into the target's true memories of an event (as opposed to what distortions the target's psyche has overlaid; caster receives clear images of the actual event).

60) Xeno Truthsaying

INTERFACE

35) Assimilate Data (U) **D:** Varies **R:** T

Caster can copy all data and programs from a computer (once any security has been overcome and Interface established). Data is transferred into Telepath's brain at a rate of 1 memory unit/rnd Total storage capacity (besides normal resident memories) of the human brain is about 5000 units.

40) Input Memory (U) **D:** Varies **R:** T Allows caster to transfer all of his memories into a computer database. Space required varies with age and experience (usually 300-500 units).

60) Emulate (U) **D:** C **R:** S Caster is able to emulate a computer of Mk. # equal to twice his level, interfacing with support systems up to 1m/ level away, and using any programs he has *assimilated.*

MIND DETECTION

35) Mind Tracking True (I) **D:** until dispelled R: 1 km/lvl As *Mind Tracking*; duration is until dispelled. ***Note**: caster may only have this Psion activated for one target at a time.*

45) Far Mind Tracking True (I) **D:** until dispelled R: 1 LY/lvl As *Mind Tracking True* except for extended range.

60) Past Mind Location (I) **D:** — **R:** 30m/ lvl As *Mind Location* except caster is able to seek back in the past for the mind pattern, lock on, and utilize a *Past Sight* Psion to that temporal location.

MIND IN THE PAST

15) Psychometry (P) **D:** V **R:** T Caster holds an object or stands in a place of significance and is able to gain a number of *Flashes Behind* of important situations, events or people who have been associated physically with the object or place. Psion also provides as many *Flashes* as important events/people which actually occurred. Time range is theoretically unlimited. ***Note:** This Psion is heavily GM discretion. A 50th lvl Telepath standing holding a fork which has never had a user of significance will get no images.*

30) Psychometry True (P) **D:** Varies **R:** T As *Psychometry,* except caster receives all information as in *Delving*, and instead of *Flashes*, he gets *Past Sights.*

55) Frozen Time (F) **D:** 1 rnd/lvl **R:** S Caster is removed from time. From the caster's viewpoint, everything else seems to be frozen in place. Anything touched will also be drawn out of time for the duration of the Psion. ***Note**: care must be taken that caster's effect on events while in Frozen Time are limited. The brief duration should be strictly adhered to.*

60) Past Sight II (I) **D:** C **R:** T As *Past Sight True* (i.e., caster is able to travel mentally backwards in time as far as desired, located by *Past Compass* — travelling to the desired time destination at up to 1000 yrs/rnd). Caster's consciousness is tied to the same relative place, and is able to receive visual and aural input. Caster's body is in a trance for the duration of the Psion.) except caster may bring another back with him. Their body is also in a trance and they see and hear just as the caster does. (e.g., "I am the spirit of Christmas Past...)

90) Time Travel I (F) **D:** 1 min/lvl **R:** S Caster is able to physically travel back in time up to 100 years/lvl. The shift is instantaneous and caster returns to his own time at the end of the duration unless the Psion is recast. Any relative movement by the caster is also reflected, though cosmic shifts (planetary movement, etc.) are corrected for. ***Note:** This is an extremely dangerous and powerful Psion, to be used with care. It is strongly recommended that extensive research with Past Sight and Past Location be done first. In any case the GM must be prepared to deal with possible ramifications of such travel if it allowed. Can someone change the past? — or is what they do in the past already a part of What Has Gone Before?*

100) Time Travel II (F) **D:** 1 min/lvl **R:** T As *Time Travel I*, except caster is able to take another person with him. If the other person is not touching caster at the end of the Psion, caster returns without him.

120) Time Travel True (F) **D:** P **R:** S As *Time Travel I* except caster has unlimited time range, remains in the past until he wills a return, and (optionally) can travel into the future. ***Note**: Travel to the future must be done blindly, and the GM must carefully monitor such activity. Hopefully, the incidence of 120th level player-characters will be quite rare...*

CONTROL

MIND ASSAULT
20) Lord Mind Shout *
40) Death's Shout *

POSSESSION
15) Mind Slayer
30) Mind Slayer True
60) Transcendent Transfer

VISIONS

EMPATH
15) Neutralize Disease * **s**
25) Rejuvenate
40) Empathic Bond * **s**
60) Rejuvenation
80) Empathic Bond True * **s**
90) Reconstitution

MIND'S EYE
5) Penetrating Sight **c**
7) Watch **c**
8) Far View **c**
10) See Invisible **c**
15) Watch (3 min/lvl) **c**
20) Lord Sight **c**
25) Watch True
30) Sight True
50) Mind's Eye
60) Far Sight
90) Sight Master

MIND'S TRUTH
3) Xeno Emotion Touch
6) Xeno Thought Scan
7) Xeno Truth I *
7) Thought Search **c**
9) Xeno Thought Analysis
10) Xeno Truth III *
13) Memory Search **c**
13) Xeno Truth V *
15) Xeno Mind Scan
16) Xeno Truthtrance I
18) Xeno Truthtrance III
30) Xeno Mind Probe
35) Xeno Truth True
60) Xeno Truthsaying
60) Deep Mind Probe **c**

INTERFACE
35) Assimilate Data
40) Input Memory
60) Emulate **c**

MIND DETECTION
35) Mind Tracking True
45) Far Mind Tracking True
60) Past Mind Location **c**

MIND IN THE PAST
15) Psychometry
30) Psychometry True
55) Frozen Time
60) Past Sight II **c**
90) Time Travel I
100) Time Travel II
120) Time Travel True

STAT POTENTIALS CHART

Roll on D100	Under 25	Range of the Initial Stat 25-39	40-59	60-74	75-84	85-89	90-94	95-97	98-99	100
01-10	25	-	-	-	-	-	-	-	-	-
11-20	30	-	-	-	-	-	-	-	-	-
21-30	35	39	-	-	-	-	-	-	-	-
31-35	38	42	59	-	-	-	-	-	-	-
36-40	40	45	62	-	-	-	-	-	-	-
41-45	42	47	64	-	-	-	-	-	-	-
46-49	44	49	66	-	-	-	-	-	-	-
50-51	46	51	68	-	-	-	-	-	-	-
52-53	48	53	70	-	-	-	-	-	-	-
54-55	50	55	71	-	-	-	-	-	-	-
56-57	52	57	72	74	84	-	-	-	-	-
58-59	54	59	73	75	85	-	-	-	-	-
60-61	56	61	74	76	86	-	-	-	-	-
62-63	58	63	75	77	87	-	-	-	-	-
64-65	60	65	76	78	88	-	-	-	-	-
66-67	62	67	77	79	88	89	-	-	-	-
68-69	64	69	78	80	89	89	-	-	-	-
70-71	66	71	79	81	89	90	-	-	-	-
72-73	68	73	80	82	90	90	-	-	-	-
74-75	70	75	81	83	90	91	-	-	-	-
76-77	72	77	82	84	91	91	-	-	-	-
78-79	74	79	83	85	91	92	-	-	-	-
80-81	76	81	84	86	92	92	-	-	-	-
82-83	78	83	85	87	92	93	-	-	-	-
84-85	80	85	86	88	93	93	94	-	-	-
86-87	82	86	87	89	93	94	94	-	-	-
88-89	84	87	88	90	94	94	95	-	-	-
90	86	88	89	91	94	95	95	97	-	-
91	88	89	90	92	95	95	96	97	-	-
92	90	90	91	93	95	96	96	97	-	-
93	91	91	92	94	96	96	97	98	-	-
94	92	92	93	95	96	97	97	98	99	-
95	93	93	94	96	97	97	98	98	99	-
96	94	94	95	97	97	98	98	99	99	-
97	95	95	96	97	98	98	99	99	99	-
98	96	96	97	98	98	99	99	99	100	-
99	97	97	98	98	99	99	100	100	100	-
100	98	98	99	99	99	100	100	100	100	101

Number given is the stat potential. A "-" indicates that the potential is the same as the initial stat.



5.5 EXPERIENCE POINT VS. LEVEL TABLE

To begin with, all folk have experience from by-gone days. Thus, the "first level" adventurer begins his wanderings and antics having a base of 10,000 experience points. The follow-ingchart Illustrates the progression from this stage on.

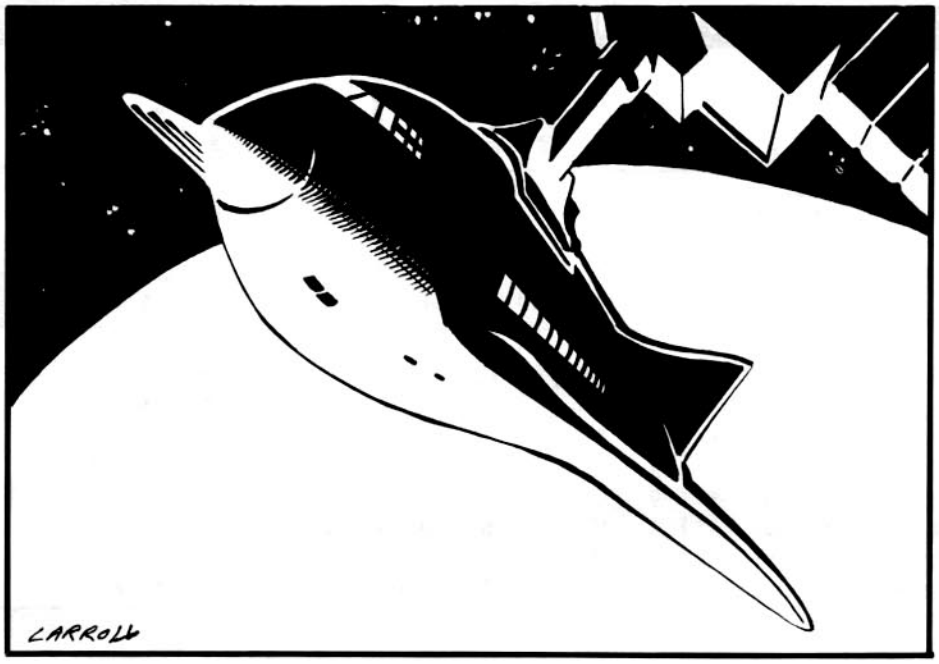
Level	Points Required
1	10,000
2	20,000
3	30,000
4	40,000
5	50,000
6	70,000 *
7	90,000
8	110,000
9	130,000
10	150,000
11	180,000 *
12	210,000
13	240,000
14	270,000
15	300,000
16	340,000 *
17	380,000
18	420,000
19	460,000
20	500,000
21	550,000 *

All of the levels after one attains 20th level cost an additional 50,000 experience points.

* All of the asterisked points denote an increase in the required points necessary for progression.

STAT BONUSES CHART

1-100 Stat.	Bonus on D100	Devel. Points	Power Points
102+	+35	11	4
101	+30	10	3
100	+25	10	3
98-99	+20	9	2
95-97	+15	9	2
90-94	+10	8	1
85-89	+5	8	1
75-84	+5	7	1
60-74	0	6	0
40-59	0	5	0
25-39	0	4	0
15-24	-5	3	0
10-14	-5	2	0
5-9	-10	2	0
3-4	-15	1	0
2	-20	1	0
1	-25	1	0



STAT GAIN CHART

Roll on D100	DIFFERENCE BETWEEN TEMPORARY AND POTENTIAL STAT								
	1	2	3	4-5	6-7	8-9	10-11	12-14	15+
01-04	*	*	*	*	*	*	*	*	*
05-10	0	0	0	0	0	0	+1	+1	+1
11-15	0	0	0	0	0	+1	+1	+2	+2
16-20	0	0	0	0	+1	+1	+2	+3	+3
21-25	0	0	0	+1	+1	+2	+2	+4	+4
26-30	0	0	+1	+1	+2	+2	+3	+5	+5
31-35	0	+1	+1	+1	+2	+2	+3	+5	+6
36-40	0	+1	+1	+1	+2	+3	+4	+6	+7
41-45	0	+1	+1	+2	+3	+3	+4	+6	+8
46-50	0	+1	+1	+2	+3	+3	+5	+7	+9
51-55	+1	+1	+2	+2	+3	+4	+5	+7	+10
56-60	+1	+1	+2	+2	+4	+4	+6	+8	+11
61-65	+1	+1	+2	+3	+4	+4	+6	+8	+11
66-70	+1	+2	+2	+3	+4	+5	+7	+9	+12
71-75	+1	+2	+2	+3	+5	+5	+7	+9	+12
76-80	+1	+2	+3	+3	+5	+6	+8	+10	+13
81-85	+1	+2	+3	+4	+5	+6	+8	+10	+13
86-90	+1	+2	+3	+4	+6	+7	+9	+11	+14
91-95	+1	+2	+3	+4	+6	+7	+9	+11	+14
96-99	+1	+2	+3	+4	+6	+8	+10	+12	+15
100	+1	+2	+3	+4	+6	+8	+10	+12	+15

Locate the column corresponding to the difference between the temporary (real) stat and its potential and roll D100 to determine the amount the temporary stat increases by. Roll separately for each stat.

* A roll of 01-04 indicates that the stress of adventuring has caused a temporary regression of faculties. The stat (temporary value only) is **Reduced by double the amount rolled** (2-8). Note that this reduction is always possible, even if the stat has already reached its potential and thus all 10 stats must be checked for possible loss or gain. Stats reduced in this manner can be restored by stat gain rolls as subsequent experience levels are reached.

Note that this table can also be used to determine recovery from injury or disease. The GM merely assigns a reduction in the appropriate stat (Agility for a sprained ankle, Constitution for a disease, etc.) and allows the character to make periodic recovery rolls provided he observed whatever conditions were necessary for recovery (e.g.: bedrest). In this case, the column would be determined substituting the temporary value of the stat before reduction for the potential, and rolls might continue until the previous temporary was achieved (but not beyond).

SKILL RANK BONUS CHART

Skill Rank	Normal Bonus
0	-25
1	+5
2	+10
3	+15
4	+20
5	+25
6	+30
7	+35
8	+40
9	+45
10	+50
11	+52
12	+54
13	+56
14	+58
15	+60
16	+62
17	+64
18	+66
19	+68
20	+70
21	+71
22	+72
23	+73
24	+74
25	+75
26	+76
27	+77
28	+78
29	+79
30	+80

Plus 1/2 for each skill rank over Skill rank 30.

EXTENDED STAT BONUSES

	Option 1		Option 2	
STAT	BONUS	PP	BONUS	PP
100	+25	3	+25	3
101	+30	3.5	+30	3
102	+35	4	+35	4
103	+40	4.5	+40	4
104	+45	5	+45	5
105	+49	5.4	+50	5
106	+53	5.7	+55	6
107	+57	6	+60	6
108	+61	6.25	+65	7
109	+65	6.5	+70	7
110	+68	6.75	+75	8
111	+71	7	+80	8
112	+74	7.25	+85	9
113	+77	7.5	+90	10
114	+80	7.75	+95	10
115	+82	8	+100	11
116	+84	8.2	+105	11
117	+86	8.4	+110	11
118	+88	8.6	+115	12
119	+90	8.8	+120	12
120+	+1/lvl	.2/lvl	+5/lvl	.5/lvl

CHARACTER DEVELOPMENT CHART

		Armsman	Pilot	Explorer	Systems Tech	Electrical Tech	Arms Tech	Researcher	Physician	Engineer	Criminologist	Medic	Planetologist	Administrator	Entertainer	Theologist	True Telepath	Semi-Telepath
Maneuvering in Armor																		
Light Body Armor (AT5-8)	(Ag/St)	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*	1/*
Armored Body Suit (AT9-16)	(Ag/St)	1/*	1/*	1/*	2/*	2/*	2/*	3/*	3/*	2/*	2/*	2/*	2/*	3/*	2/*	3/*	2/*	2/*
Arm. Exoskeleton (AT17-20)	(Ag/St)	2/*	2/*	2/*	3/*	3/*	3/*	3	3	3	3	3	3	3/*	3/*	3/*	3/*	3/*
Powered Armor	(Ag/St)	2/*	4	4/*	4/*	4/*	4/*	11	11	4	11	11	11	11	7	11	11	11
Weapon Skills																		
Category #1 **	(Varies ¥)	1/5	2/5	2/5	2/7	2/7	2/7	2/7	3/9	2/7	2/4	2/7	2/5	2/6	2/5	2/7†	2/5	2/5
Category #2 **	(Varies ¥)	2/4	2/7	2/5	2/7	3/9	3/9	6	6	2/7	2/5	3/9	2/7	2/7	2/5	6	3/9	3/9
Category #3 **	(Varies ¥)	2/7	3/9	3/9	4	5	5	7	7	4	2/7	5	3/9	7	3/8	6	4	4
Category #4 **	(Varies ¥)	2/7	4	3/9	4	5	5	9	7	4	2/7	8	4	9	9	7	7	4
Category #5 **	(Varies ¥)	2/7	4	3/9	4	5	5	9	7	6	5	8	4	9	9	9	8	6
Category #6 **	(Varies ¥)	5	4	5	6	7	7	9	15	8	5	15	15	20	20	20	15	8
Other Categories **	(Varies ¥)	10	12	12	12	15	15	15	15	15	12	20	15	20	20	20	20	15
Targeting **	(—)	Must be developed separately for each weapon at the Normal Weapon Skill cost for that weapon.																
General Skills																		
Climbing	(Ag)	3/7	3	3/7	3/7	3/7	3/7	5	5	5	3/7	3/7	3/7	5	3/7	5	3	3
Swimming	(Ag)	2/6	3	2/5	2/6	2/6	2/6	3	3	3	2/6	2/6	2/6	3	2/6	3	3	3
Riding **	(Em/Ag)	2/6	3	2/5	2/6	2/6	2/6	3	3	3	2/6	2/6	2/6	3	2/5	2/6	2	2
Disarm Traps	(In/Ag)	4/8	4	2/5	2/5	4/8	4/8	7	7	4/8	2/5	5	2/5	4/8	7	7	5	4
Pick Locks	(In/Re/Ag)	4/8	4	3/6	2/5	4/8	4/8	7	7	4	1/4	5	4	3/6	6	7	5	4
Stalking & Hiding	(Ag/SD&SD)	2/5	3	1/4	3/6	3/6	3/6	6	6	5	1/4	5	3/6	3/6	2/5	6	3	3
Perception	(In/In/Re)	2/5	2/4	1/4	2/5	2/5	2/5	3	3	3	1/3	2/5	1/4	1/4	2/5	2/5	2	2
Driving **	(Ag/Qu)	1/6	1/3	1/6	1/5	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1	1/6
Atmospheric Pilot **	(Ag/Qu)	3/6	1/5	3/6	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	4/9	5	4
Marine Pilot **	(Ag/Qu)	3/7	1/4	2/5	2/5	3/7	3/7	3/7	3/7	3/7	3/7	3/7	2/5	3/7	3/7	3/7	3	3
Special Skills																		
Adrenal Defense	(—)	20	20	20	20	20	20	20	20	20	20	20	20	20	15	20†	7	15
Adrenal Moves **	(Pr/SD)	5	5	5	6	6	6	6	6	6	5	6	5	6	5	6	5	5
Martial Arts **	(Varies ¥)	1/5	3/7	3/7	3/7	3/7	3/7	3/8	3/8	3/8	2/7	3/7	2/7	3/8	2/7	3/8†	2/7	3/7
Ambush	(—)	3/8	3	2/5	5	5	5	9	9	9	2/5	5	3	9	3/9	9	3	3
Sniping	(—)	1/5	3/8	2/5	5	5	5	9	9	9	2/5	5	3	9	3/9	9	3	3
Linguistics	(—)	3/*	2/*	3/*	3/*	3/*	3/*	1/*	1/*	1/*	2/*	2/*	1/*	1/*	1/*	1/*	2/*	2/*
Body Development	(Co)	2/5	2/7	2/7	3/8	3/9	3/9	6	3	3	3/8	3/9	3/8	6	2/6	6†	5	5
Forgery	(Ag/Re)	5	5	5	5	5	5	5	5	4	2/5	5	5	2/5	5	5	5	5
Counterfeiting	(Ag/Re)	5	5	5	3	5	5	5	5	5	2/5	5	5	4	5	5	5	5
Survival **	(Co/Re)	1/3	1/3	1/2/2	1/4	1/4	1/4	2/4	1/4	1/4	1/4	1/4	1/3	2/4	1/4	2/4	1/4	1/4
Scanner Analysis **	(In/Re)	1/3	1/3	1/2	1/3	1/3	1/3	2/5	1/3	1/3	1/2	1/2	1/2	2/4	2/5	2/5	3	2
First Aid	(Em/Me)	1/3	1/3	1/3	1/4	1/3	1/4	2/4	1/2	1/4	1/4	1/2/2	1/4	2/4	2/4	1/4†	1/4	1/4
Communications	(In/Re)	2/4	1/2	2/4	4	2/4	4	8	8	5	2/5	4	2/5	2/5	8	8	7	6
Combat Skills																		
Combat Pilot	(In/Ag)	2/4	1/2	2/4	4	4	4	10	10	4	8	8	8	10	8	10	10	10
AFV Driver	(In/Ag)	1/3	1/2	3	1	3	3	10	10	4	4	4	4	7	10	10	10	10
Alien Environments	(Ag/SD)	1/2	1/2	1/2	2	2	2	4	4	4	4	4	1/3	4	4	4	4	4
Missiles	(In/Re)	2	2	2	2	2	1	10	10	4	8	8	8	10	10	10	10	10
Projectile Gunnery	(In/Ag)	2	2	3	3	3	1	10	10	4	8	8	8	10	10	10	10	10
Hvy. Energy Projectors	(In/Ag)	2	2	3	3	3	1	10	10	4	8	8	8	10	10	10	10	10
Mount. Wp. Ambush	(In/SD)	2/5	3/7	3/8	5	5	2/5	9	9	9	3	5	3	9	9	9	10	10
Electronic Warfare (EW)	(In/Re)	2/4	1/2	2/4	4	2/4	4	8	8	5	2/5	4	2/5	2/5	8	8	7	6
Astronautic Skills																		
Orbital Pilot	(Ag/Qu)	3	1/2	1	3	4	3	5	5	3	5	5	5	5	5	5	5	5
N-Space Pilot	(Ag/Me)	3	1/2	1	3	4	3	5	5	3	5	5	5	5	5	5	5	5
Hyperspace Pilot	(In/Re)	4	1/2	1	3	4	4	5	5	4	5	5	5	6	6	5	5	5
N-Space Astro.	(Re/Re/In)	4	1/2	1	4	4	5	5	5	4	5	5	5	6	7	5	5	5
Hyperspace Astro.	(Re/In/In)	4	1/2	1	5	5	4	5	5	5	6	6	6	6	7	5	6	5
Sensor Analysis	(In/Re)	3	1/2	1/2	4	4	4	3	3	3	4	4	1/2	4	5	5	6	5

CHARACTER DEVELOPMENT CHART

		Armsman	Pilot	Explorer	Systems Tech	Electrical Tech	Arms Tech	Researcher	Physician	Engineer	Criminologist	Medic	Planetologist	Administrator	Entertainer	Theologist	TrueTelepath	Semi-Telepath
Technics Skills																		
Mechanical Technics	(Ag/Me)	3	2	3	1/2/2	1/3	1/3	2	4	1/2	1/3	2	2	4	5	5	4	3
Weapon Technics	(Ag/Me)	2	2	3	1/2	1/3	1/2/2	2	4	1/2	1/2	2	2	5	5	5	3	3
Electronics Technics	(Re/Me)	3	1	3	1/2	1/2/2	1/2	2	4	1/2	1/3	2	2	4	5	5	3	3
Computer Technics	(Re/Me)	3	2	3	1/2	1/2/2	1/3	2	4	1/2	2/4	2	2	4	5	5	3	3
Power System Technics	(Ag/Me)	4	2	3	1/2	1/3	1/2	2	5	1/2	2/4	4	2	5	6	6	4	4
Crime Technics	(Ag/In)	4	4	3	2	2	2	2	6	1/2	1/2/2	4	4	2/4	2/5	6	4	4
Medical Technics	(Em/Me)	4	4	3	2	2	2	2	1/2/2	4	2	1/2/2	2	5	5	5	4	4
Cybernetic Technics	(Ag/Me)	3	3	2	1/2	1/2	1/2	2	1/2	1/2	2	1/2	3	5	6	6	4	4
Genetic Technics	(In/Me)	5	5	5	5	5	5	2	1/2/2	1/2	5	2/4	5	6	6	5	10	10
Scientific Skills																		
General Physics	(Me/Re)	1	1	1/2	1/*	1/*	1/2	1/*	1/2	1/*	1	1/2	1/2	1	2	1	1	1
Advanced Math	(Me/Re)	1	1	1/2	1/*	1/*	1/2	1/*	1/2	1/*	1	1/2	1/2	1/*	2	2	1	1
Chemistry	(In/Re)	2	2	2	2	2	2	1/2	1/2	1/2	2	1	1/2	2	3	3	2	2
Planetology	(In/Re)	2	2/4	1/4	2	2	2	1/2	2	1/2	2	2	1/2/2	2/4	3	2	2	2
Astronomy	(In/Re)	2	2/*	1	2	2	2	1/2	2	2	2	2	1/2	1/2	2	1/2	2	2
Metallurgy	(In/Re)	3	3	2	3	3	3	1/2	3	2	3	3	1/2	3	4	4	3	3
Tachyon Physics	(In/Re)	3	3	3	3	3	3	1/2	3	2	3	3	2	3	4	3	4	4
Medical Practice	(Ag/Em)	8	8	8	8	8	8	6	1/2	8	8	6	7	8	8	7†	8	8
Genetics	(In/Re)	5	5	5	4	4	4	1/2	1/2	3	4	2	5	4	5	1/4	10	8
Cybernetics	(In/Re)	6	5	5	3	2	4	1/2	1/2	1/2	3	2	4	6	7	7	10	8
General Biochemistry	(Em/Re)	2	2	1	2	2	2	1/2	1/2	2	2	1	2	2	2	1/2	2	2
Psychology [Xeno] **	(In/Em)	3	3	2	3	3	3	1/2	2	2	2	2	1	1/3	3/*	1/2	3	2
Medical Diag. [Xeno] **	(In/Em)	8	8	8	8	8	8	5	1/2	8	8	5	4	8	8	7†	10	8
Botany [Xeno] **	(Em/Re)	2	2	1	2	2	2	1/2	1/2	2	2	1	1	2	2	1/2	2	2
Zoology [Xeno] **	(Em/Re)	2	2	1	2	2	2	1/2	1/2	2	2	1	1	2	2	1/2	2	2
History [Xeno] **	(Re/Me)	3	3	2	3	3	3	1/2	2	2	2	2	1	1/2	2	1/2	3	2
Anthropology [Xeno] **	(In/Em)	3	3	2	3	3	3	1/2	2	2	2	2	1	1/3	1/2	1/3	3	2
Engineering Skills																		
Mechanical Engineering	(In/Re)	5	5	5	1	5	5	1	5	1/2	5	6	6	6	7	7	6	5
Weapon Design	(In/Re)	4	5	5	3	5	2	1	5	1/2	5	6	6	6	7	7	6	5
Electronics	(In/Re)	5	5	5	5	2	5	1	5	1/2	4	6	6	5	6	6	6	5
Computers	(In/Re)	6	6	6	6	2	6	1	6	1/2	5	6	6	5	6	6	7	6
Power System Theory	(In/Re)	7	6	7	4	6	3	1	7	1/2	6	7	7	7	8	8	10	7
Psion Lists																		
Base Psion Field	(Varies ¥)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	1/*	2/*
Second Psion Field	(Varies ¥)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2/*	5/*
Third Psion Field	(Varies ¥)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3/*	—
Fourth Psion Field	(Varies ¥)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4/*	—

Notes:

Stunned Maneuvers use SD for an additional stat modifier.

** — Each of these skill areas include several skills that must be developed independently of one another.

† — If the weapon or training is sanctioned, cost is 1/5 (medical costs are 3/5).

¥ — The stats for these skills are:

Ag/St ..... for Projectile Firearms,
Ag ..... for Energy Firearms,
Ag/St/St ..... for Melee Weapons,
Ag/St ..... for Thrown Weapons,
Ag/Ag/St ..... for Bow Weapons,
Ag/St/St ..... for Striking Martial Arts,
Ag/Ag/St ..... for Sweeps & Throws Martial Arts,
SD ..... for True Telepaths,
In ..... for Semi Telepaths (Base Field of Visions)
Em ..... for Semi Telepaths (Base Field of Alterations)
Pr ..... for Semi Telepaths (Base Field of Control)
SD ..... for Semi Telepaths (Base Field of Self-Mastery)

SECONDARY SKILL DEVELOPMENT COST CHART

Skill	Mods	Arms-man	Pilot	Ex-plorer	System Tech	Elect. Tech	Arms Tech	Re-searcher	Phy-sician	Engi-neer	Crimi-nologist	Medic	Planet-ologist	Admini-strator	Enter-tainer	Theol-ogist	True Telepath
Acrobatics	Ag/Qu	1/3	1/4	1/3	2/5	2/5	2/5	3/6	1/5	2/7	1/5	2/5	2/5	3/6	1/3	3/6	2/7
Acting	Pr/Em	2/5	1/5	1/4	2/5	3/6	3/5	3	1/5	2/7	1/4	2/5	2/6	1/5	1/3	1/5	2/7
Advertising	In/Re	7	5	3	4	4	5	2/5	3/6	2/7	1/4	3/6	3/6	1/3	2/5	3/6	2/7
Administration	In/Em	5	4	3	4	4	4	1/4	1/5	2	2/5	2/5	1/5	1/3	4	2/4	5
Animal Healing	Em/Re	4	4	2/5	3/5	5	5	5	1/2	4	1/5	1/2	2/5	5	4	4	5
Animal Train	Em/In	2/7	2/5	1/4	4	5	5	4	2/5	2/5	1/4	2/4	2/5	5	3	3	1/6
Appraisal	In/Re	2/7	2/5	1/4	3/5	3/5	2/7	3/5	2/5	2/6	1/5	3/5	3/5	4	1/5	4	3/6
Athletic Games	Ag/Qu	1/2	1/3	1/2	2/5	2/5	2/5	3/5	1/5	2/5	1/5	1/4	2/5	3/5	2/3	3/5	2/4
Caving	SD/Re	1/4	2/5	1/2	3	3	3	2/5	4	5	1/4	2/7	2/7	5	5	5	3
Contortions	Ag/SD	1/3	1/4	1/2	1/5	1/5	1/5	5	3/7	2/6	1/4	3	3	5	1/3	5	2/5
Dance	Ag/In	1/4	1/4	1/3	2/5	2/5	2/5	2/7	2/5	2/5	1/4	2/5	1/5	1/4	1/2	1/3	2/5
Diplomacy	Pr/In	2/5	1/4	1/3	2/5	2/5	2/5	1/4	1/4	1/4	1/2	1/3	1/3	1/2	1/4	2/3	1/3
Directed Psion	Ag/SD	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1/3
Disarming	Ag/Qu	1/2	1/4	1/5	2/5	2/5	2/4	3	2/4	3/6	1/4	1/5	2/6	5	1/3	5‡	2/5
Diving	SD/Ag	1/3	1/3	1/2	2/4	2/4	2/5	2/6	2/5	2/5	2/4	2/5	2/5	2/6	2/4	2/6	2/4
Drug Tolerance	Co/SD	1/3	1/3	1/2	2/5	2/5	2/5	5	2/5	2/6	1/3	2/5	2/6	4	1/4	5	1/2
Falsification	SD/Re	3	2/6	2/5	3	3	2/4	2/6	2/5	2/5	1/2	1/5	2/5	2/5	3	2/6	3
Foraging	In/Me	1/3	1/3	1/2	1/4	1/4	1/4	2/4	1/4	1/4	1/4	1/4	1/3	2/5	2/4	2/4	2/4
Frenzy	Em/SD	1/4	1/5	1/3	3	3	3	3	2/6	2/5	1/4	2	3	5	3	5‡	1/5
Gambling	Me/Pr	2/4	2/5	1/4	2/5	2/6	2/5	2/6	1/5	2/6	1/3	2/5	2/5	1/4	1/5	2/6	1/5
Interrogation	In/Em	2/7	2/5	1/4	3/5	3/5	2/7	3/5	2/5	2/6	1/5	3/5	3/5	3	2	2	3/6
Meditation	Pr/SD	2/5	1/5	1/4	2/5	3/6	3/5	3	1/5	2/7	1/4	2/5	2/6	3	2	1/2	2/7
Music	Ag/Em	2/6	2/6	1/5	2/6	2/6	2/6	2/6	2/5	2/6	2/6	2/5	2/6	2/6	1/3	1/5§	2/5
Navigation	Re/In	2/6	1/4	1/5	2/6	2/6	2/6	2/6	2/5	2/5	1/5	2/6	1/4	2/6	2/6	2/5§	2/6
Propaganda	In/Em	4	4	2/5	3	3	3	2/6	3	3	1/4	2/5	2/5	1/4	2/5	1/4	2/4
Public speak	Em/Pr	2/6	2/6	2/4	2/6	2/6	2/5	2/6	2/5	2/6	1/5	2/5	2/5	1/4	1/4	1/2	1/4
Quick-draw	Qu/Ag	1/2	1/4	1/5	2/5	2/5	2/4	3	2/4	3/6	1/4	1/5	2/6	4	2/4	4‡	2/5
Sailing	Em/In	2/6	2/6	1/5	2/6	3	3	3	2/7	2/6	2/5	3	3	3	3	3	3
Seduction	Em/Pr	2/6	2/5	1/6	2/6	2/5	2/5	4	2/6	2/7	2/4	2/6	2/6	1/5	1/3	2/4	2/4
Signaling	Me/SD	1/4	1/3	1/2	2/5	1/5	2/4	1/5	2/5	2/5	1/2	2/6	2/5	1/3	1/2	1/2	1/5
Singing	Pr/In	2/6	2/6	2/5	2/6	2/6	2/6	2/6	2/5	2/6	2/6	2/6	2/6	2/6	1/3	1/5§	2/5
Star-gazing	In/Me	2/6	2/6	1/5	2/5	2/6	2/6	2/6	2/5	2/5	2/5	2/6	2/6	1/5	1/5	1/4§	1/5
Subduing	Ag/Qu	1/2	1/4	1/5	2/5	2/5	2/4	3	2/4	3/6	1/3	1/5	2/6	3	3	3‡	2/5
Tracking	In/Re	2/5	2/5	1/4	3	4	4	5	2/6	3	1/3	3	3	5	5	5	2/6
Trading	Re/Em	2/7	2/5	1/4	3/5	3/5	2/7	3/5	2/5	2/6	1/5	3/5	3/5	1/4	1/5	2/5	3/6
Trickery	Pr/Qu	1/4	1/4	1/3	2/4	2/4	1/5	2/5	2/4	2/5	1/2	2/4	2/4	2/5	1/2	1/3	2/5
Tumbling	Ag/SD	1/4	1/5	1/3	3	3	3	3	2/6	2/5	1/4	2	3	3	1/3	3	1/5
Visual Arts	In/Em	3	2	2	2/5	2/5	3	2/5	3/7	3	3	3/7	3	3	2/5	3/7	2/5
Weather-watch	In/Em	2/7	2/7	1/5	3/7	3/7	3/7	2/7	3	2/5	2	3	1/4	2/6	1/4	1/6	3

Key ‡ If one weapon (or fighting technique) is sanctioned, cost is 1/2. § If skill is sanctioned, adolescent cost is 1 *

ROLEMASTER / SPACE MASTER CHARACTER DEVELOPMENT CHART

Skills & Categories	Non-Spell Users	Pure Spell Users of Essence	Pure Spell Users of Chan-neling	Pure Spell Users of Men-talism	Hybrid Spell Users	Semi-Spell Users	Astro-nauts	Tech-nicians	Scientists Re-search	Scientists Field	Com-muni-cators	True Tele-path	Semi-Tele-path
Maneuvering in Armor §	—	—	—	—	—	—	—	—	—	—	—	—	—
Weapon Skills	10*	15*	15*	15*	15*	12*	—	—	—	—	—	—	—
General Skills	20	20	20	20	20	20	—	—	—	—	—	—	—
Driving & Marine Pilot	20	12	15	12	12	12	—	—	—	—	—	—	—
Special Skills	25	18	20	20	15	20	—	—	—	—	—	—	—
Forgery & Counterfeiting	4	6	6	6	5	5	—	—	—	—	—	—	—
Survival	1/2	1/3	1/3	2	3	1/3	—	—	—	—	—	—	—
Combat Skills	20	25	25	25	25	20	—	—	—	—	—	—	—
Astronautic & Technic Skills	25	18	25	25	20	25	—	—	—	—	—	—	—
Scientific & Engineering Skills	25	20	25	25	20	25	—	—	—	—	—	—	—
Psion Lists †	20	20	20	12	15	20	—	—	—	—	—	—	—
Magical Skills	—	—	—	—	—	—	25	25	25	25	25	15	20
Spell Lists ††	—	—	—	—	—	—	25	25	25	25	25	12	15
Runes	—	—	—	—	—	—	12	10	8	8	10	6	7
Staves & Wands	—	—	—	—	—	—	15	10	9	9	15	7	8

Notes:

A "—" indicates that the DP cost is already given in the appropriate system (***RM*** or ***SM***).

If a skill category is given a DP cost, that cost applies to all skills/professions in that category that do not have a normal DP cost (e.g., a ***RM*** non-spell user has no "normal" DP cost for N-Space Astrogation). This chart gives DP costs for certain specific skills that do not have the skill category DP cost. Secondary skills not in both systems should follow this pattern.

§ — DP costs are the same as for equivalent armors in the two systems: Soft Leather = Light Body Armor; Rigid Leather = Pliable Armored Bodysuits; Chain = Mesh Armored Bodysuits; Plate = Armored Exoskeletons.

* — ***SM*** has seven more weapon categories than ***RM***; each ***RM*** profession should assign the cost given to two of the additional ***SM*** categories, his highest DP cost to two of the additional ***SM*** categories, and costs of 20 to the other three additional ***SM*** categories.

† — One Field only; may only learn lists to 5th level.

†† — Normally a ***SM*** character must choose one Realm of power; may only learn "Open" lists to 5th level. However, if the Realm of Mentalism is chosen, the cost is 4/* for True Telepaths ("B" portions for open lists, "A", "C" portions for closed lists) and 6/* for Semi-Telepaths (open lists only: "A", "C" portions).

31.0 REFERENCE

On the following few pages are a number of reference aids, designed to make it easier to conquer this mass of data which is ***Space Master***.

31.1 ABBREVIATIONS

Abbreviations are listed alphabetically within subcategories:

GAME SYSTEMS:

RM ..... ***Rolemaster***
SM ..... ***Space Master***

PROFESSIONS/CHARACTER CLASSES:

Adm ..... Administrator
Arm ..... Armsman
ArT ..... Arms Tech
Cri ..... Criminologist
EIT ..... Electrical Tech
Eng ..... Engineer
Ent ..... Entertainer
Exp ..... Explorer
Med ..... Medic
Pil ..... Pilot
Phy ..... Physician
Pla ..... Planetologist
Res ..... Researcher
SyT ..... Systems Tech
Tel ..... True Telepath
Thl ..... Theologist
/T ..... Semi-Telepath of Class ""

GAME AND TECHNOLOGICAL TERMS:

AT ..... Armor Type (a range of 1-30; see "CAT")
AT(DB) ..... Armor Type with Defensive Bonus given
CAT ..... Construction Armor Type (AT 21-30)
cumet ..... cubic meter
D10 ..... A die randomizer for a range of 1-10
D100 ..... A die randomizer for a range of 1-100
DB ..... Defensive Bonus
El ..... Elmonits (Cost in Electric Monits)
FTL ..... Faster Than Light
GCH ..... The Galactic Court of Humanity
GEM ..... Ground Effect Movement; Hovercraft or Turbofan Type
Grav ..... Gravitic movement or control
GM ..... Gamesmaster (game referee)
K ..... 1000 (a quantity of one thousand
km ..... kilometers
LS ..... Light Second (300,000km)
Lvl ..... Level (experience, attack, or Psion level)
LY ..... Light Year (the distance light travels in one year)
m ..... meters
M ..... Monits (hard currency denomination)
MA ..... Martial Arts
M/A ..... Matter/Antimatter
MERLOGH .. MERcantile League of Greater Houses
Mk.# ..... Mark number (measures an item's size, strength or power)
MM ..... Moving Maneuver
Mod ..... Modifier or Modification
NPC ..... Non-Player Character
OB ..... Offensive Bonus
PC ..... Player Character
PP ..... Power Points (for Psions)
Rd ..... Round (10 seconds of game time)
RR ..... Resistance Roll
SFRP ..... Science Fiction Role Playing
SM ..... Static Maneuver
SP ..... Special Maneuver
Stat ..... Statistic or characteristic
TBD ..... Tachyon Beam Dictor
VM ..... Vehicular Maneuver

PRIMARY SKILLS:

AdrDf ..... Adrenal Defense
AdrSp ..... Adrenal Moves (speed)
AdrSt ..... Adrenal Moves (strength)
AE:UW ..... Alien Environments/ Underwater
AE:ZG ..... Alien Environments/Zero Gravity
AFV ..... AFV Crewmember
Ambsh ..... Ambush
Anthr ..... Anthropology
ASrv ..... Arctic Survival
Astrn ..... Astonomy
AtmPt ..... Atmospheric Pilot
CbtPt ..... Combat Pilot
CompE ..... Computer Engineering
Comm ..... Communications
CompT ..... Computer Technics
CrimT ..... Crime Technics
Cyber ..... Cybernetics
CybT ..... Cybernetic Technics
DSrv ..... Desert Survival
ElecT ..... Electronics Technics
EW ..... Electronic Warfare
FAid ..... First Aid
Genet ..... Genetics
HAstr ..... H-Space Astrogation
HEP ..... Heavy Energy Projectors
Hist ..... History
HPt ..... H-Space Pilot
JSrv ..... Jungle Survival
Locks ..... Pick Locks
MA1St ..... Martial Arts Strike (Rank 1)
MA2Sw ..... Martial Arts Sweeps/Throws (Rank 2)
Math ..... Advanced Math
MdDia ..... Medical Diagnosis
MdPrc ..... Medical Practice
MdScn ..... Medscanner
MechE ..... Mechanical Engineering
MechT ..... Mechanical Technics
MedT ..... Medical Technics
MlScn ..... Multiscanner
MsArt ..... Missiles
MWAmb ..... Mounted Weapons Ambush
NAstr ..... N-Space Astrogation
NPt ..... N-Space Pilot
OrbPt ..... Orbital Pilot
Percp ..... Perception
Phys ..... General Physics
Pltgy ..... Planetology
PowT ..... Power Systems Technics
PrjG ..... Projectile Gunnery
Psych ..... Psychology
RpScn ..... Repair Scanner
Sensr ..... Sensor Analysis
Snip ..... Sniping
Targ ..... Targeting
Traps ..... Disarm Traps
WpnD ..... Weapons Design
WpnT ..... Weapons Technics
Zoo ..... Zoology

SECONDARY SKILLS:

Acrob ..... Acrobatics
Act ..... Acting
Adv ..... Advertising
Admin ..... Administration
AnH ..... Animal Healing
AnT ..... Animal Training
App ..... Appraisal
AthG ..... Athletic Games
Cav ..... Caving
Contort ..... Contortions
Dan ..... Dance
Diplo ..... Diplomacy
DirP ..... Directed Psion
DsArm ..... Disarming
Div ..... Diving
DrTol ..... Drug Tolerance
Fals ..... Falsification
Forag ..... Foraging
Frnzy ..... Frenzy
Gmblg ..... Gambling
Intrg ..... Interrogation
Medit ..... Meditation
Mus ..... Music
Nav ..... Navigation
Propg ..... Propaganda
PbSpk ..... Public Speaking
QDraw ..... Quick-draw
Seduc ..... Seduction
Signl ..... Signalling
Sing ..... Singing
StrG ..... Star-Gazing
Subd ..... Subduing
Track ..... Tracking
Trade ..... Trading
Trick ..... Trickery
Tumb ..... Tumbling
VArt ..... Visual Art
WthrW ..... Weatherwatch

31.2 GLOSSARY

AFV: (Armored Fighting Vehicle) A machine whose mode of travel is primarily overland, and is designed for combat or combat-support functions. Always armored; usually armed with mounted weapons.

Alterant Replicant: A pre-fetal mutation of an existing self- replicating cell. By manipulating the genetic material of the cell, desirable traits can be brought to the fore in the fully grown being. Alterant Replicants are often constructed with a specific purpose in mind.

Android: A robot designed to resemble a human or similar race to all appearances. They usually take the form of human males or females (although any life form could be reproduced), and so closely resemble them that a multiscanner or medscanner check is required . The most advanced Androids are equipped with self-programming Molecutronic brains capable of independent thought, and have very sophisticated internal systems to mimic human functions.

AR: (Acceleration Rating): the rate of change of speed a given ship is capable of.

Automatic: Refers to any weapon which is capable of rapid- fire bursts of ammunition.

CAT: Construction Armor Type. This refers to the ten ***Space Master*** Armor Types created for vehicles and ships which have armor far superior to anything conceptualized in ***Rolemaster***. Construction Armor Types are numbered 21-30, not necessarily implying a direct progression, but to indicate a superiority to the RM Armor Types 1-20.

Clone: A genetic duplicate of a specific human. Though genetically the same, the Clone may not be identical at maturity, since memories will differ, unless memories are restored — and even then the Clone's behavior will diverge.

CPU: (Central Processing Unit): the main processor of a computer. In ***Space Master*** the Mk. number of a computer is equal to its processing unit capacity. Since most programs require more than one Processing Unit each, probably substantially fewer programs than units can be run simultaneously.

Cultural Drift: This is a phenomenon which occurs when two or more groups of the same base society are separated from each other for extended periods of time. Over the generations, customs and outlooks change to the point that new and distinct cultures are born.

Cumet: Cubic meter.

Cyborg: (Cybernetic Organism) A sentient being with mechanical/electronic parts (such as limbs or organs). A Cyborg may or may not even resemble a Hominoid in appearance; the key defining factor between Cyborg and Android is whether or not the actual brain is living human flesh.

DB: Defensive Bonus: the total of a number of modifiers which affect how difficult it is to "hit" an opponent.

Decamonit: Monetary Unit equivalent to ten Monits.

Decimonit: Monetary Unit equivalent to one-tenth of a Monit.

Elmonit: (Electronic Monit) The standard unit of currency throughout the Imperium.

Empire: In the ***Space Master*** universe, Terran humanity has colonized many new worlds. After several attempts at creating a centralized government for humanity, a few ambitious leaders pooled their resources and built a great conquering fleet of starships. The result was the formation of a dictatorial Empire. The Empire consists of the Imperium (a large central territory) and a multitude of provinces, parcelled out in a feudal fashion to the Emperor's favorites.

Energy weapon: any distance weapon which projects an energy beam/burst as opposed to a physical projectile or missile weapon.

ER: Energy Rating — a term to designate the power requirement (or output) of a given facility.

Eugenics: Eugenics is the science of breeding programs which are meant to bring about improved physical or mental characteristics in future generations. This is accomplished by suppressing inferior traits and bringing forth superior, or desirable ones. Eugenic products are called Transhumans when the final generation has been successfully reached.

EW: Electronic warfare; Also known as Stealth or Cloaking systems. By arranging high-intensity electrical fields, certain constructs (ground vehicles, installations, starships, etc.) can be made to appear displaced or cloaked when viewed on detection displays. Electronic warfare is therefore an important consideration in ***Space Master*** combat and stealth operations. EW can be made to defeat opponent's EW measures, jam incoming homing-type missiles, and even block certain types of communication transmissions.

Fire: any distance weapon attack, this term corresponds to the "missile" concept in ***Rolemaster***, but is broadened to encompass projectile and energy weaponry.

FTL: Faster Than Light. When a device or transmission can be made to displace itself at a velocity greater than the propagation rate of electro-magnetism in hard vacuum, it is said to be FTL. Most matter or energy which can be made to go FTL enters an alternate cosmos know as the tachyon universe.

GCV: (Ground Conveyance Vehicle) A machine which requires a solid surface on or above which to operate, whether it be wheeled, tracked, gravitic, etc.

Genetic Drift: When an unrepresentative portion of a given race or species becomes separated from the rest of its society for great spans of time, genetic drift is likely to occur. After many generations, the genetic make-up of the splinter group will begin to diverge enough from the common stock to allow the designation of a new sub-species.

Gravitics: The technology of annulling, countering or creating artificial gravity. Gravitics has a variety of uses, from internal Starship stability maintenance to high-speed planetary flight.

Gravity Well: A term used to describe a specific radius about a large celestial body where it is dangerous to engage in a Hyper-shunt. The standard radius given is 500 x the diameter of the body itself.

Hectamonit: Monetary Unit equivalent to 100 (one hundred) Monits

Homeworld: A geosphere which is capable of supporting Terran life-forms. There are precious few of these naturally occurring celestial bodies, so they are in great demand as territorial capitols. Candidate home-worlds with unsuitable atmospheres can often be transformed into viable geospheres through the introduction of specially developed micro-organisms which can transform undesirable gases into desirable ones.

Hominid: A category of prehistoric animals which humanity evolved from.

Hominoid: A catch-all term used to designate; humans, xeno- humans, neo-humans, Transhumans, humanoids, Alterant Replicants and Clones of the above, as well as alien beings whose biochemistry is carbon based and whose form is similar to the classic hominid configuration.

Hominoid: Term used to describe any being or machine resembling the classic Hominid form. Humans and close mutations, Replicants of humans, Clones, and Androids all fall within the bounds of Hominoid. So also do any other sentient peoples possessing two arms, two legs and a head in the same basic arrangement as humans.

Hoofies: The little cloven things at the end of the legs of sheeps.

Humanoid: A sub-species of Homo sapiens. Humanoids in Space Master are often derived from Terran stock, having been transplanted to different planets in humanity's infancy. They attained their sub-species status through the workings of genetic drift.

Hypershunt: A term describing the actual transfer of a vehicle into Hyperspace. All travel in Hyperspace is measured via FTL displacement rather than "velocity". It is referred to as a 'shunt' because of the high-acceleration boost necessary for FTL travel.

Imperium: In the Space Master universe, the Imperium is the centrally located territory within the Terran Empire; encompassing the Emperor's homeworld (Terra) and a plethora of prosperous industrial and agricultural worlds.

Kilomonit: Monetary Unit equivalent to 1000 (one thousand) Monits

LS: Light Second. A measure of distance; one Light Second equals the distance traveled by light in one second of time. 300,000 km.

LY: Light Year. A measure of distance; one Light Year equals the distance traveled by light in one Standard Year.

M/A: Matter/Antimatter — relating to a power source derived from the mutual annihilation of certain particles of matter and antimatter.

Mark (Mk.): A numeric designation to indicate the power of a given weapon or system. There is not necessarily any interrelationship between systems unless specifically indicated.

Melee: Hand-to-hand combat (as opposed to "fire" combat) where opponents are physically engaged — be it a fistfight, a duel with rapiers, or a wrestling match. All of these are considered melee.

Memory Size: A quantification of a computer's program storage capacity rated with respect to Mk.#.

Missile weapon: In ***Space Master*** this indicates a weapon which manually fires an airborne projectile, such as an arrow from a bow or a quarrel from a crossbow. This does not include projectiles fired by explosions or other high-velocity propulsion means. Thrown weapons are also included in this area.

Molecutronic: The ultimate electronics technology, molecutronics stores data in a method similar to that of the human brain, but much more efficiently. The pinnacle of true molecular electronics is the *Molecutronic Brain*, a self-contained entity most often employed in androids. It is capable of learning and independent thought.

N-Space: Normal Space — as opposed to the interdimensional realm of Hyperspace.

Neo-human: A designation used to describe those beings who embody the next evolutionary threshold of man-kind. Neo-humans are superior (mentally and physically) to normal humans.

OB: Offensive Bonus: the total of a number of modifiers which affect an attacker's chances of hitting an opponent with a weapon.

Projectile weapon: As opposed to a missile weapon, this indicates a device which mechanically fires a high-velocity projectile.

Province: In the ***Space Master*** universe, a province is a territory of space which may encompass any number of systems. Although within the boundaries of the Terran Empire, a province is not directly administered by the Emperor, but rather by Imperially designated governors. These governors often start dynasties to perpetuate their legacy, giving rise to the formation of a noble class within the society. These dynasties have evolved into Royal Families.

Psion: Referring to Telepathic/Psionic power; the act of using such power. This corresponds the the Rolemaster term "Spell" which refers to the use of a magical ability.

Replicant: See *Alterant Replicant*.

Reserve Storage: A computer component which stores programs which are not being run in the CPU, and can not be held in the memory unit due to size limitations.

RIF: Relative Inertial Field — necessary for hyperspace travel, it suspends certain relativistic and inertial physical properties.

Robot: Any self-motive powered machine with manipulative limbs.

Sensor: From the acronym: SENSR (Selected Electromagnetic/ Neutrino-Stream Reflection). This refers to a system using selectively treated, hyperlight-accelerated neutrino (and photino) beams. They are completely harmless and almost undetectable. Range varies, but there is distortion beyond about 50 light-years.

Sentient: A being (biological or mechanical) which is intelligent and has self-awareness.

Sex: Ask your mother.

Skill: Refers to a bonus acquired by a character through practice and aptitude. Whenever a specific skill is mentioned, it refers to one found in.

SMAC Fighter: (Singly Manned Attack Conveyance) Fighters are a classification of small, highly maneuverable ships with a single pilot/gunner designed primarily to assault other space vehicles. Some are capable of in-atmosphere flight (and so attack planetary defenses) and landing. Most are short-range, possessing no hyperspace travel capability, and have only a small cockpit with limited pilot mobility potential. The emphasis is on sublight speed and maneuverability, and high-output weaponry.

Speed of Light: The rate of propagation of electro-magnetic radiation in hard vacuum. Light travels at 300,000 km per second or 30,000 km per round.

Standard Day: 25 hours.

Standard Day: The standard galactic day in ***Space Master*** is 25 hours long — the time found to be most natural for human circadian rhythms. Hours and minutes remain intact from Old Earth timekeeping.

Standard Year: 350 Standard Days.

Stealth: See *EW*.

Sub Light: Moving or existing in normal space-time.

Tachyon Beam Dictor: Communications system utilizing tachyon beams (more stable over a long range than neutrinos) to transmit information. Effective range is about 50 light-years without relay.

Terran: Having origins on Terra (earth).

Transhuman: Term for a eugenically improved human.

Xeno-human: A Homo sapiens who is unable to trace his history back to Terra. A human from a non-Terran society.

Xeno: Something alien (usually from the perspective of Terrans).

Xenophobia: The fear of something alien to one's society.

THE TECH BOOK



PART I: SPACE MASTER CATALOGUE

"Nan et ipsa scientia potestas est."
("Knowledge itself is power")

Francis Bacon
Religious Meditation

1.0 INTRODUCTION

The universe of ***Space Master*** is the far future, where science has achieved in reality what can only be guessed as possible today. A brief framework of the "current" state of such technology may be helpful in understanding many assumptions and assertions in other parts of this book. Power sources in ***Space Master*** — as well as several other elements which bear explanation — are discussed in detail later in this section.

1.1 LEVELS OF TECHNOLOGY

Below are listed a series of key achievements in Science and Technology. Although the exact order of the specific entries might vary from civilization to civilization, the progression is very similar in any technic society.

- **Vacuum Tubes:** The infancy of electronics.
- **Fission Nuclear Power:** Heavy atoms split to create heat energy, converted to electricity with steam-driven turbines.
- **Transistor Electronics:** Vacuum tubes are replaced by (relatively) compact circuits. First crude computers are constructed.
- **Microchip Electronics:** Silicon chips — vastly more compact and inexpensive than transistors — spread technology.
- **Superconductors:** Practical superconductive materials (which operate without the need for extreme cooling) are synthesized, opening doors to other avenues of advancement.
- **Sentient Cloning:** Successful cloning of a human being is achieved. No memories are carried over, however. Laws banning cloning for "spare organs" limit the practice.
- **Optronics:** Optical electronics, the next step beyond silicon microchips, leaps to the forefront. Utilizing light patterns and laser reading, memory systems are able to store and transmit vast quantities of information at high speed.
- **Thermalectric Power Conversion:** One development as a result of superconductor technology, electric power can be generated directly from heat energy, bypassing bulky and inefficient steam turbine systems in reactors. Microfusion reactors are soon developed.



- **Controlled Fusion Power:** Advancing laser and electromagnetic technologies make fusion power generation practical. A renaissance of inexpensive electrical power ensues.
- **Cryogenic Hibernation:** Control of human physiological functions to put sentients into cryogenic sleep perfected.
- **Molecular Data Storage:** The precursor to Molecutronics, this system stores information by a method (similar to the human brain) even more dense than optically, and hundreds of times more efficiently than magnetic databanks.
- **Sentient Alterant Replication:** Relaxing of genetic control laws allow for experimentation. Several societies practice controlled breeding. Alteration of fetuses on a chromosomal level is done successfully, allowing creation of beings "predesigned" to certain professions or tasks.
- **Gravitic Field Control:** The force of gravity is mastered. Fields which can annul or mimic it are produced cheaply.
- **Molecular Electronics:** After many failures, living circuitry is created, and can be reproduced ("grown") very inexpensively. Utilizing a radically different processing method than any previous system, it is not unlike the synapse of the brain. Molecutronics is born.
- **Sensor Beams:** The term *Sensor* in ***Space Master*** is actually a bastardization of the acronym: SENSR (Selected Electromagnetic/Neutrino-Stream Reflection). This all-encompassing title refers to a system used by nearly all sophisticated sensing systems from Multiscanners to starship sensor banks. The power and flexibility of Sensors far exceeds such early analysis tools as spectroscopy and gravitic scans, being able to bombard a target area with selectively treated, hyperlight-accelerated neutrino beams (which have no mass and can thus travel at hyperlight speeds). Depending on their 'treatment' (a temporary electromagnetic or gravitic charge) and whether they return to the sensing device, the neutrino beams provide data on the nature of the target in great detail. Neutrino beams are completely harmless and almost undetectable, and they can pass through almost unlimited amounts of intervening matter if desired, to reach the scan target. The results are almost instantaneous.

  Sensor range is dependent almost exclusively on the power of the sensing device itself, although there is inevitable distortion beyond about 50 light-years. Beyond about one light-year detailed analysis is limited; however, it is accurate enough at this range for a ship to plot a reasonably safe Hyperspace shunt. Analysis under one-LY range is extremely useful to ships as they drop out of hyperspace near a star system and require a swift, complete analysis. Such a study using speed-of-light analysis beams would take hours, if not days.



- **Stealth Fields:** Developed in its earliest forms almost immediately after the invention of the Sensor, the Stealth Field as it is often called, absorbs, attracts or distorts the treated neutrinos sent out by sensor beams, thus making it appear as if there were nothing there to detect. The field does the same with other radiations — including visible light — so that the craft or object surrounded by a Stealth Field reflects no radiation. Of course, the field is not perfect, and there is an inevitable warping around the craft. Because of this there are EW/Stealth operators who monitor and manipulate the field to enhance its effectiveness. The Stealth field has a myriad of uses in warfare. For instance, the field can be extended out from the ship in such a manner that it can 'fool' incoming missile tracking system into believing that the ship is much closer than it really is, thus triggering the missile proximity fuse.
- **Tachyon Communication:** the Tachyon Beam Dictor, while by far the fastest mode of long range communication, is far from the perfect solution. The Dictor utilizes Tachyon beams (more stable over a long range than neutrinos) to transmit information. The dictor has an effective range of about 30 light-years, and this creates the necessity for a message to be relayed several times if it has a long way to travel. This creates serious security problems for sensitive information. An additional drawback is that the beam must be very carefully aimed, and so useful Dictors must be located on installations with very predictable movements, such as orbiting space stations (the beam does not travel well through planetary atmospheres either; standard laser transmission is used for ground to orbit communication). Dictors can also be used between ships if each has a sensor-lock on the other, so that the beam may be properly aimed. This allows for instantaneous communication between ships which may be across a solar system from each other, where a laser transmission would take hours to be received.
- **Artificial Sentience (Android Construction):** The natural followup to Molecutronics is the self-programming, "thinking" brain, placed in a mobile framework. Some true Androids are indistinguishable from living sentients without a scanning device.
- **Relative Inertial Field Suspension:** The control of inertia and — by methods not completely understood — relativity opens the door to faster-than-light travel. Unfortunately, fusion power is not up to the task of a controlled hyperspace shunt. The door is ajar but no one can pass through.
- **Controlled Matter/Antimatter Power:** The creation of *Andrium* leads to the harnessing of the most powerful source of energy yet: the mutual annihilation of matter and antimatter. This energy is so great, however, that it is not feasible for use as a sublight ship propulsion system. However, the massive energies are ideal to shunt a craft into hyperspace.
- **Hyperspace Shunt:** The technique is perfected, and the human race explodes across the galaxy.

1.2 ENERGY SOURCES IN THE TIME OF *SPACE MASTER*

Three basic types of energy-generation are considered in ***Space Master***. They are: Fission, or the splitting of heavy atoms and tapping the released heat energy; Fusion, or the joining of two atoms to form another (the power source of suns); and Matter/Antimatter, where Antimatter is allowed to come into contact with matter in limited quantities, at which point they annihilate each other.

- **Fossil Fuels:** Coal, oil, and natural gas all were burned initially for heat energy, then the heat was converted to electricity.
- **Hydro/Aeroelectric:** A cleaner form of energy using the power of water flows or wind to spin turbines and generate electricity, it is nevertheless impractical on many high-tech industralized worlds and certainly in any application other than for planetary, immobile power needs.
- **Solar:** More flexible than the above, solar energy still suffers from a lack of compactness and (to some extent) portability. It is clean, however, and is still finds many uses where solar radiaiton is abundant and dependable.
- **Fission:** This is heat energy created from the splitting of heavy atoms such as Uranium and Plutonium. Dangerous radiation is associated with this form of energy, though modern alloys can shield most such radiation. Fuel is in the form of pellets of the heavy material; these pellets are held in fuel 'rods'.
- **Fusion:** Overall, Fusion is an almost ideal combination of a much cleaner, powerful and plentiful source of energy than any of the forms listed above. Many sublight ships use fusion reactors, which generate heat from the joining of two 'heavy' hydrogen atoms (deuterium) to form a helium atom. This process releases a tremendous amount of relatively 'clean' (radiation-free) thermal energy. The heat to cause the fusion reaction is in most cases created by banks of high-intensity lasers — the most compact and efficient method under ***Space Master*** technology. Small, portable reactors are most often fusion in nature, both because of the ease of acquiring fuel and their relatively simple design and safe operation.
- **Matter/Antimatter:** This type of reactor is the most powerful and efficient by far — though initially the most expensive. By the time of ***Space Master***, however, it is the predominant method aboard advanced spacecraft, which require — more than any other application — large quantities of power from a limited volume. The fuel utilized in the vast majority of M/A reactors and engines is an specific type of dense antimatter. When matter and antimatter are combined to fuel a reactor or engine, electromagnetic fields of incredible force are needed to contain or direct the energies thus unleashed, fields many times more powerful than those needed to contain fusion reactions.

  Antimatter is collected by bombarding certain very rare elements with specific types of radiation which strips away — via a fission process — the protective nucleus barrier isolating the antimatter subatomic elements. The initial fissioning generates intense radiation: the only dangerous radiation in the process (other than raw heat of course). Thus exposed, the antimatter elements are ready to be combined with normal matter to create the annihilation. Ships are fueled with the material while it is still 'neutral' — the antimatter is safe within the subatomic field. The ship reactor or engine "strips" the atoms then triggers the controlled annihilation.

Antimatter is, of course, a highly volatile material, since its coming into contact with *any* normal matter will cause it to utterly and violently destroy as much of that matter as is equal to its own mass. For this reason, 'hot' antimatter is stored at all times in electromagnetic 'bottles', held separate from any matter. While so stored, the energy to hold the antimatter suspended is relatively low. For items like M/A Torpedoes, the antimatter is pre-stripped and tapped into a storage 'bottle' in the torpedo. The technology level assumed in ***Space Master*** is capable of full control of matter-antimatter annihilation, a power source with potential far beyond fission or even fusion. However, M/A reactors are the most costly as an initial investment, due to their necessary sophistication. Fuel is also a cost consideration. Antimatter might not even be available in many areas, where Technic development has lagged behind. In addition, it is quite possible for a ship to have M/A translight engines while having a fusion reactor, as engine design is much less complex than reactor configuration. Indeed, in ***Space Master*** technology, effective translight travel is not possible without M/A, since only the raw power released by destruction of matter can shunt a craft into hyperspace at a velocity which makes frequent interstellar travel feasible. All state-of-technology reactors in ***Space Master*** utilize thermalectric conversion to adapt the tremendous heat energy into more usable electrical power; a far more compact and efficient method than the immensely crude steam turbines used on pre-starflight Terra. M/A drives are more basic, using the reaction from the powerful annihilation as thrust.

2.0 PERSONAL WEAPONS

Below is a description of the weapons available for characters in ***Space Master***. Following this is a *Master Equipment Table* pg. 26-27. Many weapons in this listing require a power supply to fire: following the standard ***Space Master*** progression of energy sources, weapons will be keyed to their specific needs in their descriptions, as well as in the summary chart.

Power Supply Key:

* : Cell
† : Cartridge
‡ : Pack
§ : Microfusion Reactor

A more complete breakdown of power supplies can be found in Section 3.8.

2.1 PROJECTILE WEAPONS

Conventional Pistols

Coming in Light, Medium and Heavy versions, conventional pistols are slug throwing personal defense weapons. The models represented in the game are semi-automatic weapons, meaning that once a bullet is discharged, another is immediately available to fire. Ammunition of the proper caliber is interchangeable with conventional machine pistols.

Conventional Machine Pistols

In two versions, machine pistols are nothing more than embellished pistols, given offensive punch through an automatic fire capability. When used in a semi-automatic (single shot) mode, range characteristics remain the same, but less ammunition is expended in each attack. Ammunition of the proper caliber is interchangeable with conventional pistols.

Conventional Rifles

Rifles are long range slug throwers which come in Light, Medium and Heavy versions. They are semi-automatic weapons, and thus incapable of burst fire. Their ammunition, if of the proper caliber, is interchangeable with assault rifles.

Conventional Assault Rifles

Assault rifles, which come in Light and Medium versions, are short rifles with automatic fire capability. When used in a semi-automatic (single shot) mode, their effective range performance characteristics increase. Their ammunition, if of the proper caliber, is interchangeable with rifles.

Conventional Machine Guns

Machine guns are fully automatic slug throwers with excellent range and durability. Although there are only two calibers (10mm and 12mm) of MG's represented in the game, machine guns come in Light, Medium and Heavy models. The differences between the Light and Medium versions are based on how the weapons are mounted, not the caliber of the bore. Light machine guns are fired from a bipod at the end of the barrel, while Medium machine guns are fired from a tripod or otherwise more stable mount. As one can see from the range differences on the *Master Weapons Chart 1* pg.65, the stability of the Medium MG's firing platform dramatically increases its effective range. It stands to reason that one can turn a Light MG into a Medium MG (and vice versa) by changing the mount. Light and Medium belt and magazine ammunition is interchangeable between these two weapons.

Conventional Shotguns

Of the shotguns represented in ***Space Master***, there are two basic bores (15mm and 20mm), with three different variations of each (standard, sawed-off and autoshot). Shotguns are unique in that their very design is conducive to a variety of uses. For instance, merely changing the ammunition used can turn a shotgun into a flechettegun (which fires metal slivers instead of metal shot), or a slug thrower (by exchanging shot for a single slug). In addition, sawing off the shotgun's barrel will produce a more easily concealable weapon which trades off its already limited range. The autoshotguns provide burst fire through an automatic reloading mechanism. The various kinds of shotgun ammunitions are interchangeable between shotguns of the same bore.

Needleguns

Needle pistols, carbines and rifles fire a spray of metal slivers by way of a sophisticated spring mechanism. Because no explosives are required to propel the slivers, Needlers are almost completely silent weapons. Needle ammunition is not interchangeable between the three classes of needleguns because the slivers become larger (increasing the effective ranges and penetration power) as the classification of gun increases. All Needleguns tend to be notoriously small, with short barrels, making them easily concealable. They are excellent (and quite deadly) close quarter weapons.

Tangleguns

Tangleguns fire a special ammunition which, upon hitting the target, expands, enveloping the foe with tough fibrous strands. There are three types of tangleguns, a pistol, carbine and rifle. Their ammunition is not interchangeable.

Taserguns

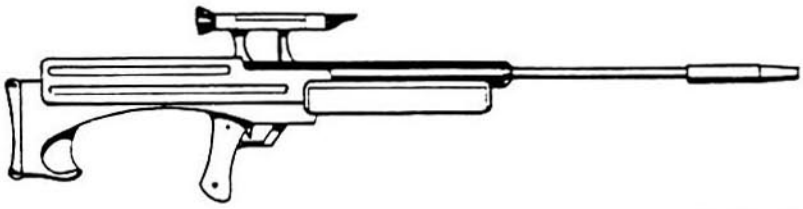
Tasers are devastating stun weapons. The three versions (pistol, carbine and rifle) each fire a prong or barb which trails behind it a fine conducting wire connected to the shell. If the barb manages to strike the target's skin, a small power source located in the shell discharges a strong electric jolt. The effective ranges of these weapons are restricted by the low carrying weight of the barb and the amount of wire which can be spooled out by the shell. The ammunition of these three tasers is not interchangeable.

Rocketguns

Rocketguns, of which there are three types (pistols, carbines and rifles), are specially constructed launching mechanisms for self-propelled small caliber ammunition. Ammunition is completely interchangeable between the three types of rocketguns.

Magnetic Linear Accelerators

MLA Pistols (†) and Rifles (‡) have special conducting-coil barrels which, when powered, accelerate MLA ammunition to exceptional velocities. Imparted with such momentum, MLA slugs are the ultimate in hand-held, anti-personnel stopping power. The size of a "Linex" (as the technology is referred to) weapon is telling; the pistol barrel length is never less than 40cm, while the rifle barrel can be well over 1.5 m long. Pistol and rifle ammunition is interchangeable.



LASER RIFLE
Kashmere Tools

Grenade Launchers

Grenade launchers come in many shapes and sizes, all having different performance characteristics. The one represented in the game is a standard version. It may be a weapon unto itself, or a version fused alongside the barrel of another gun. The range characteristics listed in the *Master Weapons Chart 1* are indicative of the standard propellant charge which most rifle-launched grenades have. Therefore, ranges will vary if stronger or weaker propellant is used.

Rocket Propelled Grenade Launchers

These launchers are merely mechanisms to discharge rocket propelled grenades. The may be disposable (after one launching), or reusable. The range characteristics listed in the *Master Weapons Chart 1* are indicative of two things: 1) the standard propellant charge with which most rocket propelled grenades are issued, and 2) the limit of effective targeting for an unguided warhead over a distance. With these considerations in mind, the GM may wish to vary the range of a given RPG slightly if the propellant charge was altered.

Portable Missile Launchers

Portable missile launchers are firing mechanisms for small guided or unguided missiles. Because of the variety of missile types, no range characteristics are listed in the *Master Weapons Chart 1.* A listing of the various types of portable missiles, and their range characteristics can be found in the Ammunition Section, pg.12. Basically, the PML and the PML Quad are breach-loading tubes on a rifle stock. The stock alone harbors the firing control, and the guidance system (if guided missiles are used). The PML Autoload weapon uses a single launching tube but is compatible with a magazine feeder, eliminating the necessity of breach-loading the device. Because portable missiles are somewhat standardized in physical size, a PML could theoretically fire any MK. number of portable missile from Mk.1 through Mk.5.

2.2 ENERGY WEAPONS

Lasers

Man-portable laser weapons function on the premise that a highly cohesive, layered stream of homogeneous electromagnetic radiation can be delivered to a target causing a "burn-through" of armor and subsequent heat damage to the victim. Lasers have the advantage of being absolutely silent when discharged, and their beams are virtually invisible unless observed in the infra-red or in pitch darkness. There is no noticeable recoil when a laser fires. Their disadvantages lie in size and durability. By necessity, laser barrels are quite long and unwieldy, and any misalignment of the delivery system will cause a malfunction. Lasers also lose effectiveness as they fire through smoke or anti-laser aerosols.

Lasers are represented in the game by five general types. The Mini Laser (*) is significantly miniaturized by most standards of this technology and so can fit onto the end of a fingertip. The Laser Pistol (*) is a comfortable hand-held weapon, despite its longish barrel. The Assault Laser (†) and Laser Rifle (†), though effective offensive weapons, are cumbersome. Their greatest strength lies in their range characteristics. The Heavy Laser (‡) is an excellent support weapon when mounted on a firing platform.

***Note:** the GM may wish to introduce light and medium versions of the Heavy (support) Laser with reduced range.*

Blasters

Blasters, or, more properly, particle beam weapons, contain miniature particle accelerators. When the weapon is discharged, the light atomic nuclei in the accelerator are shot out at the target. Unfortunately, once released from the mechanism, the "blast bolt" tends to lose cohesion and becomes rather random in its flight and hitting power. When discharged, blasters emit a piercing screech, and have a slight recoil.

Blasters are represented in the game by five general types. The Mini Blaster (*) is small enough to be concealed in the palm of a man's hand. The Blast Pistol (*) is a favored weapon due to its wieldiness and excellent defensive capabilities. The Assault Blaster (†) and Blast Rifle (†) are popular military weapons because of their relative reliability The Heavy Blaster (‡) is a devastating weapon only limited by its range characteristics.

Flamers

Flamers propel a chemical mix which both adheres to its target and burns for an extended period of time. Once ignited by the discharging mechanism, the flamer chemical mix is almost impossible to extinguish until it has consumed itself. Flamers tend to make a satisfying "Whoosh" sound when discharged. Oxygen is required for the chemicals to burn, so flamers are useless in vaccuum or oxygen-starved atmospheres.

Five flamer types are represented in the game. The Mini Flamer (*) is small enough to be fired from the wrist of a man if its power supply is strapped to the wielder's forearm. The Flame Pistol (*) is considered a good close-range weapon. The Assault Flamer (†) and Flame Rifle (†) have a fair offensive capability, and are only restricted by their range characteristics. Heavy Flamers (‡) are support weapons to be feared at close because of their fair range and superior burning effects.

Stunners

Stunners pulse strong electromagnetic radiation at their targets. At the frequencies used for these weapons, stunners tend to shock and disorient their foes. Because sound pressure waves are not the medium for the discharge, stunners are weapons equally capable in atmospheres or vacuum. They make no noise when discharged, emit no visible beam, and have no recoil. Stunners are excellent non-lethal, suppression systems.

There are five general stunner types represented in the game. The Mini Stunner (*) is so small that it can be concealed in almost anything, from a false eye, to a chemical lighter. The Stun Pistol (*) is a favored police weapon on non-violent worlds because of its capacity to subdue foes at close range. Assault Stunners (†) and Stun Rifles (†) are often used for riot control and similar exercises. The Heavy Stunner (‡), with its arc firing capability, makes an excellent non-violent crowd control support weapon.

Disruptors

Disruptors use the same attack delivery principle as stunners. However, at the frequencies used for these weapons, disruptors set up sympathetic vibrations with the target's molecular structure. Disintegration of chemical bonds is the normal effect, causing massive destruction within the target. Often, the end result in a living target is quite gruesome. Cells explode, bones shatter, and blood vessels rupture.

There are five general disruptor types represented in the game. The Mini Disruptor (*) is a typically small espionage device. The Disruptor Pistol (*), Assault Disruptor (†), and Disruptor Rifle (†) are increasingly deadly and cruel weapons used almost exclusively by the military. The Heavy Disruptor (‡) is a truly evil weapon when used against organic targets, and is thus severely monitored.

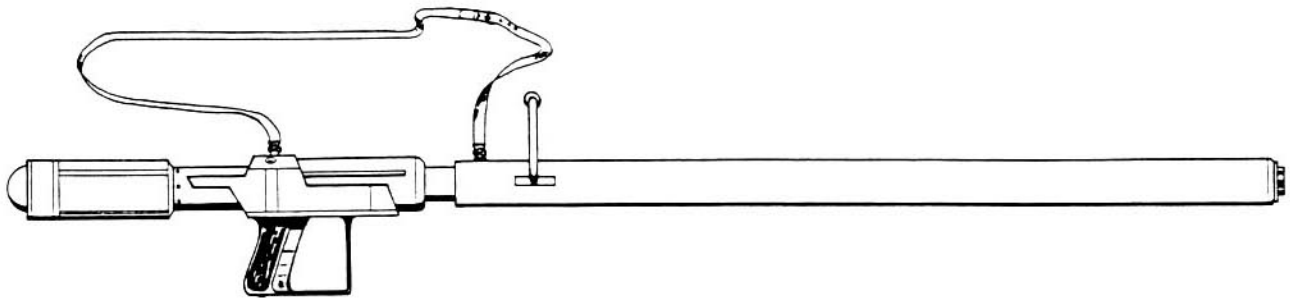
Struptorguns

Struptorguns are unique in that they incorporate both a stunner mechanism and a disruptor mechanism in the same weapon. Invariably, struptorguns have two settings; "STUN" and "DISRUPT". One merely flips a toggle on the weapon's breach to obtain a different effect. In all respects, struptorguns adhere to the descriptions of Stunners and Disruptors found above.

Plasmatic Repeators

Man-portable plasma weapon technology is an offshoot of the blaster firing system. Essentially, plasma attack mechanisms heat accelerated particles by means of their microfusion reactor power supply. The resulting super-heated, sub-atomic particle plasma can then be shot out of the accelerator with devastating effects. The weapon is termed a "repeator" because the limited magnetic containment apparatus inside a plasma weapon can neither hold very much plasma nor hold it for a very long time. Thus, small bolts of plasma are discharged in rapid succession, for once the containment vessel is evacuated, newly generated plasma quickly fills it and is ready for discharge again. The net result is a weapon system that spits out bolt after bolt of hot plasma, with menacing "cracking" sounds and moderate recoil. Plasmatic repeators are by no means ideal weapons; they quickly drain their power supplies, the individual bolts retain the blaster's inherent unpredictability, and they are invariably large and cumbersome.

Two types of plasmatic repeators are represented in the game. The Plasma Repeator Rifle (§) is just unencumbering enough to be held as a two-handed weapon, though it is still quite unwieldy. The Heavy Plasma Repeator (§) is actually a support weapon requiring a firing platform for full effectiveness.



PLASMA REPEATOR RIFLE
Haunt/Ridley

2.3 WEAPON DESCRIPTIONS

The weapons available to characters in ***Space Master*** are many and varied. There are essentially four different kinds of personal weapons: Projectile Weapons, Energy Weapons, Melee Weapons, and Archaic Missile Weapons.

The Projectile Weapons are noteworthy because they generally carry their ammunition in magazine clips or require breach loading. Projectile Weapons capable of burst fire discharge several projectiles in quick (automatic) succession. Each burst fired represents the discharge of five to ten individual slugs/shells (exactly five slugs/shells for bookkeepers).

For those weapons capable of both burst (automatic) and single shot (semi-automatic) fire, careful track of ammunition expenditures will be necessary. A burst may be followed by two single shots, then another burst, and then another single shot. Before you know it, you have no idea how many more shells your magazine is holding. In such instances assume the hard and fast rule that a burst represents five (5) rounds fired, and that a single shot represents one (1) round fired. If a magazine holds fewer than five rounds at any given time, do not allow the burst fire option.

Energy Weapons are unique in that it is not necessary to keep track of ammunition expenditure. Power supply depletion for Energy Weapons is handled through the weapon failure rules. If the unmodified attack roll of an Energy Weapon falls within that weapon's failure range, there is a probability listed at the bottom of the respective attack chart which indicates that a power supply failure has occurred.

2.31 PROJECTILE WEAPONS

Conventional Pistols

5mm Pistol: Can fire up to two shots per round using the *Small Projectile Attack Table* (15.1) Mk.1.

10mm Pistol: Can fire up to two shots per round using the *Small Projectile Attack Table* Mk.2.

12mm Pistol: Can fire up to two shots per round using the *Small Projectile Attack Table* Mk.3.

Conventional Machine Pistols

5mm Light Machine Pistol: Can fire up to two bursts per round or two shots per round (or combination adding to two), using the *Small Projectile Attack Table* Mk.1. Both burst and single shot fire use the same range characteristics.

10mm Medium Machine Pistol: Can fire up to two bursts per round or two shots per round (or combination adding to two), using the *Small Projectile Attack Table* Mk.2. Both burst and single shot fire use the same range characteristics.

Conventional Rifles

5mm Light Rifle: Can fire up to two shots per round using the *Small Projectile Attack Table* Mk.1.

10mm Medium Rifle: Can fire up to two shots per round using the *Small Projectile Attack Table* Mk.2.

12mm Heavy Rifle: Can fire up to two shots per round using the *Small Projectile Attack Table* Mk.3.

Conventional Assault Rifles

5mm Light Assault Rifle: Can fire up to two bursts per round or two shots per round (or combination adding to two), using the *Small Projectile Attack Table* Mk.1. Effective single shot range characteristics are somewhat better than burst fire ranges.

10mm Medium Assault Rifle: Can fire up to two bursts per round or two shots per round (or combination adding to two), using the *Small Projectile Attack Table* Mk.2. Effective single shot range characteristics are somewhat better than burst fire ranges.

Conventional Machine Guns

10mm Light Machine Gun: Fires up to two bursts per round using the *Small Projectile Attack Table* Mk.3.

10mm Medium Machine Gun: Fires up to two bursts per round using the *Small Projectile Attack Table* Mk.3.

12mm Heavy Machine Gun: Fires up to two bursts per round using the *Small Projectile Attack Table* Mk.4.

Conventional Shotguns

15mm Shotgun and Sawed-off Shotgun: Fires up to twice per round on the *Shotgun Attack Table* (15.2).

15mm Autoshotgun: Fires two bursts per round. All targets in the firing arc are attacked on the *Shotgun Attack Table.*

20mm Shotgun and Sawed-off Shotgun: Fires up to twice per round on the *Shotgun Attack Table.*

20mm Autoshotgun: Fires two bursts per round. All targets in the firing arc are attacked on the *Shotgun Attack Table.*

Needleguns

Needle Pistol: Fires two bursts per round on the *Small Projectile Attack Table* Mk.1.

Needle Carbine: Fires up to two bursts per round on the*Small Projectile Attack Table* Mk.2.

Needle Rifle: Fires two bursts per round on the *Small Projectile Attack Table* Mk.3.

Tangleguns

Tangle Pistol: Fires up to two shots per round on the *Entangle Attack Table* Mk.3.

Tangle Carbine: Fires up to two shots per round on the *Entangle Attack Table* Mk.4.

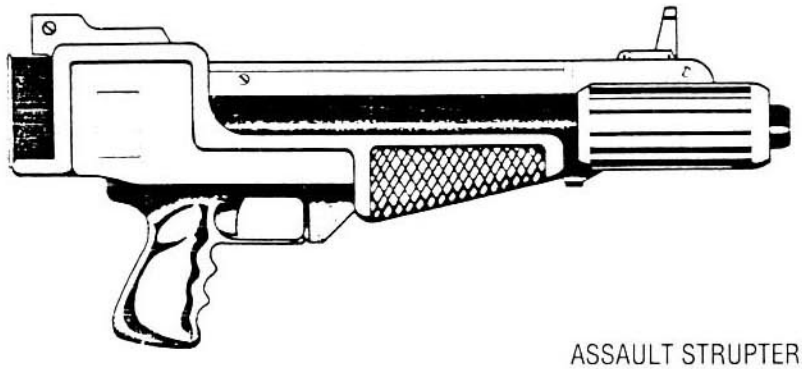
Tangle Rifle: Fires up to two shots per round on the *Entangle Attack Table* Mk.5.

Taserguns

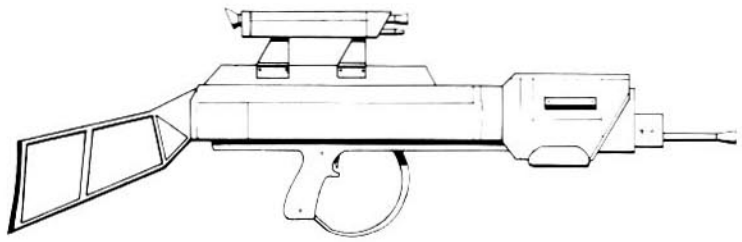
Taser Pistol: Capable of firing one shot on the *Small Projectile Attack Table* Mk.1. Specific critical results are ignored; rather, any target given a critical takes an "E" severity Stun critical instead.

Taser Carbine: Fires up to two shots per round on the *Small Projectile Attack Table* Mk.2. Specific critical results are ignored; rather, any target given a critical takes an "E" severity Stun critical instead.

Taser Rifle: Fires up to two shots per round on the *Small Projectile Attack Table* Mk.3. Specific critical results are ignored; rather, any target given a critical takes an "E" severity Stun critical instead.



ASSAULT STRUPTERGUN
Kashmere Tools



ROCKET RIFLE
Cobra/Devcomn

Rocketguns

Rocket Pistol: Fires up to two shots per round on the *Small Projectile Attack Table* Mk.3.

Rocket Carbine: Fires up to two shots per round, or two bursts per round (or a combination adding up to two), on the *Small Projectile Attack Table* Mk.3. Single shot fire has somewhat improved effective range characteristics over burst fire.

Rocket Rifle: Fires up to two shots per round, or two bursts per round (or a combination adding up to two), on the *Small Projectile Attack Table Mk.3.* Single shot fire has somewhat improved effective range characteristics over burst fire.

Magnetic Linear Accelerators

MLA (Linex) Pistol (†): Fires up to two shots per round on the *Small Projectile Attack Table Mk.4.* This weapon must be powered by one Utility Cartridge.

MLA (Linex) Rifle (‡): Fires up to two shots per round on the *Small Projectile Attack Table Mk.5.* This weapon must be powered by one Utility Pack. Note that it is the more powerful energy source (as opposed to a larger slug) which allows a Linex rifle to do more damage than a Linex pistol.

Grenade Launchers

Grenade Rifle: Weapon can discharge up to two grenades per round. The combat roll is resolved on the *Launcher Error Chart* (***Player Book,*** *pg.60)* to determine where the grenade has landed. Individual grenade attacks are then resolved on the *Grenade Attack Table* (15.3) against any potential victims in the blast radii of the warhead.

Rocket Propelled Grenade Launchers

RPG Launcher: Mechanism capable of discharging one RPG. The combat roll is resolved on the *Launcher Error Chart* to determine where the rocket propelled grenade has landed. Individual grenade attacks are then resolved on the *Grenade Attack Table* against any potential victims in the blast radii of the warhead.

Portable Missile Launchers

PML: A mechanism fires one portable missile. Range characteristics are dependent upon the portable missile being used. The combat roll is resolved on the *Launcher Error Chart* to determine where the missile has landed. Individual portable missile attacks are then resolved on the *Grenade Attack Table* against any potential victims in the blast radii of the warhead.

PML Quad and Autofeed: Mechanisms capable of firing up to two portable missiles per round. Range characteristics are dependant upon the portable missile being used. Combat rolls are resolved on the *Launcher Error Chart* to determine where a given missile lands. Individual portable missile attacks are then resolved on the *Grenade AttackTable* against any potential victims in the blast radii of the warhead.

2.32 ENERGY WEAPONS

Lasers

Mini Laser (*): Fires once per round on the *Laser Attack Table* Mk.1. Power supply is either a Utility Cell or a Weapon Cell.

Laser Pistol (*): Fires up to twice per round on the *Laser Attack Table* (15.4) Mk.2. Power supply is a Weapon Cell.

Assault Laser (†): Fires up to twice per round on the *Laser Attack Table* Mk.3. Power supply is a Weapon Cartridge.

Laser Rifle (†): Fires up to twice per round on the *Laser Attack Table* Mk.4. Power supply is a Weapon Cartridge.

Heavy Laser (‡): Fires up to twice per round on the *Laser Attack Table* Mk.5. Power supply is a Weapon Pack.

Blasters

Mini Blaster (*): Fires once per round on the *Blaster Attack Table* Mk.1. Power supply is either a Utility Cell or a Weapon Cell.

Blast Pistol (*): Fires up to twice per round on the *Blaster Attack Table* (15.5) Mk.2. Power supply is a Weapon Cell.

Assault Blaster (†): Fires up to twice per round on the *Blaster Attack Table* Mk.3. Power supply is a Weapon Cartridge.

Blast Rifle (†): Fires up to twice per round on the *Blaster Attack Table* Mk.4. Power supply is a Weapon Cartridge.

Heavy Blaster (‡): Fires up to twice per round on the *Blaster Attack Table* Mk.5. Power supply is a Weapon Pack.

Flamers

Mini Flamer (*): Fires once per round on the *Flamer Attack Table* (15.6) Mk.1. Power supply is a Flamer Cell.

Flame Pistol (*): Fires up to twice per round on the *Flamer Attack Table* Mk.2. Power supply is a Flamer Cell.

Assault Flamer (†): Fires up to twice per round on the *Flamer Attack Table* Mk.3. Power supply is a Flamer Cartridge.

Flame Rifle (†): Fires up to twice per round on the *Flamer Attack Table* Mk.4. Power supply is a Flamer Cartridge.

Heavy Flamer (‡): Fires up to twice per round on the *Flamer Attack Table* Mk.5. Power supply is a Flamer Pack.

Stunners

Mini Stunner (*): Fires once per round on the *Stunner Attack Table* Mk.1. Power supply is either a Utility Cell or a Weapon Cell.

Stun Pistol (*): Fires up to twice per round on the *Stunner Attack Table* (15.7) Mk.2. Power supply is a Weapon Cell.

Assault Stunner (†): Fires up to twice per round on the *Stunner Attack Table* Mk.3. Power supply is a Weapon Cartridge.

Stun Rifle (†): Fires up to twice per round on the *Stunner Attack Table* Mk.4. Power supply is a Weapon Cartridge.

Heavy Stunner (‡): Fires up to twice per round on the *Stunner Attack Table* Mk.5. Alternatively, it may fire once per round on the Stunner table Mk.3 versus all potential targets in a 30 degree arc. Power supply is a Weapon Pack.

Disruptors

Mini Disruptor (*): Fires once per round on the *Disruptor Attack Table* Mk.1. Power supply is either a Utility or Weapon Cell.

Disruptor Pistol (*): Fires up to twice per round on the *Disruptor Attack Table* (15.7) Mk.2. Power supply is a Weapon Cell.

Assault Disruptor (†): Fires up to twice per round on the *Disruptor Attack Table Mk.3. Power supply is a Weapon Cartridge.*

Disruptor Rifle (†): Fires up to twice per round on the *Disruptor Attack Table* Mk.4. Power supply is a Weapon Cartridge.

Heavy Disruptor (‡): Fires up to twice per round on the *Disruptor Attack Table* Mk.5. Power supply is a Weapon Pack.

Struptorguns

Special: All struptorguns adhere to the standard energy weapon progression of Mini, Pistol, Assault, Rifle, and Heavy. However, their characteristics are determined by their setting. A struptorgun, no matter what size, may be used either as a Stunner, or a Disruptor, as chosen by the wielder.

Plasmatic Repeators

Plasma Repeator Rifle (§): Fires up to two bursts per round on the *Blaster Attack Table* Mk.5. Power supply is a Microfusion Weapon Reactor.

Heavy Plasma Repeator (§): Fires up to two bursts per round on the *Blaster Attack Table* Mk.5. Power supply is a Microfusion Weapon Reactor.

Melee Energy Weapons

Power Sword (†): This quite rare and arcane weapon takes the form of a handgrip when not activated. A finely aligned set of refractors in one end of the grip allows the weapon to form a powerful energy 'blade' about one meter long, thus creating an effective melee weapon.

Force Knife (†): Similar to the power sword, though the adjustable blade can only extend about 40cm and is not as powerful. It is more common, used as a tool more than a weapon.

2.4 PERSONAL PROJECTILE WEAPON AMMUNITION

The various attack tables included in ***Space Master*** assume both the standard gun types given in the *Master Weapons Charts* and standard ammunition (particularly with respect to the Projectile weapons). However, the possibility of special ammunition types, which adjust the attack table results, should not be ruled out. What follows is a listing of the ammunition types available in ***Space Master***. Note that the general term, "round", when used here, refers to either a slug, shell, shot, cartridge, or warhead, whichever is applicable. Also, if a specific weapon fires caseless ammunition (as specified by the GM), it may not fire encased ammunition, and vice versa.

Note: *The properties of the different types of ammunition may not be combined unless otherwise stated.*

2.41 PROJECTILE ROUNDS

General Purpose Round:

The General Purpose (GP) round comes in 5mm, 10mm, and 12mm calibers and forms the basis for the *Small Projectile Attack Table (15.1)*. Such rounds are assumed to be caseless for conventional pistols, machine pistols, rifles and assault rifles. On the other hand, conventional machine guns generally use slugs encased in a cartridge. Both the standard Linex round (used in MLA weapons), and the standard Rocket round (used in Rocketguns) are assumed to be GP.

Armor Piercing Round:

Armor Piercing (AP) rounds come in 5mm, 10mm, and 12mm calibers, and may be fired from conventional pistols, machine pistols, rifles, assault rifles, and machine guns. They may be caseless or encased, and are also available in Linex and Rocket round versions. When an AP round is fired at an opponent wearing armor (generally ATs 5 through 20), 5 is added to the attacker's OB. If an AP round is fired at an unarmored foe (generally ATs 1 through 4), 5 is subtracted from the attacker's OB.

High Explosive Round:

High Explosive (HE) rounds come in 5mm, 10mm, and 12mm calibers, and may be fired by conventional pistols, machine pistols, rifles, assault rifles, and machine guns. They may be caseless or encased, and are also available in Linex and Rocket round versions. When an HE round hits an unarmored foe (generally having an AT of 1 through 4), an Internal Disruption critical, of the same severity as the primary critical delivered by the combat roll, is added to the combat result. If an HE round is fired at an armored target (generally of AT 5 through 20), 10 is subtracted from the attacker's OB, and no extra Internal Disruption critical is delivered.

High Explosive Armor Piercing Round:

High Explosive Armor Piercing (HEAP) rounds come in 5mm, 10mm, and 12mm calibers, and may be fired from conventional pistols, machine pistols, rifles, assault rifles, and machine guns. They may be caseless or encased, and are available in Linex and Rocket round versions. HEAP rounds always deliver an extra Internal Disruption critical of the same severity as the primary critical delivered by the attack.

Tungsten Core Round:

Tungsten core (TC) rounds are available for 5mm, 10mm, 12mm, Linex and Rocket round GP and AP ammunition. Tungsten core rounds add an additional +5 to the attacker's OB due to their mass being concentrated within a smaller cross-section. A round may not be TC and DUC at the same time.

Depleted Uranium Core Rounds:

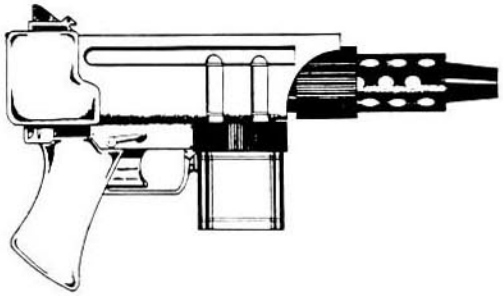
Depleted Uranium core (DUC) rounds are available for 5mm, 10mm, 12mm, Linex and Rocket round GP and AP ammunition. DUC rounds add an additional +5 to the attacker's OB, and raises the maximum damage threshold level of the weapon by one due to their increased mass. Therefore, a medium rifle firing a DUC round would resolve its attack on the *Small Projectile Attack Table* Mk.4 (instead of Mk.3). A round may not be DUC and TC at the same time.

Shotgun Standard Shot Rounds:

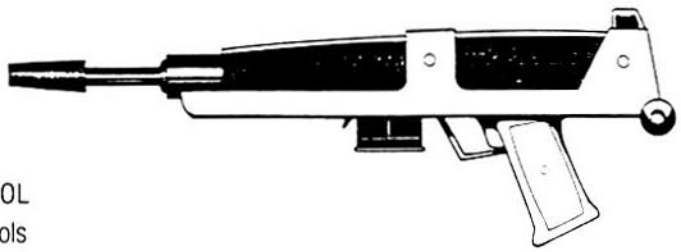
Standard Shot (SS) rounds form the basis of the *Shotgun AttackTable* and are available for all shotgun bores. An SS shell generally contains a multitude of tiny metal spheres (called shot) which are projected out of the shotgun barrel when the weapon is fired. At longer ranges SS rounds tend to do Pierce criticals, while at short ranges, Shrapnel/Automatic criticals are delivered (see the *Shotgun Attack Table*).

Shotgun Flechette Rounds:

Flechette (FL) rounds are available for all shotgun bores. An FL shell contains a multitude of tiny metal slivers (called flechettes) which are projected out of the shotgun barrel, spinning violently, when the weapon is fired. At longer ranges, FL rounds do Slash criticals, while at short ranges, Shrapnel/Automatic criticals are delivered (see the attack chart).



FLAME PISTOL
Haunt



LASER PISTOL
Kashmere Tools
Special Edition

Shotgun Slug Rounds:

Shotgun Slug (SL) rounds are available for all shotgun bores. An SL shell contains a single large metal slug which is projected out of the shotgun barrel when the weapon is fired. Use the Small Projectile attack table with a Mk.3 threshold for 15mm bores and a Mk.4 threshold for 20mm bores. If a critical result is achieved, roll for both Pierce and Impact criticals of the same severity.

Standard Needlegun Rounds:

Standard Needlegun (SN) rounds are slivers of hardened steel which begin to spin after being discharged from the needlegun. Using the *Small Projectile Attack Table*, SN rounds do Slash criticals.

Super-teflon Coated Rounds:

Any GP, AP, HE, or HEAP round (whether or not having a TC or DUC), or shotgun shot and flechettes, or needlegun rounds may be Super-teflon Coated (STC). STC rounds add +5 to an attacker's OB when firing against ATs 5-8 (with a higher Maximum Result at Point Blank range).

Irulon Coated Rounds:

Any GP, AP, HE, or HEAP round (whether or not having a TC or DUC), or shotgun shot and flechettes, or needlegun rounds may be Irulon Coated (IC). IC rounds add +5 to an attacker's OB when firing against ATs 9-20 (with a higher Maximum Result at Point Blank range).

Tranquilizer Rounds:

Tranquilizer (TR) rounds may be discharged from conventional pistols, machine pistols, rifles, assault rifles, and shotguns in lieu of regular ammunition. The only restriction is that an attack may not exceed the Mk.2 threshold level. The GM may stipulate that only half of the normal concussion hits are delivered due to the lack of penetrating power intrinsic to any TR. If a critical is obtained, it is not resolved, but rather merely means that the round's tranquilizing drug has been delivered into the target's system. In this instance, the target must immediately make an RR against the level of the tranquilizer drug (GM's discretion). Failing, the target is then knocked out for a number of rounds equal to the percentage that the RR was failed by. Generally, once the target comes around, he will be disoriented for a number of rounds equal those he was knocked out for.

Poisoned Rounds:

Poisoned (PO) rounds may be discharged from conventional pistols, machine pistols, rifles, assault rifles and shotguns. In addition, flechettes and needle ammunition may be coated with poisons. The design of poisons (and acids), are left to the devising of the GM, but as for some suggestions: certain poisons may only effect specific creatures, some effects may be delayed, biotoxins may be used, and so on.

2.42 GRENADES AND PORTABLE MISSILES

There are a variety of grenade and portable missile types available in ***Space Master***, including hand-thrown explosives, grenades launched from a rifle or similar device, as well as rocket propelled grenades. Portable missiles, on the other hand, are either guided or unguided, and are generally fired from portable missile launchers as described in the Weapons Listing. Throughout the following rules section, it will be assumed that Grenades and Portable Missiles produce the same effects, and these will be phrased in terms of what grenade warheads do when they detonate. So, references to "grenade" effects apply equally to portable missiles.

Regardless of the delivery system, all grenades share some common properties. When detonated, grenades produce five distinct "blast radii". The first blast radius is called "ground zero", wherein the most severe explosive effects are produced. The second, third, fourth and fifth blast radii extend outward from ground zero spherically, each producing graduated, and generally reduced, blast effects. Both the volume encompassed within a given blast radius, as well as the specific effects produced, are dependent upon the type of grenade which is detonated.

General Purpose Grenades:

General Purpose (GP) grenades are anti-personnel warheads available in sizes ranging from Mk.1 through Mk.5. They come in hand-thrown, launched, rocket propelled, and portable missile versions. Every GP grenade produces the requisite five blast radii when detonated. GP grenades resolve their effects on the *Grenade Attack Table* (15.3) , delivering both Shrapnel and Impact criticals of the same severity. There are three variations of the GP grenade:

1) Point Defense General Purpose (PDGP) grenades have warheads with restricted blast radii to allow their use at close quarters, or for pin-point attacks. Each blast radius extends outward from the detonated grenade only one (1) meter per Mk.#.

2) Standard General Purpose (GP) grenades form the basis of this series, having standard blast radii. Each blast radius extends outward from the detonated grenade two (2) meters per Mk.#.

3) Enhanced General Purpose (EGP) grenades have warheads which produce abnormally large blast radii. Each blast radius extends outward from the detonated grenade three (3) meters per Mk.#.

Concussion Grenades:

Concussion (CO) grenades are anti-personnel warheads available in sizes ranging from Mk.1 through Mk.5. They come in hand-thrown, launched, rocket propelled, and portable missile versions. Every CO grenade produces the requisite five blast radii when detonated. CO grenades resolve their effects on the *Grenade Attack Table*, delivering an Impact critical when called for. There are three variations of the CO grenade:

1) (PDCO) grenades have warheads with restricted blast radii to allow their use at close quarters, or for pin-point attacks. Each blast radius extends outward from the detonated grenade only one (1) meter per Mk.#.

2) (CO) grenades form the basis of this series, having standard blast radii. Each blast radius extends outward from the detonated grenade two (2) meters per Mk.#.

3) (ECO) grenades have warheads which produce abnormally large blast radii. Each blast radius extends outward from the detonated grenade three (3) meters per Mk.#. In addition, any Impact critical is rolled twice, and all results are applied to the target.

Shrapnel Grenades:

Shrapnel (SH) grenades are anti-personnel warheads available in sizes ranging from Mk.1 through Mk.5. They come in hand-thrown, launched, rocket propelled, and portable missile versions. Every SH grenade produces the requisite five blast radii when detonated. SH grenades resolve their effects on the *Grenade Attack Table*, delivering a Shrapnel critical when called for. There are three variations of the SH grenade:

1) Point Defense Shrapnel (PDSH) grenades have warheads with restricted blast radii to allow their use at close quarters, or for pin-point attacks. Each blast radius extends outward from the detonated grenade only one (1) meter per Mk.#.

2) Standard Shrapnel (SH) grenades form the basis of this series, having standard blast radii. Each blast radius extends outward from the detonated grenade two (2) meters per Mk.#. In addition, a Shrapnel critical delivered within the first Blast Radii (Ground Zero), is rolled twice with all results applying to the target.

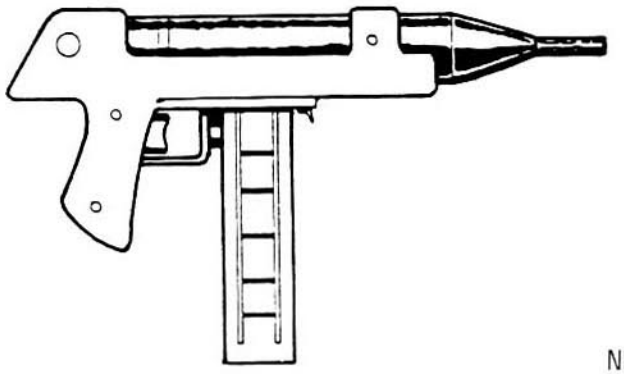
3) Enhanced Shrapnel (ESH) grenades have warheads which produce abnormally large blast radii. Each blast radius extends outward from the detonated grenade three (3) meters per Mk.#. In addition, any Shrapnel critical delivered within the first two Blast Radii (Ground Zero and the second Blast Radius) is rolled twice with all results applied to the target.

Plasma Grenades:

Plasma (PL) grenades are anti-personnel warheads available in sizes ranging from Mk.1 through Mk.5. They come in hand-thrown, launched, rocket propelled versions, and portable missiles. Every PL grenade produces the requisite five blast radii when detonated. PL grenades resolve their effects on the *Grenade Attack Table*, delivering Heat, Impact, and Radiation criticals of the same severity. There are three variations of the PL grenade:

1) Point Defense Plasma (PDPL) grenades have warheads with restricted blast radii to allow their use at close quarters, or for pin-point attacks. Each blast radius extends outward from the detonated grenade only one (1) meter per Mk.#.

2) Standard Plasma (PL) grenades form the basis of this series, having standard blast radii. Each blast radius extends outward from the detonated grenade two (2) meters per Mk.#.



NEEDLE PISTOL
Conboy Labs

3) Enhanced Plasma (EPL) grenades have warheads which produce abnormally large blast radii. Each blast radius extends outward from the detonated grenade three (3) meters per Mk.#. In addition, the Heat effect of the warhead is residual when the grenade is detonated in any sort of atmosphere. Any targets occupying the Ground Zero of the warhead on the round after detonation takes an automatic "C" Heat critical (only a "B" Heat critical if the target is wearing an activated energy shield).

Smoke Grenades:

Smoke (SMK) grenades are obscuring/signalling/concealment warheads available in sizes ranging from Mk.1 through Mk.5. They come in hand-thrown, launched, rocket propelled, and portable missile versions. Every SMK grenade produces the requisite five blast radii when detonated, but instead of giving explosive damage, smoke is produced in the area. The GM will have to adjudicate smoke effects. Generally, the more dispersed the smoke from Ground Zero, the easier it will be to see through. Here is a set of guidelines for Perception and Combat modifiers when looking or firing through smoke: Ground Zero (-50), 2nd Blast Radius (-40), 3rd Blast Radius (-30), 4th Blast Radius (-20), and 5th Blast Radius (-10). Only use the worst modifier in application for each individual SMK grenade. There are three variations of the SMK grenade:

1) Point Defense Smoke (PDSMK) grenades have warheads with restricted blast radii to allow their use at close quarters, or for pin-point deliveries. Each blast radius extends outward from the detonated grenade two (2) meters per Mk.#. The smoke will last for 10 minutes if the atmospheric medium is undisturbed.

2) Standard Smoke (SMK) grenades form the basis of this series, having standard blast radii. Each blast radius extends outward from the detonated grenade four (4) meters per Mk.#. The smoke will last for 20 minutes if the atmospheric medium is undisturbed.

3) Enhanced Smoke (ESMK) grenades have warheads which produce abnormally large blast radii. Each blast radius extends outward from the detonated grenade six (6) meters per Mk.#. The smoke will last for 30 minutes if the atmospheric medium is undisturbed.

Anti-laser Aerosol Grenades:

Anti-laser Aerosol (ALA) grenades are defensive warheads which defeat coherent light (e.g., Laser) beams. They are available in sizes ranging from Mk.1 through Mk.5, and come in hand-thrown, launched, rocket propelled, and portable missile versions. Every ALA grenade produces the requisite five blast radii when detonated. ALA grenades defeat Laser attacks using the following modifiers: Laser fired through Ground Zero (-100), 2nd Blast Radius (-80), 3rd Blast Radius (-60), 4th Blast Radius (-40), 5th Blast Radius (-20). Only use the worst modifier for each effect produced by a single ALA grenade. Anti-laser aerosols do not affect perception in any way. There are three variations of the GP grenade:

1) Point Defense Anti-laser Aerosol (PDALA) grenades have warheads with restricted blast radii to allow their use at close quarters, or for pin-point deliveries. Each blast radius extends outward from the detonated grenade only one (1) meter per Mk.#. The aerosol remains suspended for 10 minutes provided that the atmosphere is undisturbed.

2) Standard Anti-laser Aerosol (ALA) grenades form the basis of this series, having standard blast radii. Each blast radius extends outward from the detonated grenade two (2) meters per Mk.#. The aerosol remains suspended for 20 minutes provided that the atmosphere is undisturbed.

3) Enhanced Anti-laser Aerosol (EALA) grenades have warheads which produce abnormally large blast radii. Each blast radius extends outward from the detonated grenade three (3) meters per Mk.#. The aerosol remains suspended for 30 minutes provided that the atmosphere is undisturbed.

Miscellaneous Grenades:

The GM is free to develop any grenade effects that he wishes to include in his game. These could include grenades which emit poison gas, acid, biotoxins, anti-molecutronic viruses, corrosives, etc. Variations on these grenades could follow the "Point Defense/ Standard/ Enhanced" progression given in this section.

Grenade Fuse Options:

There are several ways to have a grenade detonate. The following fuse options are available for grenades (and possibly mines if the GM allows their use):

- Timed Fuse: Grenades are usually delivered during a Fire Phase in the Combat Round Sequence. A warhead could be timed to detonate in the same phase, or the next action phase in the sequence.
- Contact Fuse: The grenade will detonate the instant it strikes any solid or liquid.
- Proximity Fuse: The grenade will detonate when it comes within a set distance of the ground, thus exploding in mid-air.
- Delayed Action Proximity (DAP): The grenade will not detonate until triggered by the presence of the appropriate target type (e.g., a man sized bio-organism) within its first blast radius.
- Delayed Action Remote (DAR): The grenade will only detonate when commanded to do so via a remote control unit possessed by the attacker.

GRENADE SUMMARY CHART

Grenade Type	Blast Radii (m/Mk.#) PD	Standard	Enhanced	Critical Type	Applicable Shield Mod
General Purpose	1	2	3	Shrap/Impact	Projectile
Concussion	1	2	3	Impact/Impact	Energy
Shrapnel	1	2 (a)	3 (b)	Shrapnel	Projectile
Plasma	1	2	3 (c)	Heat/Imp/Rad	Energy
Smoke	2 (d)	4 (e)	6 (f)	—	—
Aerosol	1 (d)	2 (e)	3 (f)	—	—

Notes:
a = Roll criticals twice in the first Blast Radius.
b = Roll criticals twice in the first two Blast Radii.
c = Lingering Heat effects. See the text for specifics.
d = Effect normally lasts for 10 minutes.
e = Effect normally lasts for 20 minutes.
f = Effect normally lasts for 30 minutes.

Portable Missiles:

As indicated earlier on, portable missile effects are practically identical to the grenades described above. The difference with portable missiles is their attack delivery method. Portable missiles are best thought of as miniature guided or unguided, direct-fire rockets, which are discharged by portable missile launchers. For simplicity's sake, it is assumed that a portable missile launcher (PML) can fire any portable missile. However, the GM may stipulate as many restrictions as he sees fit. Below are detailed a few portable missiles followed by a chart of their range characteristics. Note that any of the grenade warheads described above could be held within any of the following portable missiles.

1) The Standard Unguided Missile is a direct line-of-sight warhead delivery system. Its maximum range is 800 meters.

2) The Standard Guided Missile, when discharged, must be directed to its target by the firer, who controls its flight from the portable missile launcher (by means of remote control). When so controlled, the missile adds +30 to its SR, MR and LR modifiers (from the Master Weapons Chart 1) to determine the accuracy of a hit attempt. If uncontrolled, a guided missile may be fired as an unguided missile. The missile's max range is 1500 meters.

Portable Missile Options:

A portable missile may be produced with multiple options, but it may have only one type of fuse. The following options are available for any portable missile:

- Extended Range: Long Range characteristics are doubled.
- Fire-and-Forget: This option is available for Guided Missiles only. Essentially, with the Fire-and-Forget option, a missile is treated as "guided" except that its flight need not be monitored and directed by the firer. Simply put, the missile uses its own detection system to guide itself to the target.
- Proximity Fuse: The missile detonates before reaching its chosen target if it comes within 1 Blast Radii of another target. This must be a specific sort of target chosen for the missile in question, be it a man-sized life form or armored vehicle.
- Delayed Fuse: The missile detonates after a set time interval has passed. This must be determined prior to launch on a case-by-case basis. The GM must determine reasonable limits for this technology.
- Remote Fuse: The missile detonates by a remote control possessed by the firer. With this option, a missile may be fired, its placement judged, and then the warhead detonated. This fuse may not be chosen as an option for armor piercing portable missiles.

RANGE CHARACTERISTIC CHART FOR PORTABLE MISSILES

Missile	Range (meters)				Range Modifers			
Type	**PB**	**SR**	**MR**	**LR**	**PB**	**SR**	**MR**	**LR**
Standard Unguided	10	100	200	800	+100	+50	+20	0
Extended Range Unguided	10	100	200	1600	+100	+50	+20	0
Standard Guided	10	200	400	1500	+100	+80	+50	+30
Extended Range Guided	10	200	400	3000	+100	+80	+50	+30

3.0
EQUIPMENT

"A 'Mark Five Magneto-feed Fully Automatic Plasma Repeator Rifle'? Is that what you call it? I call it a gun. I thought I knew how to use one of these; now I'm not sure. Let's try it out..."

Apocryphal Speech of a little-known Jym-bob Android model which malfunctioned slightly and murdered several dozen Citizens.

3.1 PERSONAL ITEMS

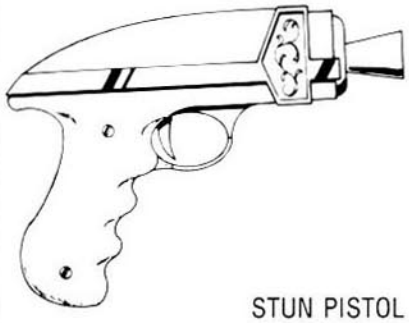
Calculator unit: (*) A small ("pocket-sized") calculator capable of performing only the most basic of mathematical functions. The calculator unit can add, subtract, multiply, divide, perform square roots, simple logarithms, derivation and integration. It also possesses a memory function.

Chronometer: (*) Fitted with a lifetime power cell, these wristwatch-like devices invariably perform several other tasks, including personal metabolic monitoring, limited audio recording, etc.

Computer Map: (*) Actually a combined scanner/recorder, this device uses hologlass plates to store visual information. The Map records information continuously in a 100 m. radius about the carrier, providing a faultless return guide. Premade maps from aerial and orbital scans can also be fed into the Map, which compares scan data with immediate surroundings to pinpoint current location. One Hologlass can store about 1,000,000 sq. km of map data. The Map is a 2 cm. thick 10 x 10 cm square, one full face devoted to a glassteel display face, which displays a 3-D top-view at a nearly infinite range of magnification. The Map can also project the image (in the right lighting) in a 3 m square display.

Distance Lenses: (*) About the size of a pair of small binoculars, these combine the powers of Infrared and Filter lenses, as well as superb magnification (up to 100,000x). A small display inside, along the edge of the view gives distance to an object targeted in crosshairs (up to 20 km).

Earphone Communicator: (*) A light-weight headset, it mounts in one ear with a filament wire extending to just in front of the mouth, a tiny microphone mounted on the tip. The unit is very lightweight and unencumbering. Hearing, even through the unit, is unimpaired. Range: 100 m; also used on-board vehicles.



STUN PISTOL
Kashmere Tools

Elmonit Card: Not a 'credit' card, but an electronic checking system. The Elmonit card is about the size of a credit card, though 5 mm thick, and contains encoded data on the possessor's available financial resources. When plugged into a Merchant or Bank transactor the data is read, and, if the holder is making a purchase, the amount is deducted, altering the data. Illegal data alteration is extremely difficult, although not impossible. Normally they are only accepted if locally (within a system) issued so that the Bank network can verify the integrity of the card. For Interstellar travel, the traveller is issued a special bank credit, with which he/she/it may set up a temporary account at the local institution. Like the Ident Disk (see below), Elmonit cards are chemically keyed to the owner.

Glowglobe: (*) An 8 cm diameter translucent sphere, the glowglobe is a portable, self-contained light source. Light level is altered by twisting the hemispheres, from 'off' to an illumination equal to about a 150 watt light bulb. Also triggered when the globe is turned on is a tiny gravity neutralizer, rendering the globe weightless. A small loop is mounted on one hemisphere where the globe can be 'moored' to keep it from floating away. A variety of light shades are also available.

Ident Disk (replacement): One Ident Disk is issued to each citizen of the Imperium free of charge; lost ones are replaced at a penalty charge. The ident disk is a 5 cm plate about 2 mm thick, carrying on one face a holo-image of the bearer, and on the other face a special sensory material, engraved with the name of the bearer in standard Terran. Within the disk is held an array of personal information — physical, physiological, psychological and historical — as well as a retina scan for further ident confirmation. Access to this information is limited, depending on the reader. Normally, only authorized Patrol readers with a master clearance have full access, and only Confederation Hospital readers have full medical (physiological and psychological) access. The disks are chemically keyed to specific body chemistry and warmth, so that if the disk leaves the proximity of the wearer long enough to fully dissipate acquired body warmth (about an hour), the disk information is destroyed, and the holo-image blurred beyond recognition. Ident Disks, like Elmonit cards, are very difficult — but not impossible — to forge. They must be worn very close to the body. Personalized disk carriers, like jewelry, are constantly moving in and out of fashion.

Infra-red Goggles: Less expensive than the lenses above, they perform basically the same function. They do, however, reduce wearer Perception by 20 (and it is is obvious that one is wearing them, as opposed to the lenses, which are undetectable to the casual observer).

Infra-red Lenses: Contact lenses, wearable for up to a month without discomfort, which allow the wearer to 'see' into the infrared spectrum, allowing him to discern heat-radiating objects even in the dark. Activated by pupil dilation, they do not impede normal vision. *Must* be custom-fitted (included in price).

Light Filter Lenses: Similar to Infra-red Lenses, these are triggered by pupil constriction, darkening to cut glare when the wearer is in bright light. *Must* be custom-fitted (included in price).

Lightrod: (*) Basically a sophisticated flashlight, the lightrod can act as a signal beacon, in addition to possessing a variety of other levels of intensity and beam width.

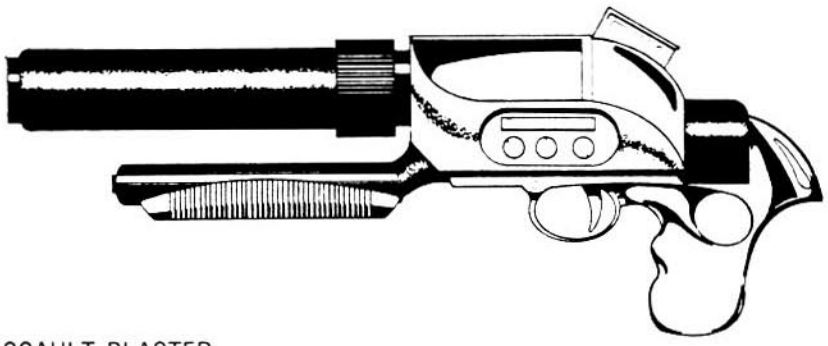
Magnetic Compass: This simple device will function on any planet where magnetic poles are present. About 6 cm in diameter and 4 mm thick.

Makeover Kit: (2*) About the size of a small attaché case, this unit includes a built-in Holoviewer. In addition you will find a number of advanced cosmetics and colored eye lenses, allowing the skilled user to alter his/her/its face and hands to appear to be nearly any humanoid racial type. One very skilled, using a superimposed holo-image, can duplicate the exact features of another individual. An easier method of exact impersonation, also in the kit, is a spray-on mask, which allows one to make a mold and perfect mask of the impersonee. Of course, a willing (or unconscious) impersonee is necessary for this operation.

Microcomputer (Mk. 1 through 4): (1-4*) A small, hand-held computer unit (15 x 10 x 3 centimeters), the microcomputer is capable of performing all basic mathematical functions (this program is part of the unit's hardware), and can record data and perform programmed functions just as any larger computer (given that the appropriate programs are in the unit). The microcomputer features a 6 centimeter diagonal screen and a mini keyboard (which is protected by a hinged faceplate when not in use), and is unable to respond to vocal commands. The computer has a receptacle for memory discs and is capable of full data playback. It has not proved possible yet to create artificial intelligence in units of this size, but in all other respects (i.e., CPU capacity, memory and storage) the microcomputer is treated as a standard computer .

Molecutronic Scrambler: (1*/Mk.#) The bane of many an android and computer brain, the Molecutronic Scrambler creates a specifically tuned (random general electromagnetics have no effect on molecutronics) electromagnetic field which thoroughly disrupts the workings of molecutronics. The Mk.# of the Scrambler (which can only be as large as Mk.50) is used as the attack level on the *Resistance Roll Chart* (**Player Book**, pg.95). The defense level is equal to the *Computer Mk.#* for computer systems and robots, or the actual *Experience Level* of a target android. If the molecutronic target fails to resist the Scrambler, the computer "brain" is mutilated beyond all possible function and is rendered completely useless. In the case of Android failure, all mental stat potentials are reduced 1 for every point of failure.

On the other hand, if the "brain" resists the Molecutronic Scrambler's attack, it is in perfect working condition and may never again be affected by that particular Scrambler.



ASSAULT BLASTER
Neufeld

Small Scrambler units look like little boxes and can be hand-held. Larger units are shaped like long rods with malicious looking prongs on the end. Still larger units can be mounted into back slung packs. Molecutronic Scramblers are not ranged weapons; the disruption field generator must be placed right next to the target brain (1 cm/Mk#). If engaged in melee, the wielder of the Scrambler must make a successful maneuver to discharge it next to a robot or android brain in order to have any chance of success. Molecutronic Scramblers are banned on Jym-Bob 77.

Personal EW Generator: (‡) This is a belt-carried device which, when activated, cloaks the subject from scanning detection attempts. Specifically, there is a -50 modifier to all scanner rolls directed at the wearer which are intended to pick up life forms. Concentrated ship or installation sensors are at -30 to pick up the 'cloaked' wearer. The Generator will operate for 100 hours before its power supply is depleted. The Generator may not be used in conjunction with a personal shield of any type.

Pocket Communicator: (*) A small, palm-sized device designed for long-range audio communication (1000 km overland, or land to standard overhead orbit). It can be linked to a multiscanner to transmit coded information for more detailed shipboard analysis — though this is not 100% dependable (base — 01-02 roll indicates flawed transmission; may be worse dependent on conditions) over long distances, and can be time-consuming. The Pocket communicator has a wider range of frequencies than an earphone and has limited (25 hour) built-in recording capacity.

Poison Detector: (*) Using the principals of diffracted X-ray analysis, this small handheld device is capable of detecting many different types of poisons commonly used in food or drink. The Detector has "standard" diffraction *signatures* stored in its memory; these are used to make positive matches when poisons are present in the analyzed material. A special X-ray reflective plate must be placed under or behind the subject matter, and the Detector is then waved within 10 cm of the subject surface. Detection of standard poisons is automatic, with *Electrical Tech* rolls required for exotic toxins, or when the device is modified for expanded capabilities. A Detector can be used about 100 times before its power supply is depleted.

Psion Damping Gear: (4*) As developed by Fredrik Borg, this lightweight equipment takes the form of a headband, laced with dozens of superconductor filaments crisscrossing in a dome formation to make an open mesh skullcap. Each headband requires 4 energy cells to operate, and is triggered automatically when the wearer is the target of an attack Psion. Each time the wearer is attacked, the cap must make a resistance roll at 20th level. Failure by 01-50 results in energy cell exhaustion (1-4 of the cells are dead). Failure by 51-100 results in the device burning out — roll for damage/repairs (all but Fredrik would be at -50 to repair the devices); failure by more than 100 results in device burnout *and* failure to protect the wearer from the attack (in which case the wearer must make a RR on their own). The gear does *not* conceal the wearer from detection Psions, nor is it resistant to Psions which cause physical manifestations (such as Telekinesis or Energy Channels).

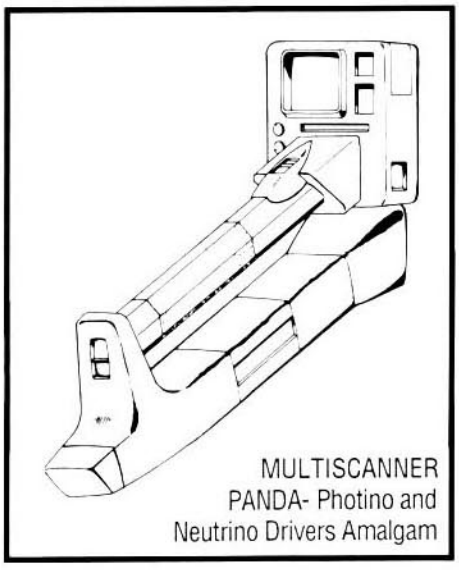
Note: *such equipment is extremely rare and hard to acquire. The lightweight headgear above should be virtually unattainable at any price.*

Scanners

Note: *Success, failure or partial success for scanner use must be determined by the GM, based on a roll using the appropriate scanner skill. Section 21.2 of the* ***Player Book*** *discusses such static maneuvers and modifiers.*

Multiscanner: (†) An extremely useful device for explorer/adventurers, the multiscanner is the ultimate in portable analysis and detection instruments. Approx. 18 x 12 x 5 cm in size, the Multiscanner is often carried on a shoulder strap. Readout is via a 2-D screen set on one side of the device, just above the control surfaces. The device is capable of three separate types of scan/analysis, as well as recording scan information for future, more detailed analysis by an onboard ship or land-based computer. It is also capable of normal audio-video recording. Information is stored on standard memory disks, 4 cm in diameter and 7 mm. thick, each capable of holding 10 hours of continuous full-spectrum scan (about 100 megabytes) in molecular memory. There is storage space in the bottom of the scanner for four disks in addition to the reader receptacle further up. Below is a summary of the scans which can be performed:

- **Life Types:** Life form detection and distinction between animal and plant life can be made at a distance of 1000 meters. At 200 meters individual animal life units can be discerned, and at 50 meters the scanner can make distinctions between basic types (humanoid vs lizard or bear, for instance). More detailed information must be gleaned using a Medscanner.



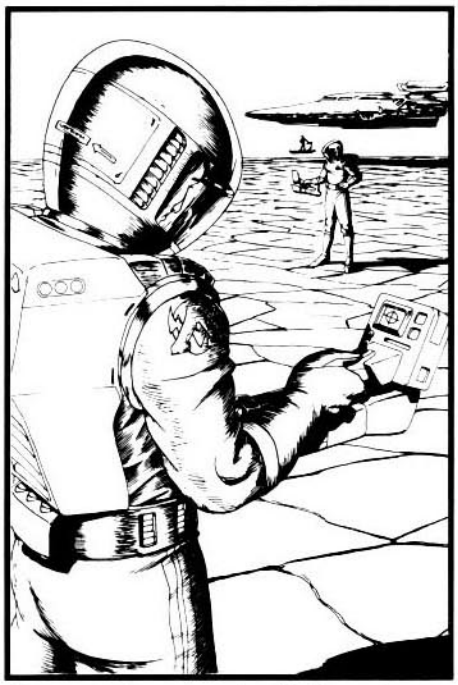
MULTISCANNER
PANDA- Photino and
Neutrino Drivers Amalgam

- **Power Emanations:** This scan reveals any form of radiation, running the full spectrum from gamma to infrared, automatically screening out the usual background radiations (unless programmed to do otherwise). This is useful in detecting transmission sources, as well as any sort of energy generator. Range varies tremendously depending on the power/transmission, but an activated scanner could pick up an unshielded pocket communicator beam at a range of about 100 meters, while it could detect a large, operating fusion reactor from as far as 10 km. At 1/10th of detection range (again, somewhat variable, dependent on conditions and skill of scanner operator) specifics can be made out (interception of transmission, exact location and type of power generation).
- **Physical Analysis:** By utilizing this setting, the operator may locate concentrations of a given substance — assuming the scanner already has in memory a previous scan or database readout of the substance with which to compare — of as little as one gram at 10 m. The progression is, conveniently, fairly even, so that a concentration of one kg. of an element may be found as far as 10,000 meters (10 km.) away.

Repair Scanner: (†) The Repair Scanner is the Technician's counterpart to the Medic's Medscanner or the Explorer's Multiscanner. Successful use of the Repair Scanner allows a Technician to determine the exact causes and effects of malfunctions or damage to mechanical, power, and electrical systems. It is largely dependant on circuit 'plans' (in Memory disks) with which to compare the ideal with actual circuitry status. At a range of 50 meters it will detect a disrupted circuit, and as range decreases it can pinpoint the problem. Repair scanners can act as an infra-plate, probing to a depth of 50 cm (though it does not mount to a surface and must be held), and can detect even minute electrical currents at a range of 100m.

Essentially the Repair scanner performs only the "Power Emanations" and "Physical Analysis" scanning functions:

- **Power Emanations:** This scan reveals any form of radiation , running the full spectrum from gamma to infrared, automatically screening out the usual background radiation (unless programmed to do otherwise). This is useful in detecting transmission sources, as well as any sort of energy generator.



Range varies tremendously depending on the power/transmission, but an activated Repair scanner could pick up an unshielded pocket communicator beam at a range of about 300 meters (pick it up, but not listen in), while it could detect a large, operating fusion reactor as far away as 30 km. At 1/10 of detection range specifics can be made out (interception of transmission, exact location, output and size of reactor). The Repair scanner is able to trace power lines and circuitry, and — with a skilled operator — analyze flawed circuits as a prelude to repair. It can also analyze electronic locks as a prelude to defeating them.

- **Physical Analysis:** By utilizing this setting, the operator may locate concentrations of a given substance — assuming the scanner already has in memory a previous scan or database readout of the substance with which to compare — of as little as one gram at 10 meters. The progression is fairly even, so that a concentration of one kg. (1000 grams) of an element may be found as far away as 10,000 meters (10 kilometers). The Repair scanner also has fine tuning controls, allowing it to determine detailed interior structures of any object within 10 meters. This function is particularly useful to Crime Techs working in areas where there are mechanical locks and devices to be dealt with.

Tactical Scanner: (*) A much simpler version of the standard Multiscanner, the tactical scanner is the preferred tool by many military services. Multiscanner skill is still used, but all rolls are at +50, due to the simplicity of the unit. Success indicates an accurate scan within the unit's range. The Tactical Scanner has drawbacks, however: standard range is only 30 meters (360° scan) and the scanner only detects in two modes, motion and infrared. While capable of detecting in a vertical range 10 meters up and down, most users set the scanner for a more limited vertical field. It does not distinguish life forms, power sources, or perform any sort of analysis. It is strictly a tactical information tool; size of all objects is approximate. The Scanner is able to penetrate most normal physical objects (walls, bulkheads) and force fields, though the GM may wish to include a difficulty subtraction when trying to read through a number of obstacles. In appearance the scanner is a small unit, about 25 x 10 x 15 cm, with a luminous blue gridded display. It can be mounted to large weapons (such as plasma rifles) or hand-carried.

Signal Beacon: (*) A flat disk about the size of a Memory Disk, the beacon projects a very bright beam of red light as far as 10 km. in length. The touch-switch allows for binary code transmission. Total light duration on one power cell: 5 hours.

Ultra Goggles: Like the Lenses below, except these are less expensive, and reduce Perception by 20.

Ultra Lenses: These combine the features of Infra-red and Light Filter lenses. *Must* be custom-fitted (included in price).

Security Scanner: (2* or †) This is the term used for an entire class of hand-portable data retrieval devices especially designed to read coded information off of an Ident Disc (they are commonly referred to as "Ident Scanners" for this reason). These devices are standard-issue equipment for most law enforcement officers throughout the Imperial and Provincial territories, as well as security personnel who represent the more autonomous corporate concerns. Varying in size, weight, manufacturing cost and energy requirements from region to region, the average Security Scanner is held in one hand while the Ident Disk is passed over its sensorplate or inserted directly into a provided slot. Depending upon the Scanner's setting (see below), this will enable the user access to various types/levels of personal information (known as "tiers") on the disc's owner.

The average Security Scanner weighs .5 to 2 kilos, and requires 2 Energy Cells (2*) or an energy Cartiridge (†) to operate. They are not commercially available, although they are occasionally seen on the black market (SHEER FOLLY to find), where they can fetch prices ranging from 500 to 5000 Elmonits.

Use of a Security Scanner requires a Routine Crime Tech maneuver (a roll of 02 or lower indicates power failure or equipment breakage), and will reveal only such data as the Scanner is "set" to retrieve (all other data will appear as meaningless lines of characters across the small screen). All information encoded upon an Ident Disc is entered into one of three "tiers"; these are detailed below:

- **Tier One/Open Data:** Accessible to all known Security Scanners of Imperial or Provincial design, this tier contains all petinent "non-sensitive" identification data (that which, for instance, might be examined by a prospective employer). Such information includes the owner's name, sex, origin and current place of residence, date of birth, hair and eye color, height and weight, profession and employer, and Imperial/Provincial awards or decorations received, and denotes any licenses or certifications possessed (to operate given classes of vehicles, to engage in various forms of commerce, to near certain sorts of weaponry, etc.)
- **Tier Two/Security Data:** Data on this tier is primarily for the use of local law enforcement agencies and VegaPol representatives. It includes the owners past arrest and conviction record, parole or probation information, physiological and medical notes (blood type, diseases, prescribed medication, etc), and known aliases or monikers. Another sort of record may be found/recorded on this tier; miscellaneous notes on psychological or biological idiosyncrasies of recommended procedures for the identification and handling of the individual, which are occasionally placed there by such persons as teachers, counselors, psychologists, physicians, wardens or enforcement officers to serve as an aid to other authorities should the need ever arise. Often referred to as "marks" or "tags", the presence fo such notes always indicates that the individual has undergone some sort of analysis, evaluation, incarceration or treatment which may have some effect on future behavior or require special consideration. Most citizens who bear tags do not know exactly what they say.
- **Tier Three/High Security Data:** Data entries on this tier differ from those on the first two in that they are doubly coded, and may only be easily retrieved by the organization which placed them there to begin with (or by an allied organization entrusted with the code). Most Ident Disks possess little or nothing in the way of high security data; the presence of such entries always indicates some sort of group affiliation (or suspicion thereof). Such items as one's military service record, Special Agent status, security clearance rating, and known or suspected ties to subversive or criminal groups would all be recorded here. Undercover field agents of various organizations may possess another type of mark; known as an "agency Recognize Release", this is basically an instruction to allied agencies that this individual is indeed a field operative and should not be obstructed or delayed. In the event that such an operative is arrested by an allied agency, the ARR serves as a "get out of jail card" — the agent is to be released immediately and responsibility (recognizance) assumed by the "mother group".

The encoding of information upon an Ident Disk requires a Laser Engraver and a Moderate Crime Tech Construction Project — this assumes that the engraver knows the appropriate code(s). Data on the first and second tiers is recorded in DODEC, translating into Anglaman, while high security data may be recorded in any number of different ways (depending upon the sophistication/authority of the encoding group).

A Security Scanner which is set to retrieve from tier two or three will also read data from the lower tiers. A Security Scanner capable of only retrieving up to tier two cannot even detect the presence of tier three data (just having tier three data makes you a suspicious character). All information on the disk will be represented on the Scanner's screen, even if it is not translated (rumor has it that the Imperial Intelligence Directorate possess an invisible Disc code and a fourth tier — there is probably no truth in these stories). Security Scanners may not be "reset" to read data from other tiers. As an additional security precaution, many agencies which issue Security Scanners have them attuned to the finger/voiceprint of the individual officers/representatives who carry them. This prevents them from being used should they somehow fall into "the wrong hands".

3.2 MEDICAL EQUIPMENT AND DRUGS

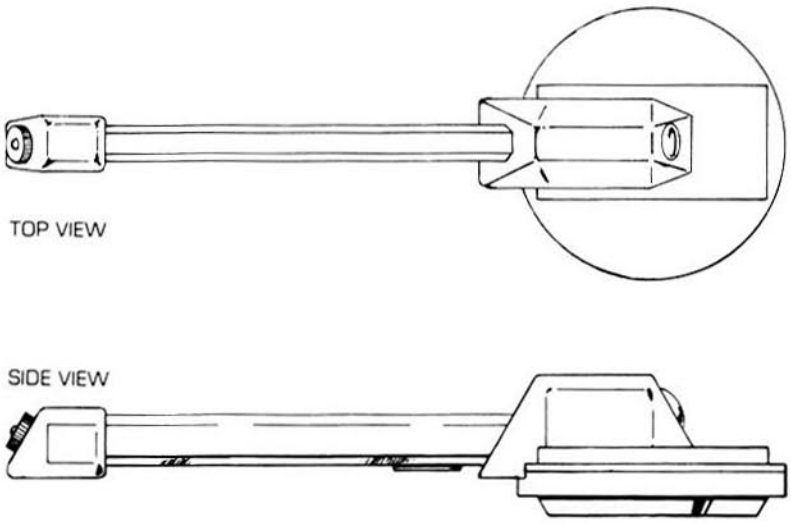
Note: *Use of the following equipment requires specialized training for full effectiveness. It is not normally issued to anyone who is not at least certified in First Aid, and even then most drugs and sophisticated equipment are restricted. It is suggested that the PC performing surgery make a roll for each tool/ operation. To knit major bones or arteries or perform other severe repairs, a laser scalpel will be necessary to access the damaged tissues.*

3.21 FIELD MEDICAL EQUIPMENT

Although generally not as complex to use effectively as Infirmary equipment, field medical devices should still be treated with respect. Each item has the difficulty modifier noted after the type of energy cell. Unless otherwise noted, Medical Practice or Medical Technics are required to utilize these devices (see the definitions of those skills in the **Player Book**).

Medical Scanner (†): (Medium [+0], use Medscanner skill) A device almost identical to the Multiscanner in appearance, its detection/analysis abilities are more specialized in the Life Signs field. Life form detection and distinction between animal and plant life can be made at a distance of 1000 meters. At 500 meters, individual animal life units can be discerned (within a given 50 m radius, after a scan) and within 100 meters the instrument will give information on basic animal types. Within 2 meters it can detect subtle racial differences and simple diagnostic analysis, such as detecting foreign matter in the target bloodstream, dangerous bacteria, etc. More accurate readings on an individual are possible if the Scanner has the person's Medhistory fed into it directly. (This can be transmitted via communicator tie-in or read off of a memory disk.) Note that the Medscanner does *not* provide treatment advice.

Diagnostic Computer (2*): (Extremely Hard [-30]) About twice the size of the Medscanner, this unit has a 200 megabyte internal storage capacity as well as memory disks, read/write ability, and space to store five extra disks. It is a sophisticated diagnostic device, capable of a detailed biomedical and psychologic analysis. It does *not* perform scanning functions; rather it reads data gleaned by a Medscanner and interprets it much more effectively than the scanner, including detailed treatment advice (something the Medscanner does not do). Once again, accurate readings are much easier if the computer has had a Medhistory of the patient previously input. An average complete Medhistory (including all previous scans and medical history) is kept on the patient's ident disc.



TISSUE KNITTER
Caeduceus

Dermal Closer (*): (Light [+10]) Releasing an energy wave which accelerates cell regeneration radically, the Closer is used for healing concussion hits at the rate of 1/ round while activated; also will heal bleeding wounds (max 5 hits/round in severity) at the rate of 1/round. The Sealer will also repair up to 2nd degree burns. One power cell in this unit will heal a total of 100 hits or hits/round. The device is roughly cylindrical, 2.5cm in diameter and 10cm long, and is operated by holding about 3cm above the affected area and activating.

Tissue Knitter (*): (Hard [-10]) Working on the same principle as the Dermal closer but more powerful, the Knitter is able to rejoin muscle, tendon and cartilage. Severe and complex injuries (such as shatters) are not recommended to be treated by field equipment, as the sophistication of these devices is limited. Tissues to be joined must be aligned somewhat. The Knitter is 3.5 cm in diameter and 12 long, with more complex controls (and so more skill required to operate). Repair time varies with complexity. The power cell will repair 4 specific wounds.

Regenergun (3*): (Hard [-10]) Will repair and regenerate any severity burns at the rate of approx 10 hits/minute. The 'gun' will also regenerate destroyed muscle, cartilage, tendon and partial bone tissue, requiring about one hour for each regenerated part. The gun cannot re-grow complex tissues like organs. The patient is at -25 (for each regenergun treatment) for a period of 25 hours after the treatment. It will repair any three burned areas or three specific tissue damages before exhausting its cells.

Arterial Sealer (*): (Very Hard [-20]) Again, similar to the Knitter and Closer, this more specialized device will rejoin severed veins and arteries (maneuver required) and stop bleeding hits at the rate of 3/rnd. It is approximately the same size as the Dermal closer, though 2 cm longer. The power cell will repair 5 severed arteries or 50 bleeding hits, or any combination (3 arteries and 20 hits/rnd, for instance).

Laseknife (*): (Very Hard [-20]) Utilizing a focused laser scalpel, this device, though probably not a potential effective weapon, could be dangerous if used by the unskilled. The Laseknife is 6 cm long, 3 in diameter, the 'blade' end cone-shaped.

Preservation Unit (†): (Hard [-10]) This device keeps alive a patient whose body, for one reason or another, is incapable of self-support, and is beyond the capability of field medication. The unit is about the size of a small backpack, with several retractable wires and tubes, each fitted on the end with a cutaneous adhesion plate. (These plates work in a similar manner to medtabs, adhering to the skin and injecting medicines or taking samples through tiny, high-pressure infusions.) The entire setup, including patient, is placed in a special polymer bag (included).

Although the device can run for as long as 25 hours on the 3 power cells, and the cells may be exchanged indefinitely, the body is not as stable as it would be if held in a more sophisticated (and much more bulky) Medcomputer Stasis Unit, and the patient's condition could deteriorate if not attended to within 25 hours (roll a RR/hour for Stat decline after 25 hrs.

Instasplint: (Medium [+0]) An inflatable sleeve forty-five centimeters long which fits snugly over any limb, the instasplint immobilizes the limb and reduces the chances of additional injury. If the GM makes rolls to determine whether healing is 100% correct, use of an instasplint adds 70 to any roll.

Instacast: (Medium [+0]) More durable than an instasplint, the instacast is an adjustable, plastic sleeve which hardens when a catalytic solution is applied, creating a rigid but relatively comfortable 'cast'. Use of an instacast effectively halves the maneuver penalty for a broken limb. It is easily removed by the application of a softening solution. A tube of each solution is included with each instacast. If the GM makes rolls to determine whether healing is 100% correct, use of an instacast adds 90 to any roll.

Skeletal Field Knitter (3*): (Very Hard [-20]) The Skeletal Knitter is a field device akin to the *Tissue Knitter*, but it has a more specialized function. When successfully utilized, the three power cells of this Knitter are capable of repairing 6 sprains, or 3 breaks, or 1 shatter, or an appropriate combination of these bone/cartilage/tendon repairs. The subjects of Skeletal Knitting are physically drained by the process, so all actions for 25 hours following the bone repair are at -25%. This represents the recovery period.

Medtab Applicator (*): (Light [+10]) An oval, palm-sized instrument, the applicator adheres Medtabs to the patient's skin. Medtabs are the latest development in controlled medicine dispensing, and are sold (to qualified personnel) in 10-tab cartridges. A cartridge is fed into the Applicator; the dosage to be applied is set on the Applicator controls — based on Diagnostic Computer recommendation or skilled treatment decision based on Medscanner readout — and the device is pressed against the patient's skin (usually on a limb). A 1 cm disk sticks to the skin, and remains firmly adhered after the Applicator is removed. The 'Tab' infuses the medication over a safe period of time and falls off, fully spent.

Auto Tab Applicator: (Hard [-10]) (2*) This device can be attached to a person's upper arm or leg so that it will automatically dispense Med Tabs into the being's system at preset intervals. It has a 10 Tab Capacity. The Auto Tab Applicator is best attached and set by a person with *Medical Technic* skills.

Modifications of the Auto Tab Applicator are possible (as they are with any device). Certain modifications could allow automatic injections at the command of the wearer or under certain environmental conditions.

3.22 TABS

The following Tabs have a variety of uses; all of the non-healing Tabs have an *Addiction Factor* (noted as the **AF** after the drug name). If the drug is taken more frequently than 1x/10 days, the imbiber must resist addiction by making a successful Resistance Roll (RR). This is done by making a percentage roll (plus Constitution bonus, if applicable) which is above the Addiction Factor. Each successive time the drug is taken, still within 10 days, adds 20 to the Addiction Factor. "Addiction" can range from its losing its effectiveness (the most common result), to a dependance on the drug, to death.

Medicinal Tabs

Alerlene: (AF: 10) Alerlene is a stimulant often used by military and paramilitary troops. Application of one tab allows the recipient to operate at full efficiency for a 25 hour period without rest. The drug is so safe, that several consecutive injections will allow extended wakefulness without detrimental effects. However, after use of Alerlene is discontinued, a sleep period must follow with 4 extra hours of sleep required for each consecutive 25 hour period that the person was kept awake with the drug.

Amboathorphin: (AF: 15) Amboathorphin is a universal nerve gas antidote for humans. Each applied tab will protect a person in a chemical warfare nerve gas environment for 25 hours. Victims who have succumbed to nerve gas in a previous combat round, and are miraculously still alive, can be treated with Amboathorphin in order to revive them. This would require an exceptional Medical Technics skill roll.

Anacept: (AF: 01) The result of centuries of biochemical research, Anacept is a 100% effective contraceptive. It is available in two forms; for males and females (the female version is more expensive and much longer lasting), and need not be used on a periodic basis. A dose of either variety must be taken at least fifteen minutes prior to sexual intercourse, and will render the user effectively sterile (males for 100 hours, females for twenty-seven days). It may be purchased over the counter by non-medical personnel on most Imperial Homeworlds. Recently, the manufacturers of this and other contraceptives and abortifacients have come under fire from several of the more fanatical religious groups which have been growing in popularity, making this a controversial issue.

Andeline: (AF: 10) Heals 30 concussion hits over the space of 6 rounds.

Andrex: (AF: 50) This chemical will normally increase concussion hit total by 50% and double the number of exhaustion points available to the character. The duration of the effect is 2 rounds per 5% failure of a RR made against a 20th Lvl attack.



AntiRad I through V: (AF: 35) A highly effective antidote for radioactive poisoning, a dose of AntiRad remains active within the user's bloodstream for fifty hours, and reduces the level of any radiation critical then taken by the Mk. of the dose (An E crit versus AntiRad I becomes a D crit, versus AntiRad II a C crit, etc). AntiRad has a high Addiction Factor, due to the tolerance developed by many persons against normal doses. Usually the dose must be doubled if this tolerance develops.

Arelenex: (AF: 10) Available over-the-counter throughout the Empire, a dose of Arelenex completely relieves all symptoms of the common cold for twenty-five hours.

Decilage: (AF: 15) A micro-organism in Tab form with an incubation period of 31-60 minutes after it is introduced into the blood-stream. The M/O attacks and destroys ingested toxins and other M/O's which work on the digestive or circulatory system.

Doseline: (AF: 80) (Sedative variant) Causes immediate unconsciousness as Virlene, but certain sleep patterns are inhibited. User awakens after only 1/4 of normal sleep time, fully rested (including PPs) and can function as normal. (Addiction symptom: mental deterioration: -5 to permanent Reasoning, Intuition and Memory for every additional use/10 days when RR failed.)

Fir-Queline: (AF: 05) Heals 10 hits instantly.

Hemoflux: (AF: 20) (Specific Stimulant): Acts on the spleen and liver, causing greatly accelerated blood production — enough to completely replace blood supply within 2 hours. Patient must at all times still have the normal minimal amount of blood to remain alive. Patient must be kept hydrated and will be at -25 for 25 hours after taking this drug.

Hyravol: (AF: 25) This drug counters the side effects which often accompany Hyper Space travel. Anyone suffering from nausea or disorientation after a hyper-shunt (GM's discretion) can be cured with a shot of Hyravol

Interferon IV: (AF: 10) (Antiviral) The latest synthetic version. Immediately after administered the patient is allowed a new RR at +100. If it is successful, complete recovery is achieved within one hour. If not, the patient may make another roll at +100 after every hour until successful, or six tries are made, whichever comes first. If all should fail, one can receive the drug and try again after one full day (though the drug is at an additional -10 for every successive use vs the same virus).

Jirolene: (AF: 70) (Stimulant) Aids wakefulness; adds 20 to Perception and related alertness rolls. Prolonged use (75 hours without a full rest period) causes a deterioration of all stat bonuses at the rate of 5 pts/hr, until a full rest is taken.

Korteline: (AF: 20) Relieves 1-10 accumulated stun-rounds.

Luryadrenaline: (AF: 5) (System Stimulant) used to revive patient from stasis in a portable preservation unit.

Perserverine compound: (AF:70) A highly effective pain-killer used often by military physicians. Although it does not heal any concussion points of damage, Perserverine greatly reduces the user's sensitivity to any pain for a period of six hours. In game terms, this drug lowers the "Shock & Pain" modifier by one step (i.e.; a character who has taken from 51% to 75% of his total concussion hits may act as if only 25% to 50% have been taken — reducing the maneuver penalty from -20 to -10, etc). This adjustment also applies to the exhaustion point expenditure modifiers. One very dangerous aspect of this drug is its high addiction factor. Any character who rolls such a result must succeed in a very hard (-20) static maneuver modified by Self Discipline. It the total achieved on this roll exceeds 100, the dosage will have to be doubled the next time Perserverine is taken. It the total is 100 or lower, the character is physically dependent on the drug, and will feel hopeless and in pain whenever denied its effects. Such characters will suffer a -20 on all maneuvers attempted during withdrawal. This penalty will continue to apply until withdrawal is complete — usually from three to thirty days later.

Quedella Phi: (AF: 0) Not a chemical drug, but actually a micro-organism held within the Tab; a Quedella Phi Tab allows a human to digest rough cellulose for a week. This is a great survival boon for explorers on undeveloped worlds that are sparse in readily edible vegetable food.

Rebillis: (AF: 20) Allows character to "see into his future" (5 minutes only). He must make a RR against a 5th Lvl attack; if it is successful the vision is clear, if failed, the vision takes the form of a hazy hallucination.

Regenex III: (AF: 0) (regenerate limb) A very expensive drug, it allows the regeneration of lost body parts. It is also time-consuming, for the full re-growth of a finger will take as long as 20 Standard Days; an arm or leg 100 to 150 Days. The limb is a perfect reconstruction, however; identical to the original.

Stirene: (AF: 10) (antibiotic) Extremely useful in fighting most bacterial infections. Although full recovery usually takes 24 hours, only one Stirene-aided RR is made, at +100. If the patient fails this roll (and the GM should keep this secret for two hours, which is how long it takes before even a skilled and well-equipped physician could determine whether the drug was taking effect) more extreme measures need to be taken. Addiction here usually means that the drug becomes ineffective.

Teledrine: (AF: 20) A difficult drug to obtain (sheer folly (-50) on most Imperial worlds), and totally illegal in some Provinces, Teledrine somehow increases the effectiveness of psionic endeavors by Telepaths and Semi-Telepaths. It is occasionally used by the Truthsibyls of the Galactic Court of Humanity. The user must succeed in a static maneuver roll modified by Intuition and +30 in order for the dose to have any effect whatsoever. If the total is higher than 100, the user will receive a modifier of +30 on all Psionic attacks and resistance rolls for the next hour. Taking more than one dose will increase the duration of the effect, but not the modifier. Should a patient become 'addicted', the dosage must be doubled.

Thiagorex III: (AF: 15) Available over the counter throughout the Empire, Thiagorex III completely relieves headaches and minor muscle tension. Should a patient become 'addicted', the dosage must be doubled. A critically low roll (of 05 or lower) indicates either total tolerance to the drug (i.e., it will never have any effect on the character) or some kind of allergic reaction.

Torethene: (AF: 10) Heals 100 concussion hits over the space of 12 rounds.

Triadrenaline: (AF: 80) (Heavy Stimulant) A very powerful, short term stimulant, Triadrenaline acts to 'haste' the user for 4 rounds.

Tyreline: (AF: 100) (lifekeeping) Strictly an emergency drug, it is used when even a portable Preservation Unit is unavailable. The instant the Tab is applied, the patient's body is chemically 'frozen' and will not deteriorate. Brain oxygen requirements are minimized, so that 'death' does not occur. This condition can be allowed to continue for a maximum of one hour before the brain begins to deteriorate. If a preservation unit or (preferably) a Medcomputer Stasis Unit is reached before this time, however, a dose of Luryadrenaline must be applied to cancel the Tyreline, and the patient must roll above (100 — his Co) or die, his body unable to take the shock.

Verex Compound: (AF: 25) A universal poison antidote, it allows the patient an additional RR at +100.

Virlene: (AF: 30) (Heavy Sedative) Causes immediate unconsciousness for 2-4 hours.

Yuthix: (AF:100 — if taken more frequently than once per year) Stops the aging process in most humanoids. One dose a year is effective, but if it is used more than once per 350 days, severe organ damage and usually death result.

Unmonitored/Recreational Tabs

Gorteline: (AF: 50) (recreational stimulant) Lasting about an hour, Gorteline produces a euphoric effect similar to — though somewhat more intense than — the drug Cocaine.

Mertinel: (AF: 0) (suppresses hair growth) Usually taken by men who don't want to bother with a beard and are unwilling to deal with permanent beard irradication. The drug alters certain hormonal levels, retarding beard growth for 100 days.

Myrine: (AF: 10) (sense enhancement) Expands vision slightly into infra-red and ultraviolet realms; allows user to view other light waves. Useful for night travel where infra-red vision would be an aid. Unfortunately, anyone under the influence of the drug outdoors in full sunlight is virtually blind without goggles. Duration: 2 hours.

Siradrel: (AF: 20) (mind stimulant).

Urlene: (AF: 80) (hallucinogen).

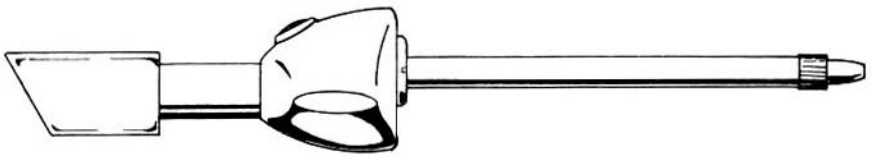
3.23 INFIRMARY EQUIPMENT

Note: *All infirmary surgical equipment assumes use in tandem with a scanner bed. These instruments are relatively ineffective (and can be dangerous) when used without support diagnostic equipment. Such instruments also operate using beamed power from a nearby transmitter tied in to the ship or building power reactor. Surgery with these devices without a scanner bed should be at an additional -30 penalty. However, successful surgery with this equipment takes but a quarter of the time to heal, always heals properly without scarring.*

Scanner Bed: A sophisticated infirmary device, shaped somewhat like a large bed with a full size display mounted above along one side. The scanner bed continuously monitors all vital signs of the patient, and signalling if there is any change. It is also capable of detailed sensor scans, and magnifying specific body parts. It is an invaluable tool.

Surgical Dermal Closer: (Medium [+0]) This device is capable of healing 5 concussion hits per round.

LASEKNIFE
Welby-Simms



Surgical Tissue Knitter: (Hard [-10]) Can heal torn (but not destroyed) muscle, tendon and cartilage, and any bone breaks — including shatters.

Surgical Regenergun: (Very Hard [-20]) The most powerful of the Surgical instruments, the Regenergun is actually several different devices, one each for burns, muscle, cartilage, bone, and organs. A surgical gun heals burns up to 5 hits/rnd, a single complete muscle or cartilage structure in 10 minutes, and one bone in 10-200 minutes (variable with size). Each requires considerable skill to operate.

Surgical Arterial Sealer: (Hard [-10]) A specialized device, it will repair arterial and venous tissues, reducing bleeding rates by as much as 10 hits/rnd (max one bleeding wound per round).

Laser Scalpel: (Very Hard [-20]) An indispensable surgical tool, it is necessary to cut away tissue to get at damaged bones and organs, often used in concert with the above devices.

Medical Function Bed: ("Medbed") The ultimate device for exploration parties without a skilled medical official (but a lot of money), the Medbed is a large machine (1.5 x 2.5 x 2 meters) resembling a bulky glass-lidded coffin on a solid pedestal. It has a built-in Mk. 20 computer, with sophisticated Surgical programs and general physiological data for all known sentient races. It must be certified and periodically checked by qualified government personnel, because it is, in essence, a surgeon. It is equipped with all of the infirmary equipment listed above, and is also capable of administering Medtabs, depending on its available supply. The Medbed has a 500 tab storage capacity, and can provide an instant readout of its current inventory.

The Medbed is a scanner bed and a diagnostic computer which, once activated by the presence of a body inside, will perform whatever actions it deems necessary to return the occupant to full normal operating status. A preliminary scan is performed to determine whether the occupant is near death — and immediate preventative action is taken if necessary. In very serious cases, the Medbed will place the occupant in stasis. Medbed stasis is much safer, sustainable indefinitely, and involves only a 1% chance of stat decline when the patient is revived. After the patient is stabilized, the Medbed proceeds with additional repairs.

This rather expensive device also requires specific data to function properly. With a complete medical profile of the patient (available on his ident disc), it acts with a Medical Practice skill of +100; with only its standard programs it is +70 (no specific penalties for the various instruments are employed).

Medstasis Bed: Essentially a cryogenic berth with monitoring devices and a small computer to assure that the occupant's more fragile lifesigns are maintained.

3.24 PROSTHETICS

The science of prosthetics has become quite advanced, to the point where artificial limbs indistinguishable from the real thing can be fitted within a matter of few days. The limb has sensory contacts like nerve endings. This lack of time delay is the major advantage over regeneration. The limb is usually powered by an ultra-microfusion reactor (normally lasts 1 year without maintenance). Super-powerful limbs were soon discarded as dangerous, since use of them invariably caused a strain on connective tissues and other body parts. They were only useful for acts involving the limb itself, for instance a super-powerful hand could crush things within itself. The prosthetic limb does have the advantage of being more durable and resistant to heat, cold, and physical abuse.

3.3 DATA STORAGE AND RETRIEVAL

Audio Disks: 2cm diameter molecular storage discs, they can hold up to 20 hours of audio recording each. Due to the nature of the storage, near-instantaneous reference to any data area is possible.

Holocamera: (*) Able to record still or motion holographic pictures (with sound, if desired) on a hologlass plate (see Hologlass below). The camera is 10 cm x 5 cm x 7 cm and has twin lenses.

Hologlass: 5 x 5 x 1cm transparent glassteel square, a rectangle of metal mounted on one edge and an identifying label on the opposite edge. These small squares receive digitalized laser images, which can be stored at a very high density on their special crystalline interiors. Hologlass storage is permanent; the images cannot be altered without destroying the square, which is very resilient.

Holoviewer: (*) Basically the same device as the Memory Disk viewer, though less expensive. Adapter modules are available to convert from one to the other.

Memory Disk Viewer (portable): (*) Slightly larger than a standard multiscanner, the viewer has a larger screen (12 x 12 cm) covering nearly all of one face. This black, glassteel plate can either display text information on its surface or generate a 3-D holographic image above or behind the screen. This image can be freely rotated — assuming a full 360° scan of the original was performed).

Memory disks: For use with standard audio/visual playback and record devices. Each disk holds up to 100 hours of digitalized holovideo recording or 100 megabytes of coded data. They are 3cm in diameter and 5mm thick.

Memory Recorder: (*) About the size of a pack of cigarettes, the Recorder makes standard 3-D video and stereoaudio (within the limits of its sensors) recordings. It uses standard memory disks.

Recorder (audio): (*) Useful when only an audio recording is necessary, this 10 cm long, 3 cm diameter cylinder is capable of limited stereo recording via microphones at each end. Audio disks (useable only with this type of recorder) 2cm in diameter fit into a slot in the shaft. Touch controls modify volume, etc. The recorder is capable of playback, through the speaker/mikes. A tiny readout on the side displays 'location' in storage area.

Viewer With Enhance: (*) Similar to the Holoviewer, this handy device is capable of 'enhancing' images encoded on the hologlass (this is only possible with the sophisticated digital laser recording done on a hologlass) many times, bringing into focus minute details previously too small to discern. Images may be enhanced up to 1000x.



3.4 CLOTHING

Naturally the prices given are but a base, and clothing costs can range dramatically, especially when high-fashion items, or custom-made items, are involved.

General Clothing Examples

Dress Clothing: Generally evening wear, more elaborate and less durable than leisure clothing.

Dress Footwear: To complement appropriate dress clothing.

Leisure Clothing: Daywear, activewear.

Leisure Footwear: More rugged, general-use shoes or boots.

Uniform: Often a one-piece coverall, this is the basic version of most military uniforms, including accoutrements and footwear (but no equipment).

Dress Uniform: A more elaborate version of the above, for state occasions, formal receptions, etc.

Light Jacket: General-purpose garment for cool weather.

Thermal Jacket: (*) A lightweight jacket with a built-in heating unit. It has detachable gloves and hood.

Thermal Suit: (*) This full-body suit uses two power cells, has a hood, foot and hand coverings, and a goggled mask shielding the face. The suit can keep a man warm in temperatures to -100° or cool up to +150° for as long as 100 hours with one power cell set. The suit is not equipped to be sealed against the atmosphere, but does have a filter for warming or cooling breathing air to reasonable temperatures.

Specific Imperial Milieu Clothing

The items in this section are examples form the ***Space Master*** Imperial Milieu to provide the GM with some pricing and clothing ideas. They are sometimes specific examples from the height of fashion.

Karolinian Seal Thigh-boots: The thick white fur of these aquatic mammals and the chamois-soft hide combine to make these incredibly comfortable boots a luxury accoutrement all across the Empire.

Kashmere Dress Toga: An elaborate garment bearing little resemblance to the simple tunics worn on a day-to-day basis on Olympus, this toga nearly sweeps the floor in many folds of cloth (the best are made from Oberon Moonmoth silk). Trimmed with precious-metal thread, they are indeed a work of art.

Shimmersheer Gown: The favored evening attire at any provincial court function, shimmersheer silk ripples in rainbow colors and even becomes semi-transparent. the material is also used to make tunics and shirts, but a gown of the cloth is every noblewoman's goal.

Static Cloak: Powered by a micro solar cell, a static cloak repels moisture using static electricity, forming a charge on the cloak exterior.

Trueleather Pants: In this distant future, to call a material 'leather' is not enough. The genuine article is priceless and now goes by the name *true* leather. Such pants are custom made.

Urkusk Mink Coat: The ultimate fur pelts come from the minks of the Kubischev-Lloyd capital planet; it has shimmering golden fur which brings an incredible price on interstellar trade markets.

Velaise Bodysuit: A skintight body suit covering all but the hands, feet and head, the velaise suit is surprisingly comfortable, being a material which breathes yet insulates against temperature extremes. It is made in a wide variety of colors, and other garments such as pants and tops are available separately. Velaise itself resembles an advanced lycra-like material.

3.5 ARMOR AND SHIELDS

Below are various types armor, shields, and accoutrements.

3.51 ARMOR

Armor is the basic protective material which covers the body. It is divided into five categories of four types each, thus there are 20 Armor Types (AT) represented in ***Space Master***. For those players familiar with ***Rolemaster***, the 20 ***Space Master*** ATs closely approximate those found in RM, and one will note that the standard progressions of "toughness" and "body covering" are followed here. Below are listed the 20 ***Space Master*** ATs with accompanying descriptions.

Cloth-Skin Base

This category encompasses normal cloth attire, robes, unarmored environmental suits and normal animal hides.

Skin (AT 1): Normal clothing, assumed worn if other covering is not specified.

Robes/Environmental Suit (AT 2): Encumbering full-length ceremonial robes or non-armored environmental suiting.

Light Hide (AT 3): The natural hide of certain animals (e.g., deer, dog, wolf and the like).

Heavy Hide (AT 4): The skin of androids, and the natural hide of certain animals (e.g., buffalo, elephant, bear and the like).

Light Body Armor

This category encompasses pliable, lightweight ballistic cloths and alloys. References to "kevlar" assume an advanced material with superior puncture resistance, while "duralloy" is the name given to any number of soft armors which become rigid when struck by a considerable force.

LBA Flak Vest (AT 5): A heavy quilt or kevlar vest covering the back, torso and abdomen.

LBA Extended Flak Vest (AT 6): A heavy quilt or kevlar vest which extends down the arms and to mid-thigh.

LBA Reinforced Flak Vest (AT 7): An Extended Flak Vest with duralloy plates sewn in for added protection.

LBA Reinforced Flak Armor (AT 8): A full suit of duralloy-reinforced kevlar, covering the body from the collar to the lower legs. Padding protects the joints and groin.

Pliable Armored Bodysuits

This category encompasses environmentally secure bodysuits of flexible but resilient cloth covered with laminated, yet somewhat pliable, armor pieces. The armored sections are typically made of duralloys layered with battleplastics. When a compatible helmet and life support system are added to the armor types of this category, the wearer may be totally immune to hostile environments (such as hard vacuum). This category also includes the rigid hide coverings of certain animals.

ABS Pliable Breastplate (AT 9): An environmental bodysuit mated with a soft-armored breastplate which covers the back, torso and abdomen. There may also be shoulder/upper arm and thigh armor.

ABS Pliable Breastplate & Greaves (AT 10): An environmental bodysuit covered with a soft-armored breastplate, as well as arm and leg greaves. The greaves typically cover the outer forearms, thighs and shins.

ABS Pliable Half Plate (AT 11): An environmental bodysuit coupled with soft-armored plates which cover the torso, back, abdomen, arms, and the fronts and backs of the legs. Also, the hides of certain creatures that contain at least a few rigid plates (e.g., rhinoceros, alligator, and the like).

ABS Pliable Full Plate (AT 12): An environmental bodysuit covered with soft-armored plates. Additional areas protected include the neck, groin, buttocks, hands and feet. Many joints remain exposed however. Also, the hides of creatures which contain many rigid plates (e.g., turtles, crabs, certain alien beasts, and the like).

Mesh Armored Bodysuits

This category encompasses environmentally secure bodysuits of non-constricting and resilient cloths, covered with mesh armor to various degrees. Mesh armor is a flexible covering of plasteels and synthi-armors woven so as to give optimum mobility for the considerable protection they impart to the wearer. When these armor types are coupled with a compatible helmet and life support system, the wearer may be immune to hostile environments (like hard vaccuum).

ABS Mesh Shirt (AT 13): An environmental bodysuit mated with a mesh armor shirt which covers the torso to the mid-thigh, back, and half of the upper arms.

ABS Mesh Shirt & Greaves (AT 14): An environmental bodysuit and mesh armor shirt coupled with arm and shin greaves. Greaves may be of mesh or battleplastics.

ABS Full Mesh (AT 15): An environmental bodysuit under mesh armor which covers most of the body in the form of a shirt and leggings.

ABS Battle Mesh (AT 16): An environmental bodysuit covered completely by reinforced mesh armor. Extra padding, in the form of cushioned duralloys and/or battleplastics protect the groin and joints.

Armored Exoskeletons

This category encompasses advanced battle armor, the toughest protection available to combatants short of Powered Armor. Exoskeletons are hard integrated plates which can deflect many attacks which would otherwise cleave through lesser armor types. Exoskeleton armor is typically a fused amalgam of hardened duralloys, ceramic plates, and battleplastics, formed soas to allow maximum maneuverability. The last two armor types in this category may be sealed against the environment as they have integral helms and life support systems.

AEX Exoskeleton Breastplate (AT 17): An exoskeletal breastplate with auxiliary plates covering the back, upper arms, abdomen and upper thighs.

AEX Exoskeleton Breastplate And Greaves (AT 18): An exoskeletal breastplate with auxiliary plates. This armor type includes greaves of hardened battleplastics which protect the forearms and shins.

AEX Half Exoskeleton (AT 19): A rigid exoskeletal armor covering most of the body. An undersuiting of mesh and resilient cloths protect exposed areas (such as the neck, groin, joints, and backs of the legs).

AEX Full Armored Exoskeleton (AT 20): A rigid exoskeletal armor which covers the entire body. Plates may overlap at the joints, imparting complete combat integrity.

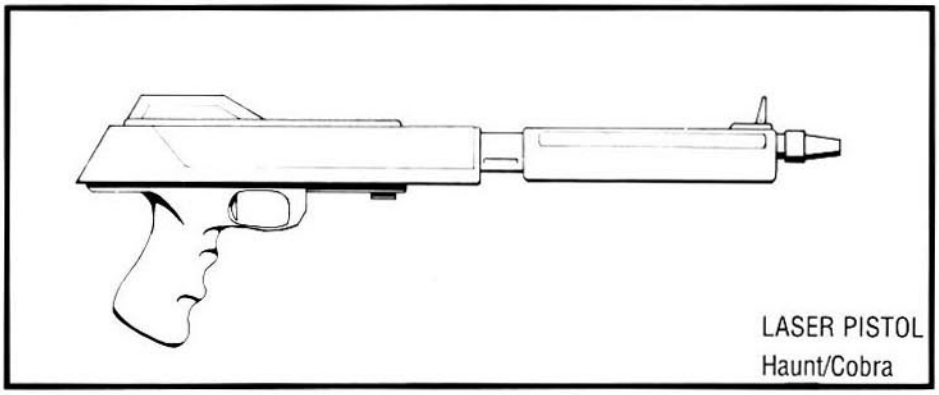


3.52 SHIELDS

All four shields described below function in basically the same manner, although the range of protection may vary. In the most advanced version, the shield is worn as a lightweight belt device (several small, cigarette-case sized modules affixed to a belt). One of the modules is the shield power pack. When the device is activated it covers the body and accoutrements of the wearer (the focus) with a halo of energy, usually faintly visible as a shimmering aura — quite noticeable in darkness. It should also be noted that persons wearing activated shields are much more easy to pick up on multiscanner and sensor probes because of the energy output.

The shield forms about 2-3 cms away from the wearer's body, reacting to the surfaces like an electro-static charge. At the feet the shield dissipates out for a few inches over the floor where they touch. The shield will, however, only spread to envelop about 1/10th of a cubic meter beyond the volume of the wearer's body (himself, normal clothing, a small pack and a few weapons) without suffering dispersal. When dispersal occurs (and the GM should be alert for the potential of this to prevent PC abuse of shields) all normal subtractions of the shield are halved, and the shield energy cell has a 5% every round of going dead due to overload. This situation is applicable to volumes up to the equivalent of the wearer's unclothed body. The living flesh of the wearer is the basis for the field, though the shield's internal computer is capable of limited compensation. Shield computers are preset to the general parameters of the owner when bought, and complex to reprogram. The shield simply will not attempt to spread over a larger area than that, because of its microcomputer programming. If, when the shield is activated the shield computer realizes that too much volume is involved — volume even beyond dispersal — it overrides and will not activate. Any objects added after the shield is fully activated have no effect. The shield compresses to the surface it has formed over, leaving the new, added volume outside. A shield will, under no circumstances, spread to envelop another living being, even if the wearer attempts to embrace that being then activate his shield. The shield will simply ignore the other focus.

With the shields' spreading tendency, the natural question arises: how does one fire a weapon while wearing a shield without suffering the subtraction as the projectile/beam attempts to punch through the attacker's own shield? This is, in fact, relatively easily accomplished (for those using projectile or energy weapons) with a device known as a dissipater. The dissipater is affixed to the end of the weapon barrel and acts to prevent the shield from trying to close over the end of the barrel. Interestingly, if one is armed with a weapon equipped with a dissipater and can get close enough to an opponent who is wearing a shield, he can push the barrel through the target's shield (the barrel tip must get within one inch of the opponent, truly point-blank) and annul its effects for that shot. Projectile mounted dissipation devices have been experimented with, but even ***Space Master*** technology is currently not up to them.



LASER PISTOL
Haunt/Cobra

Cruder, more bulky shield models are most often worn on the back or chest, or as a suitlike garment covering the entire body. Belt weight: 3.5 kg; back/chest weight: 8 kg.

All shields require 3 full rounds after being activated to spread and establish themselves fully. Conversely, after being deactivated they require three full rounds to dissipate.

Only one shield can be operated from one focus at any given time. Though more than one could theoretically be worn, (watch encumbrances, GMs!) attempting to have both operational around the same focus at the same time will short them out (Extremely Severe malfunction).

Any two shields centered about different foci which come into contact will either ignore (in the case of a Velocity Shield) or repel each other, compressing closer to the surface they surround. This effect is not strong enough to push or otherwise bother the wearers.

Shield wearer advantage is given as a DB (listed as a subtraction); this allows combined use of shields and armor. Keep in mind that, unless the armor is equipped with a conduction grid (like spaceships with shields; all powered armor is equipped with such a grid) to properly spread the shield, it is treated as additional volume. Note the distinction between 'missiles' and 'projectiles'. These are arbitrary term, missile being used to mean arrows, quarrels and any thrown, relatively low-velocity airborne attack, as opposed to projectiles, which are fired from a gun and have a relatively high velocity.

Regarding Shield Power Usage

Each power pack, when fully charged, has 100 energy points. Activating the shield costs five points, and each round the shield is on drains one point. In addition, each time the shield is activated, the wearer must make an unmodified, non-open ended roll. A result of 01-03 indicates that the cell is completely dead and requires recharging. This occurs despite the power level of the cell, due to the initial immense power drain of setting up the shield. A result of 04-05 indicates a shield malfunction, and one must roll severity (1D10: 1-5: Routine; 6: Light; 7: Moderate; 8: Severe; 9: Very Severe; 10: Extremely Severe.

Shield Types

Velocity Shield : (‡) Works basically on the principle that the faster something approaches, the more resistance the shield generates. Wearer is essentially -30 vs. all regular melee attacks; -45 vs missile; -60 vs projectiles (due to greater velocity). This shield is extremely effective against projectile weapons, but useless against energy weapons, as the beam has virtually no mass to resist. An option with the Velocity Shield is a *wrist collector*, a device worn about the lower arm, and attached to the main shield belt via a light cable. The *collector* affects the shield aura in such a manner that the shield's deflective energy is concentrated more at the front of the wearer (or wherever the arm is held) much like a version of ancient physical shields. The effect adds 25 to all frontal DBs (-55 vs melee, -70 vs missile, -85 vs projectiles), however, it reduces the DB on all other facings by 20 (-10 vs melee, -25 vs missile, -30 vs projectiles).

Deflector Shield: (‡) Creating a different sort of field than the Velocity Shield, this shield is very effective against energy weapons, somewhat useful against fast projectiles, but almost useless against missile and melee weapons. It uses the very energy of the incoming attack to deflect, or alter its course. It is useful against energy waves as well as material objects, if their kinetic energy is high enough. Wearer is -60 vs energy attacks, -40 vs projectiles, -15 vs Missile, -5 vs Melee.

Absorption Shield: (‡) Although useful against all forms of attack, this shield is not as effective as A or B in either. It acts to absorb and dissipate over its surface the energy of an incoming object, thus slowing (or even stopping) it. Wearer is -30 against all forms of attack.

Barrier Shield: (2‡) Able to generate a very powerful field of energy about the wearer, this is the most impressive of the four, and requires a portable reactor rather than a standard power pack (though the reactor should be treated the same as the power pack for energy drain and overload possibilities — see below). It is correspondingly bulkier and more expensive. It does, however, effectively stop all but the most determined energy weapon attacks (wearer at -90). The shield stops material objects by deflecting, or if they are moving fast enough, destroying them. Projectiles are usually completely vaporized before reaching the target. For missile and projectile attacks, treat wearer as -70; missile destroyed in the shot if stopped (unless the missile is some special material or item, in which case the GM may wish to give it a RR). For melee, treat wearer as -60; and roll a RR for the attacking weapon after each strike or attempted strike. If a metal weapon is used, wielder takes 1-10 hits during each strike, as power feedback is channeled down the weapon.

3.53 OTHER PROTECTIONS

Antipsi Helmet: (4*) A complicated and rather bulky gadget, the Antipsi helmet is available in many basic styles and with varying strengths. The Mk.# of the helmet determines its cost as well as its effectiveness, since this number is added to the user's experience level. This adjusted level is the wearer's experience level whenever a resistance roll is made versus any Psion.

Note: *such equipment is extremely rare and difficult to acquire.*

Riot Shield: (†) A small frontal version of the absorption shield which is worn on one forearm, the riot shield is used by law enforcement agencies on many Imperial worlds. Once activated, the shield takes a full round to actualize, forming a slightly concave disc about one meter in diameter. This transparent disc of light shimmers and hums softly, otherwise looking like a normal "left-hand shield" of old. The wearer may parry (using his DB) only one attack per round, and must be able to interpose the shield (i.e., the shield cannot stop an attack from behind). The GM may wish to allow the wearer a maneuver roll to parry flank attacks. Otherwise, the Defensive bonuses for the riot shield are the same as a standard absorption shield. Note that attacks coming around the shield (rather than through it) do not require a dissipater.

Sentinel Helmet: (†) Manufactured by Kodo Industries of Clan Detzeer, the Sentinel Helmet combines the best aspects of several familiar devices into one unit. Functions include: an ultraview faceplate (infrared and light-filtering), a filtered compressor unit, a variable headset rangefinder, and a two-way microfrequency band communicator with a range of up to one kilometer.

3.6 TOOLS

Laser Cutter/Welder: (†) A device consisting of a handle with a 13 cm long, slender (1 cm in diameter at the widest point) cone. A dial on the base of the handle controls width and intensity of the pinpoint laser beam, which can be used to either cut through thin material or fuse circuits. Though fairly powerful, it is not very practical as a weapon since the beam focuses about 1-5 cm from the tip of the cone.

Heavy Cutter/Welder: (‡) The heavy-duty version of the laser above, this device is more powerful: it will burn through an inch of alloyed steel in moments, able to cut a 1 meter diameter hole in a standard ships interior door in 15 seconds. The beam can be set for up to 30 cm of focus length, but is most effective at about 5 cm. It is also able to weld (useful for welding doors shut when Snee are coming down the hall).

Standard Tools: An assortment of lightweight alloy wrenches and other tools capable of performing normal mechanical repairs.

Molec Boards: The basis of modern circuitry, Molec boards are 10 cm square laminated sheets of transparent plastic with conductive and superconductive materials in the middle layers. The conductive material is electrically moved about on a molecular level to form the complex micro-circuitry used in most electronics. These sheets plug in along one edge to receptacles which tie the device together. The boards in this repair kit are blank, ready to be etched. An Etcher is, of course, necessary .

Infra-plate: (*) A 10 cm square, 1 cm thick plate of glassteel framed with a black alloy. The controls to this device are located along the edge. When placed on any surface the plate adheres and glows a dim red. Utilizing the controls the operator can gain a holographic image — which appears behind the glass exactly where it would actually be — of any solid objects behind the surface, up to a depth (viewing depth is variably controlled) of 20 cm. Excellent for viewing mechanical lock mechanisms, etc. Tools are designed to work around the plate, which is held away from the surface on tiny extensions.

Molec Board Etcher: (†) When a molec board and the appropriate circuit programming memory disk are plugged into this 12 x 5 x 8 cm unit it will 'etch' a new board to replace the defective one.

Memory Switch Panels: Standardized control panels (20 in a pack) which can be utilized to replace damaged or defective control panels and readout displays.

3.61 SMALL TOOL KIT

— Laser cutter/welder
— Standard Tools
— Molec Boards
— Infra-plate

3.62 MASTER TOOL KIT

Contains everything in the above tool kit, plus:
— Supplemental Tools
— Molec Board Etcher
— Blank Molec Boards
— Repair Scanner
— Memory switch panels
— Heavy Cutter/Welder

3.7 SURVIVAL EQUIPMENT

This section includes items useful for surviving in the wilds and wherever civilization is but a distant thought.

3.71 SHELTER

Collapsible Shelter: Capable of housing 10 comfortably, this structure is more rigid than a tent and is capable of withstanding a rougher climate. It can be sealed from atmosphere but requires a separate air supply. Folds to a 20 x 20 x 50 cm package weighing 16kg.

Life Support System: (4*) 10 cm cube unit capable of recirculating warmed or cooled air for up to ten people to breathe and live comfortably for 100 hours before requiring a new filter unit. (requires four power cells).

Portable Bed: (*) An air mattress and frame, with air pillow and veriwool blanket. A tiny pump inflates the bed and powers a warmth unit in the blanket, if desired. Weighs 2 kg and collapses into a 10 x 10 x 5 cm. package.

Pressure Tent: (*) Similar to the tent above, this unit has a double skin and can be sealed from a hostile atmosphere. It includes a pump and an air supply enough for four people to breathe comfortably for 20 hours (four Air Packs). Folds to a 20 cm cube and weighs 8 kg.

Tent: Holds four people comfortably, made of a virtually indestructible plastic material which also has superior insulating qualities. It weighs but 3 kg and collapses to a 12 cm cube when not in use.

3.72 SUSTENANCE

Air Pack: 6cm long cylinder 3 cm in diameter, holds 10 hour supply of compressed/solidified air mix. For use with filter mask and standard pumps, it is practically indestructible.

Atmospheric Compressor: (2*) A box-like device attached to a plastic mask via a breathing tube, the atmospheric compressor is used on planets where the mix of gases in the atmosphere is of a life-sustaining variety, but the density or pressure of the atmosphere is too thin to allow normal respiration. It can compress any such atmosphere up to four times its normal density (allowing humans to breathe in any air-like atmosphere with a density as low as 0.25 that of Terra). Note that the atmospheric mix must closely resemble that which is normally breathed by the wearer only the density is altered.

Coolpack: (*) Mounts on top of a six-pack of beverage (in the standard molec-cans which biodegrade one day after being opened) and chills or heats the contents to desired drinking temperature. Complete with handy carrying handle.

Filter Mask: (*) For use in areas with suitable atmospheric pressure and no gasses harmful to skin and eyes, but where the air is not capable of supporting humanoid life. The mask fits over nose and mouth, and provides breathable air for 20 hours before needing a new filter pack.

Filtered Compressor: (2*) A combination of the filter mask and atmospheric compressor, this device is used on planets where the atmosphere is not only too thin to breathe normally (down to 0.25 that which is normal for the wearer), but also contains some sort of trace elements which must be filtered out prior to compression. Like the standard filter mask, this unit can sustain normal breathing in such atmospheres for up to twenty hours before the filter must be replaced, and fits over the wearers mouth and nose.

Note: *this unit does not provide any protection from gases or toxins which may be harmful to skin or eyes.*



Foodpack: A more delectable if bulky form of sustenance than a Ration Tube (see below), a foodpack is a 6 cm cube. When water is added it hydrates into actual foods (although they have been somewhat 'homogenized', each retains some natural flavor). The foodpack is guaranteed against spoilage for ten years.

Gillpack: (*) For extended underwater activities, the gillpack is a 2 cm diameter cylinder 12 cm long, with a mouthpiece mounted halfway along the tube. The pack essentially allows the user to breathe air suspended in water, minimizing the problems of compression. The duration is the life of the power cell (about 100 hours in this case).

Micro-oven: (†) A miniature (30 x 30 x 20cm) microwave oven, suitable for field use

Ration Tube: A disposable plastic container (about a 6 cm cylinder 3 cm in diameter) holding a semi-liquid, highly concentrated food. Though lacking in variety and flavor (it normally has a non-offensive, if bland, taste) it is extremely nutritious and filling, and equals a full meal. A man could survive indefinitely on two a day. These rations are not subject to spoilage and are not damaged by extreme heat or cold.

Instameals: More sophisticated than Foodpacks, instameals are complete dinners with built-in warmer units, serving plate and utensils. Pull the tab on top and the dinner is hot and ready in one minute. Generally considered quite delicious, but rather bulky for survival rations.

Water Accumulator: (*) A 5 cm cylinder which can be mounted on the mouth of a 2 liter plastic bag. When activated, it condenses water vapor from the surrounding air and fills the self-sealing bag. Time to fill varies with atmosphere, though is usually 1-5 minutes. Power cell is good for about 500 bagfuls. Unit normally sold with 5 reusable, tear-resistant bags.

3.73 MISCELLANEOUS "GEAR"

Grav Belt Modulator: (1*/10 kg mass) Also known as a Weight Modulator, this smallish device is actually a mini antigrav unit. Designed to be worn on a person's belt, the modulator may be set to effectively negate some (or possibly all) of the wearer's current weight (up to the maximum level purchased). Note that the higher this maximum setting is, the more expensive the modulator is, and the more energy cells are required to power the device. Remember that the wearer's effective weight will still be averaged with his or her normal mass for purposes of determining encumbrance.

4.0 MASTER EQUIPMENT TABLE

(Mass is in kg. — Cost is in Elmonits.)

Name	Mass	Cost
PROJECTILE WEAPONS		
Conventional Pistol		
5mm Pistol	.3-.6	50
10mm Pistol	.5-.8	80
12mm Pistol	.6-1	100
Conventional Machine Pistols		
5mm Light Machine Pistol	2.5-3.0	350
10mm Medium Machine Pistol	3.0-3.5	600
Conventional Rifles		
5mm Light Rifle	3.0-4.0	250
10mm Medium Rifle	3.5-4.5	400
12mm Heavy Rifle	4.0-5.0	500
Conventional Assault Rifles		
5mm Light Assault Rifle	3.5-4.0	350
10mm Medium Assault Rifle	3.75-4.5	500
Conventional Machine Guns		
10mm Light Machine Gun	7-10	800
10mm Medium Machine Gun	8-12	1200
12mm Heavy Machine Gun	9-15	1500
Conventional Shotguns		
15mm & Sawed-off Shotgun	3-4	250
15mm Autoshotgun	3.5-5.0	700
20mm & Sawed-off Shotgun	4-4.5	300
20mm Autoshotgun	4.5-5.5	900
Needleguns		
Needle Pistol	.5-.75	400
Needle Carbine	1.5-3.0	1000
Needle Rifle	2.5-4.0	1600
Tangleguns		
Tangle Pistol	.75-1.25	700
Tangle Carbine	2-4	1300
Tangle Rifle	3-5.5	1800
Taserguns		
Taser Pistol	.75-1.25	600
Taser Carbine	2-3.5	1200
Taser Rifle	3-5	1800
Rocketguns		
Rocket Pistol*	1-1.5	400
Rocket Carbine	2-3.5	900
Rocket Rifle	3.5-6	1500
Magnetic Linear Accelerators		
MLA (Linex) Pistol (†)	1-1.75	800
MLA (Linex) Rifle (‡)	3.5-6	2000
Grenade Launchers		
Grenade Rifle	3-5.5	1000
Rocket Propelled Grenade Launchers		
RPG Launcher	3-6	1200
Portable Missile Launchers		
PML	4-6.5	1400
PML Quad	5-8	1800
PML Autofeed	6-11	2400

Name	Mass	Cost
ENERGY WEAPONS		
Lasers		
Mini Laser (*)	.1-.2	120
Laser Pistol (*)	.3-.5	250
Assault Laser (†)	2.5-3.5	500
Laser Rifle (†)	3.0-4.5	750
Heavy Laser (‡)	4.0-6.0	1000
Blaster		
Mini Blaster (*)	.15-.25	150
Blast Pistol (*)	.3-.75	300
Assault Blaster (†)	2.75-4.0	550
Blast Rifle (†)	3.5-5	800
Heavy Blaster (‡)	4.5-7.0	1200
Flamers		
Mini Flamer (*)	.2-.4	100
Flame Pistol (*)	.4-1.0	200
Assault Flamer (†)	3-5	400
Flame Rifle (†)	4-6	650
Heavy Flamer (‡)	5-7	900
Energy Melee Weapons		
Force Knife (†)	.3	500
Power Sword (†)	.7	3000

Name	Mass	Cost
Stunner		
Mini Stunner (*)	.1-.2	120
Stun Pistol (*)	.3-.5	260
Assault Stunner (†)	3-4	550
Stun Rifle (†)	4-6	800
Heavy Stunner (‡)	4.5-7.0	1100
Disruptors		
Mini Disruptor (*)	.1-.3	300
Disruptor Pistol (*)	.3-.6	700
Assault Disruptor (†)	3.5-5.0	1200
Disruptor Rifle (†)	4.0-6.5	1500
Heavy Disruptor (‡)	5.0-7.5	2000
Struptorguns		
Mini Struptor (*)	.1-.3	500
Struptor Pistol (*)	.3-.6	1000
Assault Struptor (†)	3.5-5.0	2000
Struptor Rifle (†)	4.0-6.5	2800
Heavy Struptor (‡)	5.0-6.5	3500
Plasmatic Repeators		
Plasma Repeator Rifle (§)	10-12	4500
Heavy Plasma Repeator (§)	15-18	6000

PROJECTILE AMMUNITION

(**Cost** is per round unless indicated otherwise. **Mass** will vary, but the GM can use the values below for a rough estimate for the Mass of 5 rounds unless indicated otherwise.)

General Purpose Round		
5mm	.1	.05
10mm	.2	.08
12mm	.3	.1
Armor Piercing Round		
5mm	.1	.06
10mm	.2	.1
12mm	.3	.12
High Explosive Round		
5mm	.1	.07
10mm	.2	.11
12mm	.3	.13
High Explosive Armor Piercing Round		
5mm	.1	.1
10mm	.2	.15
12mm	.3	.2
Standard Needlegun* Bursts*		
Pistol (magazine of 2 bursts)	.1	.5
Carbine (magazine of 4 bursts)	.2	1.5
Rifle (magazine of 6 bursts)	.3	2.5
Shotgun		
15mm	.2	.05
20mm	.2	.1
Tangler Cartridge		
Pistol	.5	3
Carbine	.5	6
Rifle	.5	9

Taser Ammo		
Pistol (cartridge)	.2	3
Carbine (magazine, 5 shots)	1.0	15
Rifle (magazine, 5 shots)	1.0	15
Ammunition Modifiers		
Tungsten Core Round	(x1.5)	(x3)
Depleted Uranium Core Rounds	(x3)	(x4)
Super-Teflon Coated Rounds	(x1)	(x1.5)
Irulon Coated Rounds	(x1)	(x4)
Tranquilizer Rounds	(x0.5)	(x3)
Poisoned Rounds	(x1)	(x4)
Grenades and Portable Missiles		
General Purpose Grenades	.1k/Mk	10/Mk
Concussion Grenades	.1k/Mk	10/Mk
Shrapnel Grenades	.1k/Mk	10/Mk
Plasma Grenades	.1k/Mk	30/Mk
Smoke Grenades	.1k/Mk	4/Mk
Anti-laser Aerosol Grenades	.1k/Mk	16/Mk
Standard Unguided Missile	.2k/Mk	10/Mk
Standard Guided Missile	.2k/Mk	20/Mk
Grenade/Missile Modifiers		
Point Defense Grenades/Missiles	(x1)	(x.5)
Standard Grenades/Missiles	(x1)	(x1)
Enhanced Grenades/Missiles	(x1)	(x3)

Name	Mass	Cost
PERSONAL ITEMS		
Calculator Unit (*)	.1	10
Chronometer (*)	.02	1 - 50
Computer Map (*)	.6	60
Distance Lenses (*)	.4	20
Earphone Communicator (*)	.02	25
Elmonit Card (*)	.02	5
Glowglobe (*)	.25	1
Ident Disk (replacement)	.02	200
Infra-red Goggles	.15	20
Infra-red Lenses	—	150
Light Filter Lenses	—	60
Lightrod (*)	.2	.3
Magnetic Compass	.1	1
Makeover Kit (2*)	1	45
Microcomputer (1-4*)	1	40
Molecutronic Scrambler (1*/Mk)	.5/Mk	200/Mk
Personal EW Generator (‡)	1.5	2500
Pocket Communicator (*)	.25	30
Poison Detector (*)	1	500
Psion Damping Gear (4*)	.1	?
Scanners		
Multiscanner (†)	2	800
Repair Scanner (†)	2	700
Tactical Scanner (*)	1.5	300
Security Scanner (2* or †)	.5-2	varies
Signal Beacon (*)	.1	10
Ultra Goggles	.2	80
Ultra Lenses	—	350

Name	Mass	Cost
Field Medical Equipment		
Medical Scanner (†)	2	850
Diagnostic Computer (2*)	2	1200
Dermal Closer (*)	.5	200
Tissue Knitter (*)	.5	350
Regenergun (3*)	.8	400
Arterial Sealer (*)	.5	400
Laseknife (*)	.4	250
Preservation Unit (†)	3	500
Instasplint	.1	20
Instacast	.2	30
Skeletal Field Knitter (3*)	1	800
Medtab Applicator (*)	.2	80
Auto Tab Applicator (2*)	.3	200

Name	Mass	Cost
Tabs		
Medicinal Tabs		
(cost is per clip of 10 tabs, mass is .1kg for 500 tabs)		
Alerlene	—	150
Amboathorphin	—	230
Anacept	—	300
Andeline	—	100
Andrex	—	550
Antirad I through V	—	1K/Mk
Arelenex	—	15
Decilage	—	600
Doseline	—	50
Fir-Queline	—	100
Hemoflux	—	120
Hydravol	—	20
Interferon IV	—	100
Jirolene	—	2
Korteline	—	250
Luryadrenaline	—	100
Perserverine compound	—	120
Quedella Phi	—	90
Rebellis	—	650
Regenex III	—	250
Stirene	—	25
Teledrine	—	1000
Thiagorex III	—	10
Torethene	—	150
Triadrenaline	—	200
Tyreline	—	500
Verex Compound	—	100
Virlene	—	50
Yuthix	—	2000
Unmonitored/Recreational Tabs		
Gorteline	—	200
Mertinel	—	1
Myrine	—	50
Siradrel	—	200
Urlene	—	300

Name	Mass	Cost
Infirmary Equipment		
Scanner Bed	400	20k
Surgical Dermal Closer	.8	1,200
Surgical Tissue Knitter	.9	1,800
Surgical Regenergun	1.1	2,200
Surgical Arterial Sealer	.8	2,000
Laser Scalpel	.7	1,600
Medical Function Bed	700	200k
Medstasis Bed	450	25k
Prosthetics	varies	varies

Name	Mass	Cost
Data Storage and Retrieval		
Audio Discs	.08	2
Holocamera (*)	.5	50
Hologlass	.1	15
Holoviewer (*)	1	30
Memory Disk Viewer (*)	1	70
Memory Disks	.05	20
Memory Recorder (*)	1.5	120
Recorder (audio) (*)	.2	40
Viewer With Enhance (*)	1.5	150

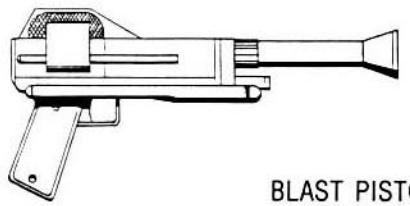
Name	Mass	Cost
Clothing		
General Clothing Examples		
Dress Clothing	varies	100
Dress Footwear	varies	20
Leisure Clothing	varies	50
Leisure Activewear	varies	10
Uniform	varies	80
Dress Uniform	varies	120
Light Jacket	varies	10
Thermal Jacket	varies	30
Thermal Suit	varies	50
Specific Imperial Milieu Clothing		
Karolinian Seal Thigh-boots	4	15k
Kashmere Dress Toga	1	800
Shimmersheer Gown	2	4,000
Static Cloak	5	500
Trueleather Pants	1.5	1,500
Urkusk Mink Coat	6	20k
Velaise Bodysuit	2	60

Name	Mass	Cost
Armor And Shields		
Armor		
Environmental Suit	6	750
LBA Flak Vest	1	80
LBA Extended Flak Vest	1.5	100
LBA Reinforced Flak Vest	2	150
LBA Reinforced Flak Armor	4	200
ABS Pliable Breastplate	5	1,000
ABS Pliable Brstplt &Greaves	6	1,300
ABS Pliable Half Plate	7	1,500
ABS Pliable Full Plate	8	1,700
ABS Mesh Shirt	6	1,500
ABS Mesh Shirt & Greaves	7	1,800
ABS Full Mesh	8	2,000
ABS Battle Mesh	10	2,200
AEX Exoskeleton Breastplate	7	3,000
AEX Exoskeleton Brstplt & Grvs	8	3,200
AEX Half Exoskeleton	14	3,500
AEX Full Armored Exoskeleton	18	4,000
Shields		
Velocity (chestpack, ‡)	6.5	2,000
Deflector (chestpack, ‡)	6.5	2,000
Absorption (chestpack, ‡)	6.5	2,000
Barrier (chestpack, 2‡)	8.5	15k
Velocity (belt, ‡)	1.5	8,000
Deflector (belt, ‡)	1.5	8,000
Absorption (belt, ‡)	1.6	8,000
Barrier (belt, 2‡)	2.0	60k
Other Protections		
Antipsi Helmet(4*)	1.5	5k/Mk
Riot Shield (†)	3.5	2000
Sentinel Helmet (†)	2.0	400

Name	Mass	Cost
Tools		
Laser Cutter/Welder (†)	.5	150
Heavy Cutter/Welder (‡)	1	250
Standard Tools	1	100
Molec Boards (10)	.5	300
Infra-plate (*)	.1	200
Molec Board Etcher (†)	1	500
Memory Switch Panel	3	400
Small Tool Kit	3	800
Master Tool Kit	7	3000

Name	Mass	Cost
Survival Equipment		
Shelter		
Collapsible Shelter	15	150
Life Support System (4*)	1	50
Portable Bed (*)	2	6
Pressure Tent (*)	8	90
Tent	3	20
Sustenance		
Air Pack	.2	5
Atmospheric Compressor (2*)	.2	10
Coolpack (*)	.2	5
Filter Mask (*)	.2	5
Filtered Compressor (2*)	.35	15
Foodpack	.08	.5
Gillpack (*)	.5	50
Micro-oven (†)	5	30
Ration Tube	.05	.2
Instameals	.5	1
Water Accumulator (*)	.5	5
Miscellaneous Gear		
Grav Belt Modulator (1*/10kg)	.1	50
Grav Belt (‡)	2	3,500
Grav-pack (*)	1	20
Gravchute (2*)	.1	25
Heat Dissipation Gear (*)	2	75
Reflective Coveralls	2	170

Name	Mass	Cost
Power Cells		
Cells *		
Utility Cell	.01	5
Weapon Cell	.02	8
Flamer Cell	.05	5
Cartridges †		
Utility Cartridge	.2	30
Weapon Cartridge	.3	50
Flamer Cartridge	.5	15
Packs ‡		
Utility Pack	4	100
Weapon Pack	4	200
Flamer Pack	6	60
Microfusion Reactors §		
Utility Reactor	5	1,000
Weapon Reactor	2	1,200



BLAST PISTOL
P3/Devcomm

Grav belt: (‡) Not so much a vehicle as a personal device, the grav belt is a small gravitic generator strapped to the back with a wide belt. From the generator, control appendages extend forward to a position convenient for the wearer. The belt is capable of full lift and maneuverability.

Grav-pack: (*) A large backpack capable of neutralizing the weight of anything placed in it, up to 50 kg or .5 cumet. Care must be used, however, as the inertial mass of the pack, of course, is the same. Maneuvers are at -5/10 kg.

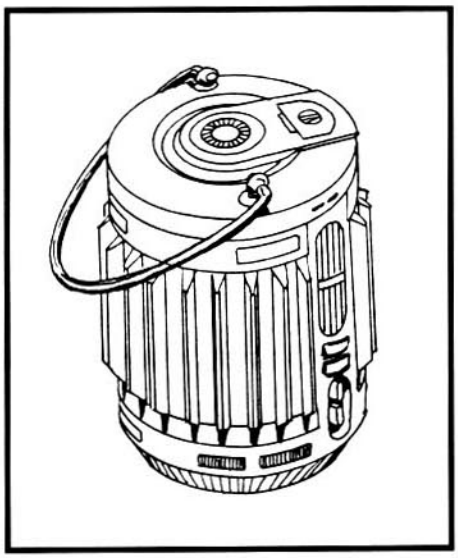
Gravchute: (2*) A very simple version of the gravbelt, it is a harness which can be donned quickly (in an emergency) and will allow the wearer to float safely to the ground in an environment of up to 3 G's and from an altitude of up to 20 km — or any combination. The belt is only good for one use, regardless of the distance of the fall. Most modern air and spacecraft stock them.

Heat Dissipation Gear: (*) Survival equipment for desert and jungle biomes, Heat Dissipation Gear is worn at strategic locations all over the body. It allows the wearer to ignore the exhaustion modifier for hot environments by quickly dispersing body heat into the surrounding atmosphere, thus keeping the body's temperature down. Heat Dissipation Gear may not be worn over or under any sort of body armor or encumbering clothing.

Reflective Coveralls: An anti-LASER defensive complement which may be worn in combination with any other personal armor type. A target wearing Reflective Coveralls has 10 added to his or her defensive bonus versus LASER attacks only.

3.8 POWER CELLS

Almost every item of personal equipment in Space Master (except for most projectile weapons, of course) requires a power supply to keep it functioning properly (or functioning at all for that matter). There are basically four general categories of personal equipment power supplies, the cell, the cartridge, the pack and the microfusion reactor. Each is physically larger and more powerful than the one that preceeds it in the listing. Each category then has several representative types. For instance, there are utility cartridges, weapon cartridges, and flamer cartridges. What follows is a breakdown of the various personal equipment power supplies.



Cells

A piece of equipment which requires the use of an power cell is marked with a (*). If multiple cells are needed, the notation (2*) or (3*) will appear, meaning that two or three cells are used to power the equipment. Cells are generally small discs of negligable weight. The various power cells include:

1) Utility Cell: Used to power a wide variety of low power consumption equipment, and some Mini Energy Weapons.
2) Weapon Cell: Used to power small Lasers, Blasters, Stunners, and Disruptors.
3) Flamer Cell: Used to power small Flamers. These cells are significantly larger than the other power cells.

Cartridges

A piece of equipment which requires the use of a power cartridge is marked with a (†). If multiple cartridges are needed, the notation (2†) or (3†) will appear, meaning that two or three cartridges are used to power the equipment. Cartridges are generally short cylinders or blocks which slide into recepticles in the equipment. They have moderate weight. The various power cartridges include:

1) Utility Cartridge: Used to power some larger pieces of equipment, including Linex Weapons.
2) Weapon Cartridge: Used to power Assault Energy Weapons and Energy Rifles like Lasers, Blasters, Stunners, and Disruptors.
3) Flamer Cartridge: Used to power medium sized Flamers. Flamer cartridges are, by necessity, rather large, as they contain the Flamer's volatile chemical mix.

Packs

A piece of equipment which requires the use of a power pack is marked with a (‡). Packs vary significantly in size and weight, with the determining factor being the sophistication of the producers, and their level of technology. They may be small enough to be attached to the piece of equipment they power. More often, it is the case that power packs are chest or back-slung, with a power cable running from the power supply to the equipment. The various power packs include:

1) Utility Pack: Used to power large pieces of field equipment.
2) Weapon Pack: Used to power Heavy Lasers, Blasters, Stunners, and Disruptors.
3) Flamer Pack: Used to power Heavy Flamers. These power packs are exceptionally encumbering, and are typically back-slung when transported by a man.

Microfusion Reactors

A piece of equipment which requires the use of a microfusion reactor is marked with a (§). Microfusion reactors are quite small, considering their power output. They are about the same size as a small power pack, but somewhat heavier. When an equipment failure roll results in a "power source depleted" result, any given microfusion reactor does not suddenly become an expensive piece of scrap metal, (that only happens on a subsequent D10 roll of 1). On the contrary, all that is required is a refueling of the reactor, which can be accomplished by simply adding more water to the unit. There are two types of Microfusion Reactors:

1) Utility Reactor: This durable field unit is capable of powering a wide variety of heavy gear. Given the proper adaptor, a Utility Reactor could conceivably power any piece of equipment short of a Flamer Weapon.
2) Weapon Reactor: The Weapon Reactor is the only device capable of powering a Plasmatic Repeator. Given the proper adaptor, a Weapon Reactor could conceivably power any energy weapon except a Flamer.

Summary of Coding:

Energy Cell:	(*)
Cartridge:	(†)
Pack:	(‡)
Microfusion Reactor:	(§)

5.0
THE ROLE OF COMPUTERS

"I wouldn't do that if I were you, Dave."

"Discovery" Computer
PreImp 9694
Orbiting Juptiter

It would no doubt be an understatement to say that computers play an important part in the universe of ***Space Master***. Indeed, they are everywhere, expediting every facet of life in the far future. They are miniaturized to near-microscopic size in many cases, and can perform functions of amazing complexity at speeds truly approaching instantaneous.

State of the art computer circuitry memory storage is done on a molecular level; memory units are organic and, in a way, alive. This allows far more dense storage and faster relays. Many larger units are voice-controlled, able to interpret and respond to verbal commands — though of course only in languages for which the computer has been programmed. For accuracy and efficiency, however, computers on board most starships and other complex vehicles are still manually controlled to a great extent. This is not a reflection of the machine's limitations, but rather of the being who must give it instructions. Direct mental links from the human brain to computers have been tried, but proved ineffective and even dangerous; the human mind is simply not disciplined enough to give coherent commands which are not accompanied by a flurry of aberrant irrelevant 'mental chatter'. And vocal commands are not precise because of the inevitable inaccuracies of any sentient-based language. The idea of a computer language to be used by sentients was proposed, but the effort of learning it outweighed the advantages. The alternative of a ship virtually under the command of a computer was also dismissed (except for unmanned ships, of course) because of man's continuing resistance to the idea of being 'controlled' by a computer.

Thus, even in ***Space Master***, the weak link in any such sentient-computer interface is just that: the delay which occurs between the sentient visualizing and deciding on the action, and the delivery of the action command to the machine.

In ***Space Master***, though, the computer has been able to take over very complex tasks (such as continuous evasive maneuvres in a starship battle, even when coordinating gunner fire) the details of which need not concern the sentients in charge.

Obviously, to attempt to cover the entire range of software available in the universe of ***Space Master*** would be absurd. Instead, below are detailed typical programs.

5.1 PROGRAMS AND DESCRIPTIONS

Below are brief descriptions of the various computer programs available in the most advanced areas of the ***Space Master*** universe. All programs may not be available everywhere, or, if available, they may only be 'partial'.

Remember when purchasing programs that each has two important volume factors, in addition to the cost: *Processing Capacity* and *Memory Volume*. This reflects the concept that certain programs, such as Archive Reference and the Research programs, consume a vast amount of *Memory* volume because of the sheer mass of data. However, their data retrieval system is relatively simple, and requires only a small amount of *Processing* capacity. Complex, demanding programs, such as Evade and Predict, consume very little *Memory* volume, but, depending on how demanding or sophisticated, a lot of *Processing* capacity. The volume and capacity for a specific standard computer are determined by its Mark (Mk.) number: the processing volume capacity is exactly equal to the Mk.#, while the memory volume is 2 x the Mk. #. Available programs always use memory volume *but* only use processing capacity when being used. In addition, standard computers have what is called *Reserve Storage*. It is not as easily accessible as Memory, but has a much larger capacity — ten times the Mark number in storage volume. However, this memory storage is not as easily accessible: it requires one round per memory unit to transfer the program from Reserve Storage to memory, where it can be easily accessed and used. In this capacity, therefore, Reserve Storage is useful for Archive and Research data, but probably not for regular combat program storage, since it would require too much time to "call up" the necessary programs from Reserve Storage.

Example: *Teruk has an Mk. 50 computer. Its processing capacity is 50, and its memory is 100 units. It has a Reserve Storage volume of 500 units.*

The reference to *memory units* refers to a discreet unit of data. As many as desired (or one can afford, or one can pack into their computer) may be purchased. However, there is a declining rate of return, based on the idea that the mass of information reduces the efficiency of the processor. It also reflects the idea that after a point the additional data in memory is more peripheral, and increasingly less relevant to the topic.

For those programs which have a cost per memory unit pick, the initial purchase provides a +5 bonus to the appropriate research/technical activity/maneuver (counting as the initial investment as well as the first 'rating pick'). Each additional pick adds another +5 to the appropriate bonus, up to a total of +50. The eleventh through twentieth picks, though they cost the same, only supply a +2 bonus per pick. Any additional picks beyond twenty add +1 per rating pick.

It is assumed that each pick fills one computer unit, regardless of the bonus. See individual programs for whether the volume is consumed in *Memory* or both Processing and Memory (if it takes up a unit of processing space, it must take up at least the same amount of space in memory for storage while not in use).

PROGRAM DESCRIPTIONS

General Reference: An encyclopedic database, referenced by subject with multiple cross-references. Includes very basic information on Terran general history, the sciences, the arts, literature, etc.

Xeno Gen. Ref: The complement to the General reference database above, this file covers all Terran colonies as well as any general data on other races encountered by Civilization. By necessity, this file is even more general than the above, having to cover a wider field.

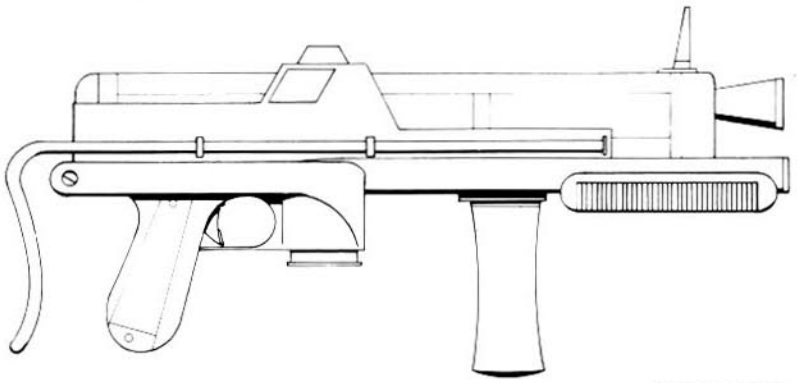
Archive Reference: This file covers the same areas as the General Reference program, but in much greater depth, especially in the non-science fields. The detail and referencing is exhaustive; however, it does not approach some of the planetary Archive databases; consuming as much as 10,000 Storage units, they might truly hold what could be called the "sum of human knowledge".

Research Reference

Physics: Each memory unit pick adds a bonus to all research done on this topic. Note that this total is cumulative with a lab bonus, but cannot exceed the lab bonus.
Chemistry: As Physics, above.
Biology: As Physics, above.
Planetology: As Physics, above.
Astronomy: As Physics, above.
Cultures: Each memory unit pick adds a bonus to all anthropological and cultural research.
Medicine: As Physics, above.
Mechanical Engineering: As Physics, above.
Genetics: As Physics, above.
Computers: As Physics, above.
Weapons Design: As Physics, above.
Power Systems Theory: As Physics, above.
Cybernetics: As Physics, above.

Technical Reference

Mechanical: Each memory unit pick adds a bonus to all repairs and construction related to this topic. Use appropriate table.
Weapons: As Mechanical, above.
Electronics: Includes all electrical systems. As Mechanical, above.
Communications: As Mechanical, above.
Computers: As Mechanical, above.
Power Systems: As Mechanical, above.
Stardrive: As Mechanical, above.
Crime Systems: As Mechanical, above.
Medical Systems: As Mechanical, above.
Cybernetics: As Mechanical, above.
Genetics: As Mechanical, above.
Basic Systems Monitoring: Automatic ship's log and minor systems control (lighting, portal control, etc.)
Recreation: Games, movies, etc.
Life Support: Maintains environment.
Galley: Food synthesis.
Xeno Galley: Food synthesis for exotic tastes / other races.
Astrogation Reference:
Star Chart: A complete map of the known galaxy is available, though the total volume would be prohibitive. Astrogation is made "Easy" if within an area on file. See cost chart for price per memory unit.
Preset Course: Astrogation for such a course is "Routine".
Astrogation Plotting:
Hyperspace Course: Computes Hyperspace Course. Without program, computation is "Absurd". (However, every day spent by a trained individual with proper references lowers the degree of difficulty by 1.)
N-Space Course: Computes N-Space Course. Without program, computation is "Absurd". (However, every *day* spent by a trained individual with proper references lowers the degree of difficulty by 1.)



ASSAULT STUNNER
Struin Field Systems

Pilot Interface

Hyper Jump: Controls Antimatter flow to Translight Engines.
Autopilot: Can maintain a course, or carry out Preset N-space course
Evade: Each processor unit pick adds a bonus to ship DB due to computer controlled evasive maneuvering. (1 unit processing and one unit memory per pick)
Tactics: Each processor unit pick adds a bonus to ship initiative. (1 unit processing and one unit memory per pick)
Power Distribution: Controls and monitors distribution of power to all ship systems.
Damage Control: Malfunction alert and flame detection/control. Seals doors to contain decompression unless overridden.
Security: Monitors and can restrict movement of specific beings within installation. Requires .1 memory unit per being.
Cybernetic Monitor: Controls robotic assignments. Requires .5 memory unit per special system.
Communications: Allows Com Tech bonus on Transmission / Reception, including both Tachyon Beam and Microwave signals. Each processing pick adds a bonus, and 5 Light-years of Tachyon Beam range.
EW Distribution: One pick for every 10 points of EW (actual EW equipment purchased separately) is necessary for manual control of EW/Stealth screens. Each Processing pick also adds a bonus for all EW activity (no matter how many operators). (1 unit processing and one unit memory per pick)
Target Lock-on: Allows shipboard Heavy Energy Projectors to be committed on any target in Sensor range (see ship construction for ship sensor ranges). Energy attacks without this program are at -30 (in addition to any other factors).
Central Gun Control: Allows any number of ship's guns to be fired from central control with controller's gunner bonus (-10 to bonus for every gun over one controlled).
Gunner Interface: Allows inclusion of individual gunner's fire bonus for Heavy Energy Projectors.
Predict: Each pick adds a computer bonus for Heavy Energy weapons fire. (1 unit processing and one unit memory per pick)
Missile Targeting: Each pick adds a computer bonus for missile targeting. (1 unit processing and one unit memory per pick)
Defense (screens): Arranges and maintains shields. Processor and memory required is 1 per 10,000 tons (1 unit minimum).
Star System Analysis: Reference data; each pick adds a bonus to sensor analysis, and fills one memory cell — in addition to the base volume of 3.
Planetary Analysis: Reference data; each pick adds a bonus to sensor analysis of planetary and stellar bodies, and fills one memory cell — in addition to the base volume of 3.
Bio Analysis: Reference data; each pick adds a bonus to sensor analysis of life forms, and fills one memory cell — in addition to the base volume of 3. Range for such analysis is no more that a high orbit above scanned planet.
Construct Analysis: Reference data; each pick adds a bonus to sensor analysis of artificial constructs and energy sources, such as other spacecraft, ground-based installations, etc., and fills one memory cell — in addition to the base volume of 3.
Medical Diagnosis: Reference data; each pick adds a bonus to medical scanner analysis of patients, and fills one memory cell — in addition to the base volume of 2.
Medical Procedure: Reference data; each pick adds a bonus to surgical or medicinal procedures performed and fills one memory cell — in addition to the base volume of 2.
Xeno Medicine: Reference data; each pick adds a bonus to medical diagnosis of another life-form (than homo-sapiens or derivativea) and fills one memory cell — in addition to the base volume of 2.

5.2 PROGRAM SIZE AND COST TABLE

Program/Database Name	Size Processing	Memory	Cost (Elmonits)
General Reference	5	20	5,000
Xeno Gen. Ref	5	30	8,000
Archive Reference	5	5 + Special	5,000 + 500/Memory data unit pick
Research Reference			
Physics	4	20	1,000 base + 500/memory unit pick
Chemistry	4	20	" " " " "
Biology	4	20	" " " " "
Cultures	4	20	" " " " "
Medicine	4	20	" " " " "
Engineering	4	20	" " " " "
Technical Reference			
Mechanical	1	5	1,000 base + 300/memory unit pick
Armaments	1	5	" " " " "
Electrical	1	5	" " " " "
Communications	1	5	" " " " "
Computers	1	5	" " " " "
Power	1	5	" " " " "
Stardrive	1	5	" " " " "
Field Science Systems	1	5	" " " " "
Medical Systems	1	5	" " " " "
Basic Sys Monitoring	Special		500/1000 tons
Recreation	1	1	500
Life Support	Special		100/10 beings
Galley	1	1	300
Xeno Galley	1	1	800
Astrogation Reference:			
Star Chart	1	Special	2,000/storage cell (100,000clr)
Preset Course	0	1/course	500/course
Astrogation Plotting:			
Hyperspace Course	3	3	3,000
N-Space Course	3	3	4,000
Pilot Interface			
Hyper Jump	3	3	2,000
Autopilot	5	5	8,000
Evade	Special		5,000 base + 2,000/pick
Tactics	Special		5,000 base + 1,000/pick
Power Distribution	2	2	5,000
Damage Control	2	2	3,000
Security	1	Special	1,000 + 100/being
Cybernetic Monitor	Special		5,000 + 2,000/system
Communications	1	1	8,000
EW Distribution	Special		5,000 base + 1,000/ 10 pts of EW
Target Lock-on	2	2	7,000
Central Gun Control	.1/gun	1	12,000
Gunner Interface	1/gnr	1	2,000/gunner
Predict	Special		5,000 base + 1,000/rating pick
Missile Targeting	Special		5,000 base + 1,200/rating pick
Defense (screens)	Special		1000/10,000 tons
Star System Analysis	3	3 + Special	1,000 base + 500/memory unit pick
Planetary Analysis	3	3 + Special	" " " " "
Bio Analysis	3	3 + Special	" " " " "
Construct Analysis	3	3 + Special	" " " " "
Medical Diagnosis	2	2 + Special	1,000 base + 200/memory unit pick
Medical Procedure	2	2 + Special	" " " " "
Xeno Medicine	2	2 + Special	2,000 base + 500/memory unit pick

5.3 SPECIAL ROBOTICS PROGRAMS TABLE

As an option for those players wishing to insert special software programs into their robots so that they can become more specialized, see the listing below. A robot which is running the appropriate program while executing the given operation is given a bonus equal to his computer Mk. # when determining the success of that operation. Note that these programs are specially designed for robots and are therefore not compatible with any other computer system. Additionally, each program is available in a number of computer languages, so players must be careful that they are purchasing a program which their robot can understand.

Many of the programs require the robot to meet certain physical parameters and/or be of a certain class.

Most of these programs work exactly the same as the character skills of the same name.

Program Name	Size Processing/ Memory	Cost (Elmontis)	Notes/Requirements
General Programs			
Data Acquisition	0.1/0.1	200	Allows robot to record data into free memory space.
Etiquette	0.2/0.2	300	A separate protocol program is required for each culture. Req: human relations bot with oratory rtg 7
Atmospheric pilot	2/2	1750	Each type of craft requires its own program. Req: mech interface, or manipulate rtg 9 and intellect rtg 3.
Marine pilot	1/1	900	Each type of craft requires its own program. Req: mech interface, or manipulate rtg 7 and intellect rtg 2
Driving	1/1	950	Per vehicle type. Req: mech interface, or manipulate rtg 8 and intellect rtg 7.
Disarm traps	0.4/0.4	1000	Req: multiscanner equipment interface and manipulate rtg 9.
Pick locks	0.4/0.4	950	Req: multiscanner equipment interface and manipulate rtg 9.
Special Programs			
Linguistics	1/1	1000	Per language grouping. Req: oratory rtg 3-6 for non-computer languages.
Forgery	1.2/1.2	5000	Req: multiscanner equipment interface and manipulate rtg 10.
Counterfeiting	1.2/1.0	5000	Req: multiscanner equipment interface and manipulate rtg 10.
First aid	0.2/0.2	100	Per species. Req: medscanner equipment interface, intellect rtg 2 and manipulate rtg 8.
Technic Programs			
These programs can only be used for maintenance and equipment modifications.			
Mechanical technics	0.5/0.5	1000	Req: manipulate rtg 7.
Weapons technics	0.5/0.5	1000	Req: manipulate rtg 7.
Electronics technics	0.5/0.5	1000	Req: manipulate rtg.7.
Computer technics	0.6/0.6	1400	Req: manipulate rtg 8.
Power systems technics	0.5/0.5	1200	Req: manipulate rtg 7.
Crime technics	0.5/0.5	2000	Req: manipulate rtg. 7.
Medical technics	0.5/0.5	1000	Req: manipulate rtg 9.
Cybernetic technics	0.5/0.5	1100	Req: manipulate rtg 8.
Combat Programs			
Airborne assault	0.4/0.4	1700	Req: maneuvering rtg 7 and sensor rtg 5/
Combat pilot	2/2.5	6000	Req: mech interface with sensor rtg 5, perception rtg 4, intellect rtg 5 and manipulate rtg 2. Per craft type.
AFV crewmember	0.3/0.5	4000	Req: mech interface or manipulate rtg 8. Per vehicle type and position.
Missile Artillery	0.3/0.03	3900	Req: mech interface or manipulate rtg 6. Per weapon type.
Heavy energy projector	0.3/0.3	4000	Req: mech interface or manipulate rtg 7.
Astro Programs			
Orbital pilot	0.7/1	5000	Req: mech interface.
N-space pilot	0.7/1	5000	Req: mech interface
Hyperspace pilot	2/3	10000	Req: mech interface.
N-space astrogation	2.5/3	7000	Req: mech interface with intellect rtg 4.
Hyperspace astrogation	3/3.5	11000	Req: mech interface with intellect rtg 6.

6.0 ROBOTS AND ANDROIDS

"Gort, Klattu barados nikto"

A Visitor to Terra
c. Day the Earth Stood Still

"Danger! Danger, Will Robinson!"

Some Robot
Aboard the *Jupiter 2*

6.1 ROBOTS

A vast range of machines, but defined here as being an intelligent, self-propelled machine. Robots (with the exception of special Combat Bots) are usually no larger than two meters tall, and possess manipulative limbs suitable for repair, manual labor, or mechanical interface, or weapons operation. Some robot designs are vaguely man-like in form, possessing arms and legs, but are distinguished from Androids in that they are clearly machines (being metal encased, etc.) and not *designed* to imitate humans, except as necessary for their function.

6.11 GENERAL ROBOT TYPES

Service Bot: The standard model is short and squat (1 meter high), with several extendable limbs fitted with interchangeable manipulative devices. The Bot's Mk. 10 computer can be programmed with any Technic data (see Section 4.3) or it can be purchased pre-programmed (add program cost separately). It has a +50 Manipulate bonus, in addition to the programmed Technic skill. Remember that it is at -25 to all repairs with no applicable skill in its computer. It has normal audio/visual pickup ability, and a Computer Mech Interface, to receive computer data. It can be programmed to understand any language, but 'speaks' only BIVOC (the Binary Vocabulary of computers).

Mech Interface Bot: Less than a meter high and roughly cylindrical, this robot is basically a mobile computer. With an Mk. rating of 20 it can run several sophisticated programs simultaneously. See "Service Bot" above for references to computer input. Available interfaces: Pilot, Heavy Energy Projectors, Sensors, EW and Computer. Beyond a few small manipulative arms and the interface hookup, this Bot is unadorned. It has short range audio/visual pickup, and it can be programmed to understand any language, but 'speaks' only BIVOC (the Binary Vocabulary of computers).

Cyborg Relations Bot: Probably the most 'humanoid' of the robots, this device is just under 2 meters tall, has legs, arms and a head, but there the resemblance ends. The Relations Bot's prime function is liaison between humans and robots, and as such most of its Mk. 5 computer is taken up with language data. It can freely translate between any language and BIVOC.

Combat Bot Type I: Three and a half meters tall, this fearsome machine mounts an Mk. 3 laser on each arm. It has a 500m Sensor range, as well as normal audio pickup and visual normal and infra-red. Its shields add 50 to its DB; it speaks and understands only BIVOC — instructions must be programmed.

Combat Bot Type II: Slightly more mobile than Type I, this Bot is 2.5 meters tall and walks like a man. One arm is an Mk. 5 Laser, the other is a mechanical hand with +10 manipulate skill. On the shoulder is mounted an Mk. 5 Heavy Machine Gun. It stores 100 bursts of ammunition. This Bot has normal audio pickup, and visual into infra-red. Its shields add 50 to its DB. It can only communicate in BIVOC.

Combat Bot Type III: Perhaps the most terrifying of the three Combat Bots, this one floats on silent gravitics, and +30 stalking skill. It is 3 meters tall and mounts 2 Mk. 5 Blasters on the shoulders, and a Plasma Repeater Rifle on one arm. The other arm has a hand with +20 manipulate capability. It has a 10km Sensor range, as well as normal audio pickup and visual normal and infra-red. Its shields add 60 to its DB (the rest comes from maneuverability and superior armor). It also has +40 in Intellect and can speak up to 3 human languages fluently.

6.12 SPECIFIC ROBOT EXAMPLES

Following is a selection of robots of varying use and availability in the Empire.

Technical Assistance and Repair Bot 412 Series

The TAR 412 series is considered by most to be one of the best repair bots in the universe. This small (1.6m), humanoid bot is extremely independent. The TAR 412 is programmed to diagnose and repair a piece of equipment without assistance from a tech. The bot can be purchased with any one of the following Technical Skills (at +70): Mechanical, Weapons, Power Systems, or Cybernetics Technics. The TAR 412 is in no way practical for use during combat situations. However, it is completely capable of functioning independently from starship power sources and personnel in a number of different "hostile" (Xeno-)environments for short periods of time (30 hours).

ROBOT NAME: TAR 412
TYPE: Service
WEIGHT(KG): 272.2
COMPUTER Mk.#: 8.1
PROGRAM: Sensor Analysis (Mk .3)
PROGRAM: Perception (Mk .8)
PROGRAM: Intellect (Mk 2)
PROGRAM: Manipulate: (Mk 2)
PROGRAM: Technical Practice (Mk 2) see below
PROGRAM: Xeno-environments (Mk 1)
POWER SOURCE: Batteries; 30 hour charge
MOTIVE FORM: Walk; 20m per rnd
MANEUVERING: +20
ARMOR: AT 15
HITS: 20
SHIELD: None
OB TOTAL: N/A
DB TOTAL: 0
DATA OUTPUT: 30cm diag. screen
AUDIO/VISUAL EQPT.: Holocamera; 9m range
WEAPONRY: None
SENSOR/RANGE: Multisens/9m; +15
EW/STEALTH: None
INTERFACE W/: Starship Technical Reference computers; +60
Multiscanner; +20
LANGUAGE: BIVOC
OTHER FUNCTONS:
#1- Xeno-environments: +50
#2- Perception: +40
#3- Intellect: +70
#4- Manipulate: +70
#5- Technics: +70
TOTAL COST: 451,310 Elmonits

Advance Reconnaissance and Combat (ARC) Scout

The ARC Scout is specially designed to be both an information gathering device and a deadly offensive weapon. It is armed with a Mk. I Grenade Launcher and has the storage capacity of up to 20 standard size explosives (any type). The ARC Scout also sports a Mk. III blaster for close combat and as an anti-personnel weapon. It is equipped with a video-relay camera (lens has infra-red and light filter capabilities) which produces an image on a 16cm remote monitor screen up to 300km away. Also, sensor readings are constantly relayed to a portable computer (included in price) for use in the field. The ARC scout can be programmed and manipulated using this terminal by a skilled Computer Tech.

The ARC Scout is very fast and highly maneuverable. From the side the ARC Scout appears as a dark, horizontal, streamlined cylinder approximately 2m long and .5m wide. The video-relay camera is mounted just under the nose of the ARC and has a 360 degree view radius. The blaster and grenade launcher are concealed inside the bot until activated, when they are revealed from behind two receding panels. The blaster lowers from the base of the bot and has a 360 degree fire radius. The grenade launcher rises from the top of the bot and can be aimed by the Targeting program and/or the Computer Tech.

ROBOT NAME: ARC Scout
TYPE: Combat
WEIGHT(KG): 439.5
COMPUTER Mk.#: 6.5
PROGRAM: Electronic Warfare (Mk1)
PROGRAM: Sensor Analysis (Mk 1)
PROGRAM: Evade (Mk 1) +10 to DB
PROGRAM: Targeting +10 to Grenade Launcher OB (MK 1)
PROGRAM: Energy Weapon (Mk 1)
PROGRAM: Stalk/Hide (Mk .5)
PROGRAM: Perception (Mk .5)
PROGRAM: Intellect (Mk .5)
POWER SOURCE: Internal Fusion Reactor; 30 days w/out refueling
MOTIVE FORM: Med. Gravitic; 200 kph
MANEUVERING: +40
ARMOR: Aligned Crystalline Steel: AT 20 (-50)
HITS: 300
SHIELD: +40
OB TOTAL: +60 Grenade Launcher
+50 Blaster
DB TOTAL: +150 (+10 Evade, +40 Shield, +50 Stealth, +50 Armor)
DATA OUTPUT: 16cm Diagonal screen
AUDIO/VISUAL EQPT.: Holographic camera; 30m range
WEAPONRY: 1 Mk. I Grenade Launcher +50 bonus
1 Mk.III Blaster +50 bonus
+10 Targeting program
SENSOR/RANGE: Multisensor (reads life forms, power source, construct)/30m; +50
EW/STEALTH: Jamming capability 1km/+50 DB
INTERFACE W/: Portable computer; +50
LANGUAGE: BIVOC
OTHER FUNCTIONS:
#1- Stalk/Hide: +25
#2- Perception: +25
#3- Intellect: +25
TOTAL COST (CUSTOM BUILT): 874,500 Elmonits



Diplomatic/Public Relations Bot

Originally designed by Maircon Cybernetics for use as advertising tools in large corporations, the DPR Bot is highly skilled in Diplomacy, Oration, Etiquette, and Acting. These Bots were sent all across the universe as product promoters or flashy traveling salesmen. The excitement over this advertising gimmick was, however, short-lived. Maircon Cybernetics, in order to avoid bankruptcy, began to unload any and all of their remaining stock of DPR Bots (accepting any reasonable offer) on anyone who would take them. Most of the DPR Bots are able to interface with a starship's communications console and are often requested to use their diplomatic prowess to avoid serious conflicts with possible enemies or, in some cases, the law.

The DPR Bot is humanoid in form and of average size. It is able to speak and understand up to 3 languages (Imperial Standard plus two others depending on programming). In addition, the DPR Bot understands the mannerisms and quirks (etiquette) of the cultures associated with the languages they speak.

ROBOT NAME: DPR
TYPE: Human Relations
WEIGHT(KG): 196
COMPUTER Mk.#: 11.1
PROGRAM: Sensor Analysis (Mk 1)
PROGRAM: Perception (Mk 1)
PROGRAM: Oration (Mk 1)
PROGRAM: Intellect (Mk 1.5)
PROGRAM: Etiquette (Mk .6)
PROGRAM: Linguistics (Mk 3)
PROGRAM: Diplomacy (Mk 2)
PROGRAM: Acting (Mk 1)
POWER SOURCE: Batteries, 40 hour charge
MOTIVE FORM: Walk; 20m per rnd
MANEUVERING: +50
ARMOR: AT 20
HITS: 150
SHIELD: None
OB TOTAL: None
DB TOTAL: 0
DATA OUTPUT: 6cm diagonal screen
AUDIO/VISUAL EQPT.: Holographic camera; 15m range
WEAPONRY: None
SENSOR/RANGE: Multisensor/15m; +25
EW/STEALTH: None
INTERFACE W/: Starship Communications consoles; +70
LANGUAGE: BIVOC
Imperial Standard see below

OTHER FUNCTIONS:
#1- Perception: +50
#2- Oration: language skill rank 10
#3- Intellect: +60
#4- Etiquette: +70 each culture
#5- Diplomacy: +70
#6- Acting: +50
TOTAL COST (CUSTOM BUILT): 350,000 Elmonits

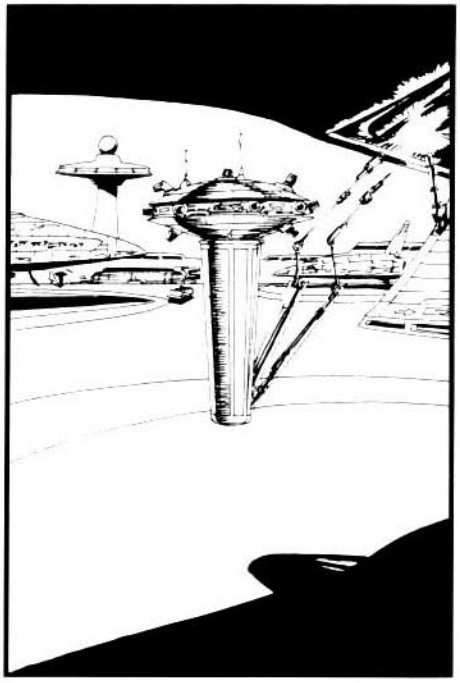
Synthetic Orbital, N-space, and Hyperspace Astrogator/Pilot

After years of market research, the Trevco Universal Bot Corporation designed the SONHAP; one of the most cost efficient, "user-friendly" bots ever made. The SONHAP is an affordable, mass market product which was originally targeted toward fashionable tourists who enjoyed travel, but did not wish to waste leisure time piloting and astrogating. However, the popularity of the SONHAP line grew. A few of the major starship construction companies began selling SONHAPs at discount rates with the purchase of a ship. Now, both new and used SONHAPs can be found rather easily in just about any highly populated area.

The SONHAPs come in a wide variety of designer colors. These bots are tall (1.9m), cylindrical, and very slender (25cm in diameter). The SONHAPs speak fluent Imperial Standard and are programmed to make cheerful small talk and exchange witticisms with passengers and crew members alike.

Despite their flippant air, the SONHAPs are quite adept at all space piloting and astrogation skills. Their extremely high intellect level allows them to control the ship's helm independently 25 hours a day.

ROBOT NAME: SONHAP
TYPE: Mech Interface
WEIGHT(KG): 208
COMPUTER Mk.#: 15.1
PROGRAM: Sensor Analysis (Mk .4)
PROGRAM: Perception (Mk .8)
PROGRAM: Linguistics (Mk 1)
PROGRAM: Intellect (Mk 2)
PROGRAM: Orbital Pilot (Mk .7)
PROGRAM: N-space Pilot (Mk .7)
PROGRAM: Hyperspace Pilot (Mk 2)
PROGRAM: Atmospheric Pilot (Mk 2)
PROGRAM: N-space Astrogation (Mk 2.5)
PROGRAM: Hyperspace Astrogation (Mk 3)
POWER SOURCE: Batteries; 20 hour charge



MOTIVE FORM: Slow Wheeled; 10m per rnd
MANEUVERING: +25
ARMOR: AT 13
HITS: 100
SHIELD: None
OB TOTAL: N/A
DB TOTAL: 0
DATA OUTPUT: 15m range holographic projector
AUDIO/VISUAL EQPT.: Holographic camera; 12m range
WEAPONRY: None
SENSOR/RANGE: Multisensor/12m; +20
EW/STEALTH: None
INTERFACE W/: Starship Pilot/ Astrogation consoles; +70
LANGUAGE: BIVOC
Imperial Standard
OTHER FUNCTIONS:
#1- Perception: +40
#2- Oration: language skill rank 9
#3- Intellect: +70
#4- Orbital Pilot: +60
#5- N-space Pilot: +70
#6- Hyperspace Pilot: +60
#7- Atmospheric Pilot: +70
#8- N-space Astrogation: +70
#9- Hyperspace Astrogation: +70
TOTAL COST (CUSTOM BUILT): 235,900 Elmonits

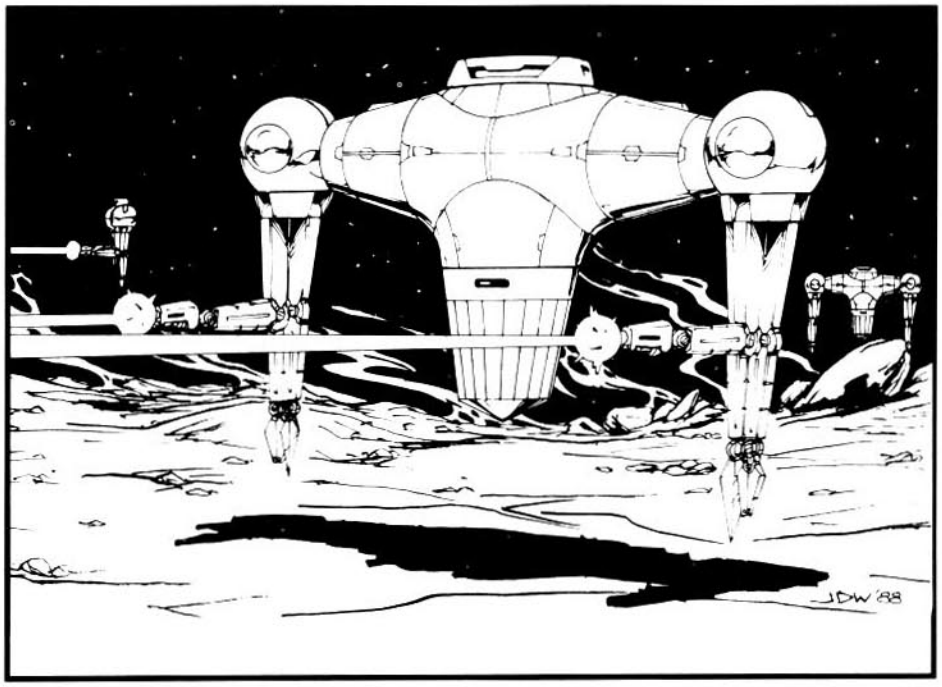
6.2 DRONES

Drones are fully automated "quasi-vehicular' constructs. All of a drone's functions (piloting, weapons systems, sensors, etc.) are controlled by its computer/Bot brain. Most are programmed to speak several key languages (depending, of course, on where and who's they are), and are well-versed in the Perception and Oration functions.

Robotic orbital relay beacons: Also known as "Orbots." Orbots are often found in geosynchronous orbits above planetside Spacefaring Ports, where they handle incoming traffic, supply planetary data or warnings, send out Port directives, request and verify Passage Codes, etc. Basically, they serve to take some of the load off the communications personnel at the Port. Orbots may also be left to guard planets, moons, ships, or whatever — most Orbotic systems are modular (insuring that no two Orbots need be exactly alike), and many contain advanced weaponry.

Stellar and planetary survey drones: Often referred to as "Rovers" Survey Drones are employed by most Imperial and Provincial scout services. Equipped with extensive memory storage, high Intellect and Participant Research programs,they are capable of taking large amounts of accurate readings in a comparatively short time. Very large survey drones (with capacity for a small crew) are often constructed above Omega Worlds (or any worlds which require a lengthy and detailed analysis), and serve as fully automated, artificially intelligent research laboratories. Such laboratories are generally equipped with some form of high security system. Smaller Drone models are often scattered from an orbiting survey ship which awaits and correlates their findings.

Jettisoned evacuation and recovery pods: Large passenger-carrying Drones which are used as "returning lifeboats," JERPS are designed to protect unskilled personnel in the event of an emergency. Stored in a standard shuttle or fighter bay, they are loaded and launched at the first sign of danger, and make their own decisions regarding piloting until the danger ends and they return to the ship (they may, of course, be programmed not to return to the ship, to head for the nearest moon, to hold a tight orbit, etc).



JERPs are usually equipped with high Perception, Oration, and Intellect ratings, and many possess Evade programs or even (defensive) weaponry.

Search and destroy drones: Employed to ruthless effect in many guerilla activities, SDDs are deathly perceptive and intelligent recon and combat units. Often equipped with manipulative "limbs" for weaponry, SDDs are always well armed and well shielded. Sensors, EW/Stealth, Xeno-Environments, Stalk/Hide, and Ambush are all very popular SDD functions. They are designed to make strategic decisions, collect large amounts of military intelligence quickly and quietly, perform any combat functions they deem necessary, and return to a preprogrammed location. Truly awesome constructs, they are also extremely expensive. Imperial Search and Destroy Drones (ImpSaDDs) are the bane of many a would-be revolution.

6.3 ANDROIDS

An Android is a robot designed to closely resemble a human being or other sentient race. Androids have an artificial, Molecutronic brain, but are highly intelligent: capable of self-programming and extremely versatile. The highest-quality models are indistinguishable from real sentients except by sensor (or other artificial) scan. Androids are often much stronger and/or quicker than their sentient counterparts. They also *learn*, gathering experience and increasing their skills just like humanoids.

While Androids can be 'programmed' during the activation with various skills, loyalties and abilities, it is not the same as programming a robot or computer. Androids are nearly human in their thought processes and most tend to develop 'personalities'.

6.31 BASIC TYPES

While Androids are always custom-designed, below are listed four general categories which most production companies use as 'series' guidelines.

Warrior: What else need be said? Intellect was not a priority, except to instill an almost animal cunning. Large and muscular in appearance, these Androids can be programmed with certain absolute loyalties, and other 'morals' as desired (there are legal minimum requirements in most areas). Popular as bodyguards, they are considered a status symbol on the densely populated, highly-civilized worlds.

Pilot: Preprogrammed with +50 to as many as 5 piloting /driving skills, these are very useful to large companies needing pilot/chauffeurs, etc.

Tech: Similar to the Pilot, the Tech is purchased with 5 Technic skills (purchaser's choice) with a +50 bonus in all.

Protocol: Trained with a variety of customs and local etiquettes, this Android is rarely seen outside of the high-society "inner worlds". They are invariably attractive, but often somewhat bland (this by nature, as diplomats need to be bland to avoid causing offense).

6.32 SPECIFIC EXAMPLES

While there are many Android producing corporations in the Empire, three stand out as the premier producers of Androids: *Humanadyne, Universal Robotics,* and *Virtual Humanatronics.* Among these three, Virtual controls a commanding market share, and indeed pioneered self-programming molecutronic brains. All three companies construct androids in nearly every Humanoid subrace. The Virtual Humanatronics 'Jym-bob' series was immensely popular, and the models V through XII are still considered to be state of the art. Naturally, V.H. also produces a number of other models, but the JB series remains a staple.

Virtual Humanatronics

Jym-bob: Usually Explorers or Armsmen, the Jym-bobs were originally designed as agri-techs for use on remote farming planets (and look the part). They gained popularity, however, and the later models are quite sophisticated.

Sheri: Medics and/or Researchers, the Sheri series is popular with the Imperium.

Alex: A technical wizard, the Alex models are very dexterous and mechanically oriented.

Tama: often a pleasure model.

Humanadyne

Metanira: A very popular pleasure model and sometimes pilot.

Jason (J. Mk VII): Usually an Armsman, the Jason series is sought after for personal guards.

Jesse (J. Mk. VIII): A restricted series only available to the KIN (Kashmere Intelligence Net), this series is said to match the best V.H. can put out.

6.4 ROBOTIC PROGRAMMING

Robots are made more specialized by their programming. The *Robotics Programs Table* (5.3) lists a number of popular softwares with which a robot owner can 'customize his 'bot.

7.0 BIOLOGICAL CONSTRUCTS

By the time of ***Space Master,*** Terran science has perfected the techniques of gene replication and manipulation. While the morality of the more complex results of this ability is hotly contested (and banned outright on many worlds) there are still many organizations who carry out genetic manipulation on a large scale.

Without genetic control there would be no molecutronics (so, in a way, all advanced computers and Androids also fall under this category). However, the principals behind the growth of these tissues are far different than the genetic manipulations of human tissues which are necessary to create clones and humanoid Alterant Replications.

7.1 MICRO-ORGANISMS

Micro-organisms have been engineered since the very dawn of human civilization, before man had even achieved viable interplanetary spaceflight. In fact, mankind barely learned how to biologically control his environment before poisoning his planet beyond repair.

In the Fifth Century of the Terran Empire, micro-organisms are carefully controlled and monitored, easily engineered to do anything from eat garbage to create healing substances. They are a mainstay of civilization, and most are incredibly mundane.

7.2 CLONING

See Section 12.3 for construction rules on cloning. Since it is by necessity a rather personal operation, the potentials of purchasing clones 'off the shelf' are rather limited.

7.3 CYBORGS

Cyborgs (Cybernetic Organisms) are, as the name implies, a combination of cybernetic and organic construction. Technically, a Cyborg is anything from a humanoid with a mechanical prosthesis to a robot with living external tissue to simulate a real organic being. The definition in this case leads more towards the latter, as the 'construction' portion of such cyborgs is equally organic and mechanical. The GM must regulate such creations and decide for himself the technic and legal ramifications of cyborgs in his game.

7.4 ALTERANT REPLICANTS

Also called simply "Replicants", these are beings created from sentient genetic material but altered using Recombinant DNA and other techniques to create an "improved model". It is scientifically possible to perform Alterant Replication upon animals, plants, and most sentient species. Below are listed the four most "popular" Human Replicant types and their general functions. They are not as dependable as Androids, but somewhat less expensive and easier to maintain.

Ironically, Replicants — though created out of humanoid genetic material — are considered less 'human' than Androids. They are rarely 'custom' grown, and are invariably programmed and conditioned through intense psychological and psycho-neuronic patterning. The process irreparably damages one Replicant brain out of ten, but this is considered an acceptable loss rate.

General Types

Below are listed a few of the basic 'off-the-shelf Replicant types.

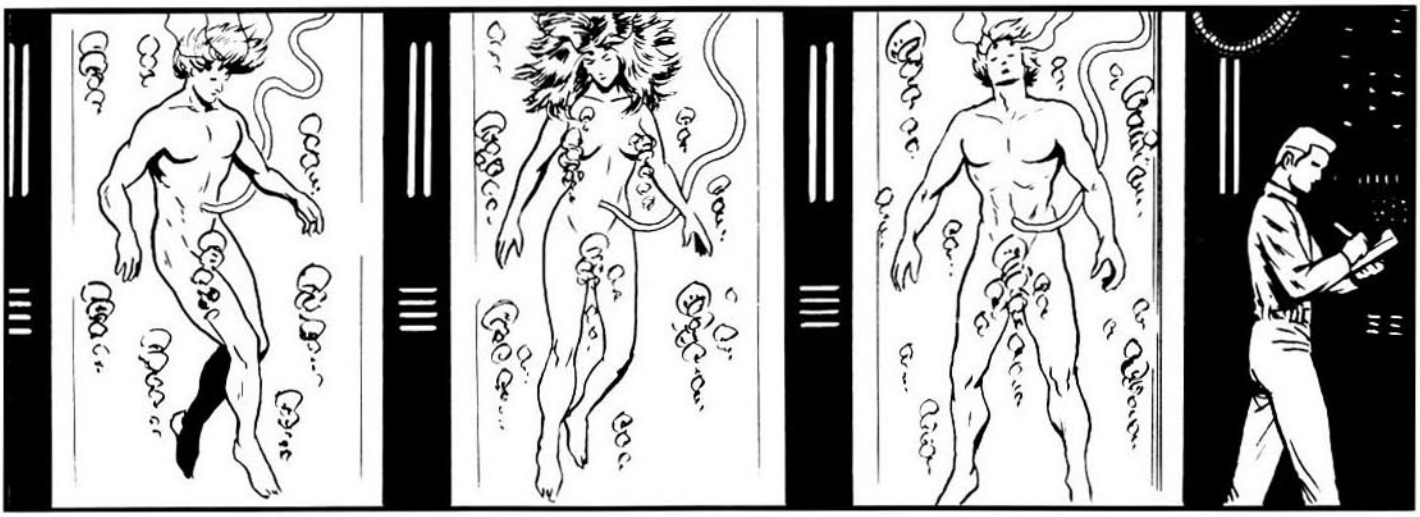
Warrior: Strong and agile, they can be purchased with skill in almost any weapons combination. Also have +25 skill in Stalking/Hiding Climbing, and other physically-oriented skills.

Tech: Identical to the Android Tech, but start with up to +50 in 3 Technic skills.

Clerical: Well-organized memory (perfect short-term memory) makes this Replicant an excellent secretary.

Recreation: This Replicant is primarily versed in the skills of *Gaming, Acrobatics, Singing, Dance, Gambling, Music,* and of course, *Seduction.*

Laborer: Often untrained, sometimes even brain-damaged from failed programming, these types are inexpensive and capable of only the most simple manual tasks. They are considered 'disposable' by their owners. This type is decried as an abomination by most governments, but still is used in many locations where cheap manual labor is required and robotics maintenance is expensive.



ROBOT/DRONE/ANDROID/REPLICANT COST CHART

TYPE	MOTIVE FORM	HITS	AT	(DB)	ARMAMENT (OB)	PWR	COST	NOTES
Robot								
Service Bot	S WHEEL	50	20	(0)	—	¥	50,000	
Mech Interface Bot	S WHEEL	100	20	(0)	—	¥	65,000	
Cyborg Relations Bot	WALK	80	12	(10)	—	¥	40,000	
Combat Bot Type I	S TRACK	200	20	(90)	2 Mk. 3 Lsrs (63)	§	100,000	
Combat Bot Type II	WALK	240	20	(100)	1 Mk. 5 Lsr (50) 1 Mk. 5 HMG (70)	§	120,000	
Combat Bot Type III	M GRAV	300	20	(200)	2 Mk. 5 Blstrs (80) 1 Mk. 5 P Rep Rfl(100)	§	180,000	
TAR 412	WALK	200	15	(20)	—	¥	70,000	
ARC Scout	M GRAV	300	20	(150)	1 Mk 1 Grnade Lnchr(50) 1 Mk 3 Blaster (60)	§	150,000	
DPR	WALK	150	20	(0)	—	¥	25,000	
SONHAP	S WHEEL	100	13	(0)	—	¥	40,000	
Drones								
Orbot	(thrusters)	200	20	(0)	—	§	20 - 80,000	Various models
Rovers	(thrusters)					§	20 - 500,000	Various models
JERPs	(varies)					§	100 - 800,000	Various models
SDDs	F GRAV	300+	20	(200+)	Varies	§	1 - 3 mil	Various models
Androids								
Warrior	—	220	11	(50)	+150/+100/+80 any weaps	§	100,000	
Pilot	—	180	4	(30)	+80/+50 any weaps	§	70,000	
Tech	—	180	4	(30)	+50 one weap	§	60,000	
Protocol	—	150	4	(20)	—	§	50,000	
Jym-bob VIII	—	230	4	(25)	varies	§	110,000	Armsman
Jym-bob XII	—	200	4	(35)	varies	§	150,000	Pilot
Sheri XII	—	180	4	(30)	varies	§	140,000	Scientist
Alex VI	—	180	4	(30)	varies	§	130,000	Tech
Tama IV	—	180	4	(35)	varies	§	120,000	Entertainer
Metarina	—	150	3	(25)	varies	§	100,000	Entertainer
Jason VII	—	200	11	(25)	varies	§	130,000	Armsman
Jesse VIII	—	225	4	(35)	varies	§	(180,000?)	Restricted
Replicants								
Type I (Warrior)	—	200	1	(40)	+100/+80/+50 any weap		20,000	
Type II (Tech)	—	130	1	(20)	+50 one weap		25,000	
Type III (Clerical)	—	80	1	(10)	—		20,000	
Type IV (Recreation)	—	80	1	(30)	+50 one weap		15,000	
Type V (Labor)	—	60	1	(0)	—		5,000	

KEY:

MOTIVE FORM: Refer to the Vehicular Movement Chart (pg 43) for the explanation of these terms. The humanoid types obviously move as humans.

AT (DB): The Armor type is listed, with the standard Defensive Bonus (DB) in parenthesis afterwards.

ARMAMENT: Any and all armament. The total Offensive Bonus (OB) for each weapon type. Android and Replicant bonuses are applicable to any handheld weapon desired.

PWR: The type of powersource for the unit. ¥ = internal batteries, usually with a charge of 10-50 hours, rechargeable on any fusion converter. § = microfusion reactor, usually internal. Replicants, being organisms, eat to gain energy.

COST: The average cost for the Robot/Android/Replicant in Elmonits.

8.0 VEHICLES

"We'll have fun, fun, fun
'till Daddy takes the T-bird away"

Unknown
Pre-starflight Poets

The vehicles described below are for the most part limited to small machines, designed to carry no more than ten persons. The craft are either vehicles for private use, small research parties, or exploration.

Definitions

Below are described a number of commonly used vehicles of different types and purposes. These are for quick reference and general use. Some general terms used throughout the section are defined here:

GEM: (Ground Effect Maneuvering) Using powerful fans to create an air cushion, this system requires an atmosphere of a density range similar to Terra. Altitude is usually fixed at no more than one meter.

Gravitic: Utilizing a gravitic field to partially nullify gravity's effect upon the vehicle. Unless otherwise specified (such as for air and spacecraft) they have a limited lifting power to an altitude limit of 3 meters. For vehicles like cars, their altitude is fixed at about .5 meters.

Hydrofoil: A fin or set of fins so designed as to lift a ship's hull out of the liquid and reduce friction, thus allowing an increase in speed. This general principle is applied with some modifications here. Such craft are usually propelled by hydrojets: jets which pump tremendous amounts of water (or whatever the travel medium is) out with great force, driving the craft forward.

SMAC: (Singly Manned Attack Conveyance): A type of space fighter used for short-range missions.

8.1 GROUND CONVEYANCE VEHICLES

This definition applies to all vehicles which require a solid surface on or above which to act — and of course gravity to pull the vehicle towards that surface.

Scooters

Gravbike: An open machine about two meters long, the gravbike is designed for one occupant, either crouching forward or reclining, depending on the design. There is a small storage area under the seat, though these vehicles are designed primarily for recreational travel. They have very limited gravitic lift (normally only up to about 5 meters). The faster models are equipped with a *static field*, a low-power energy shield which protects the rider from the strong airflows.

Buzzer: A small, quick two-seater powered by Fast Gravitics, the Buzzer looks like two enclosed sidecars connected by a horizontal bar between them. Model II is equipped with Mk. 5 Heavy Lasers. Both models have full gravitic lift.

Gravskooter: One-seater transports, Gravskooters are often used for short hops and courier service. They can be used to tow a Grav Sled, and are not sealed versus the environment. The skooter comes in a variety of styles and is often used for recreation and by those who prefer something more exciting than a gravcar. They have full gravitic lift and a static field.

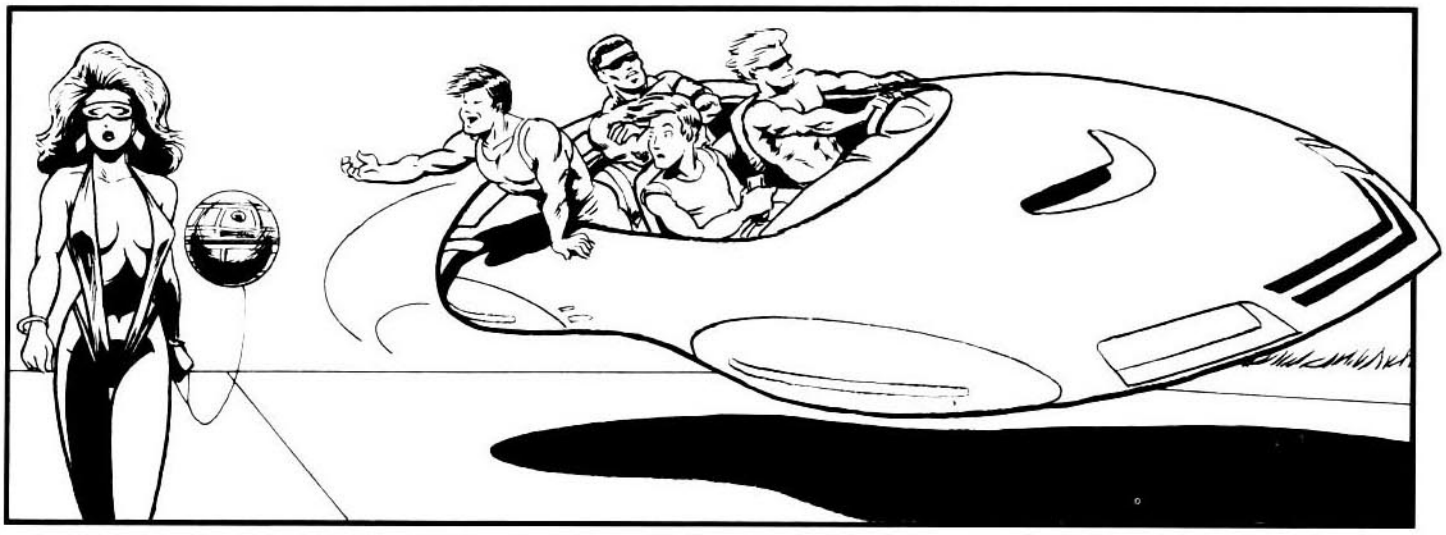
A more expensive (and less 'sporty') model called the ScoutSkooter is available with a forward mounted Mk. 5 Heavy Laser, a greater operating duration, and EW and shields capabilities. Scoutskooters are standard on Imperial Survey vessels.

Cars

Vehicles for transporting passengers or supplies. These have minimal interior environmental control (heat/cool/humidity) and are not suitable for any environment other than standard Terran.

Wheeled Car: This refers to any sort of vehicle which depends upon the friction of wheels against a solid surface for propulsion. In more sophisticated versions the wheels are of some soft material or an inflated polymer. This cushions the ride for any passengers and equipment. These 'tires' are often the most vulnerable part of such craft.

GEM Car: Any GCV which uses air cushioned suspension falls into this category. These craft tend to have a 'skirt' of some flexible material around the bottom of the vehicle to better contain the air cushion. If this skirt is severely damaged the air cushion will not function properly, greatly hampering the craft maneuverability.



Gravitic Car: The highest technology personal land conveyance medium, such vehicles have a built-in stabilized gravitic field which holds them suspended above any solid (or, if so programmed, liquid) surface. Lateral power is usually provided by compact, quiet turbofans for slower (under 100 KPH) vehicles, while jets, turbo-gravitics, or even small rocket engines are used on high-speed craft.

Explorers

These have full environmental control for 10 days per passenger (minimum) and are equipped with 3000 km/orbital com units, 200 km range Sensors, visual scanners, viewports, and an Mk. 40 computer.

Exploration Walker: Very maneuverable, these vehicles are usually conveyed by four to six "legs", computer coordinated so that the machine literally walks over uneven terrain. These are more stable than gravitic craft, but slower; and the legs are somewhat vulnerable to damage.

GEM Explorer: These are more maneuverable, but usually lighter than the above AFV because of the enormous power expenditure to lift the machine. GEM Explorers are uncommon, mainly because it is difficult to protect the delicate lifting fans and skirt adequately.

Gravitic Explorer: This craft has a variable altitude capability, able to rise up to 100 meters before encountering stability problems.

8.2 MARINE SHIPS

Although called *marine*, these craft are appropriate for navigation through any liquid material which would not prohibit such travel for some other reason. The correctly designed craft, for instance, might employ a type of hydrofoil to travel through the liquid hydrogen oceans of Jupiter's 'atmosphere'.

Open Speedboat: Unprotected standard craft, powered by a hydroprop.

Open Airboat: Built to skim the water's surface, this open-air craft is propelled by one or more large fans which push the vehicle forward. This craft is ideal for shallow or viscous liquid.

Open Hydrofoil: the passenger area of this ship is either completely open or protected by a limited-environment control cabin. It is basically a large speedboat with collapsible foils which engage when the craft attains a certain speed (about 50 kph) lifting it out of the liquid and allowing for greater velocity.

Exploration/Xenoenvironment Hydrofoil: Much larger than the open version, with an interior environment completely controlled. Such a craft might have exploration equipment or be for travel between floating stations on a planet of non-Terran environment (such as a Gas Giant).

Hydroskimmer: An improvement on the hydrofoil design, though only practical for very small, high-speed designs. One open and one enclosed version is listed.

Research Submersible: Small, relatively slow underwater craft, fitted with exploration equipment like the Explorer craft above. These are capable of submerging into liquids where pressures far exceed even the deepest oceans of Terra. Basically short-mission craft.

Exploration Submersible: Larger, more long-range than the Research subs, these vehicles are usually also equipped with high-speed submersible functions such as an aerofilm or electrostat fields to reduce liquid friction to a minimum.

8.3 AIRCRAFT AND SMALL SPACECRAFT

Embracing atmospheric as well as small N-space craft, this section includes all vehicles whose main mode of travel is independent of any solid or liquid environment. Naturally, prop craft require an atmosphere through which to pull the ship; and jet propelled aircraft require the appropriate oxygen/nitrogen atmosphere. Shuttles, SMAC fighters and other N-Space craft are all capable of atmospheric travel and ground landing unless otherwise noted.

Helicopter: A highly maneuverable though fragile vehicle which is lifted and moved laterally by use of a large overhead rotor (or rotors). These require an atmosphere to operate.

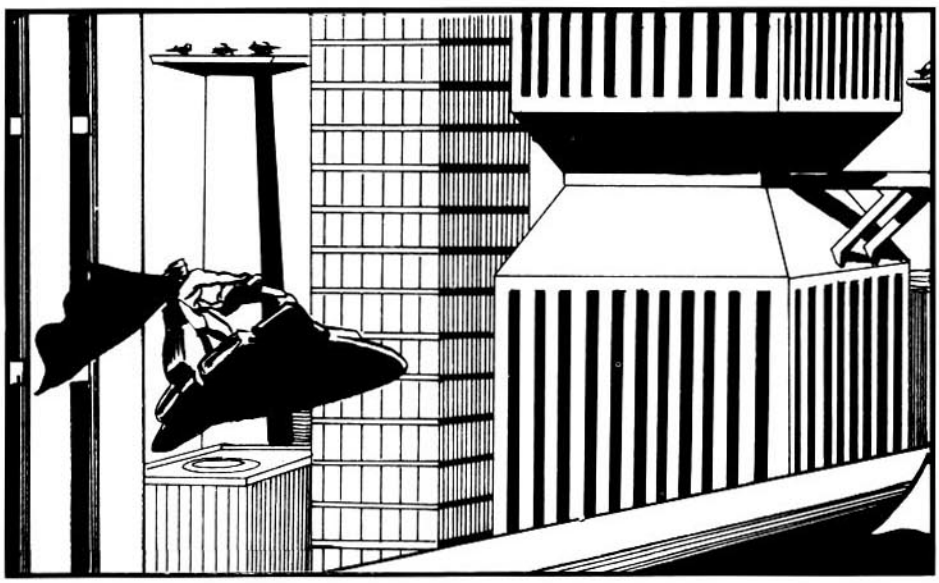
Prop Plane: Utilizing wing surfaces for lift and stability, these craft are propelled by forward-facing rotors. They require an atmosphere to operate. It should be noted that such craft are often preferred over combustion jets in ***Space Master*** because they can be powered by clean electricity, are more efficient and, with new alloys and aerodynamics, can move almost as fast as most such jet craft.

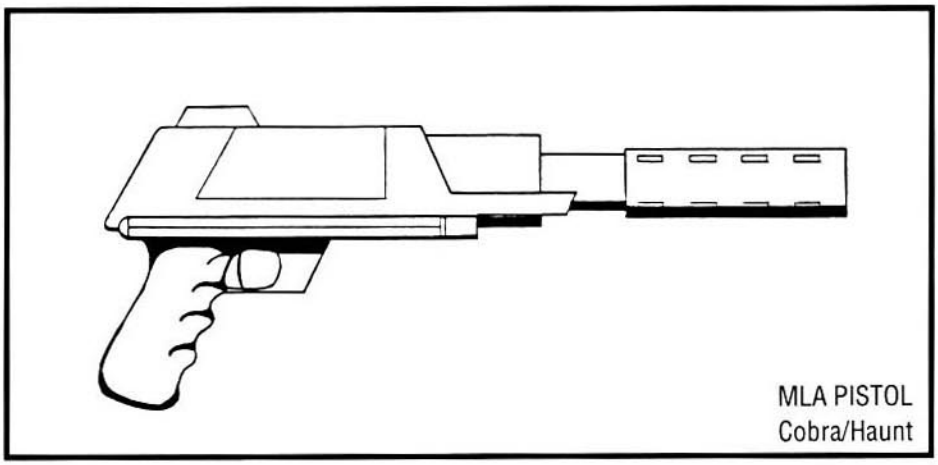
Gravprop Plane: Identical to the prop above except that it is capable of vertical lift-off and landing because of gravitic lifting boost. This also reduces energy consumption to maintain the plane's altitude. Wings are smaller, and the craft is capable of greater speeds. These require an atmosphere to operate.

High-speed Jet: Used for long-range planetary travel where suborbital flight is impractical, these craft are extremely fast. They require an oxygen-nitrogen atmosphere to operate.

Gravitic Belt: Not so much a vehicle as a personal device, the gravitic belt is a small gravitic generator strapped to the back with a wide belt. From the generator, control appendages extend forward to a position convenient for the wearer. The belt is capable of full lift and maneuverability.

Gravitic Sled: A small oval platform about two meters in length, the sled is designed for a standing pilot who controls the sled via small console mounted on a column at the front of the sled. The sled is capable of full lift and maneuverability.





MLA PISTOL
Cobra/Haunt

Gravitic Flitter: Coming in a variety of forms from recreational to exploration, these work on the same principle as gravitic cars, except that their vertical lift is much more powerful and can be manually controlled, allowing the craft to fly at altitudes of even kilometers. They are not as fast as some planes, but very maneuverable and ideal for light survey/exploration work.

Runabout: A popular fan flitter which seats four people with room for cargo, the Runabout is not sealed against the environment, making it a bit more affordable than a Grav Prop plane. Motive power is supplied by two great adjustable turbofans, one on each side of the mostly transparent cabin.

Suborbital Shuttle: With complete interior environmental control, these vehicles are designed for very swift planetary travel. Usually rocket powered with gravitic lift, they rise to suborbit level and make most of the journey at high speed where there is little atmosphere to create friction.

Maintenance Pod: A very small craft powered only by thrusters and incapable of atmospheric maneuvering. Used for repairing ships in Space Dock or other stable, orbit situations. They are equipped with a standard docking collar and have full interior environment control.

Orbit Shuttle: Designed for ground-to-orbit transfer of passengers and supplies, these ships are rocket-powered with gravitic lift for landing and takeoff. They are equipped with a standard docking collar and have full interior environment control.

Courier Shuttle: For interplanetary journeys, these ships are capable of landing on most planetary surfaces and have powerful N-Space engines for swift travel. Like the shuttle above, they have a standard docking collar and full interior environment control. Storage for supplies to sustain each passenger for 5 days.

Hypershuttle: Primarily for short interstellar journeys, Hypershuttles are light, fast vehicles designed to transport personnel or materials as quickly as possible. Like they other shuttles, they have no armament and possess only navigational deflectors, not useful in combat. They possess the usual standard docking collar and full interior environment control, and have a capacity to carry supplies for twenty days per passenger.

DeBARTON

SMAC Fighter: These vehicles are small but swift and equipped with powerful weapons. Some have shields, but others even forgo this protection to allow for more deadly armament. SMACs usually use energy weapons because of their lower mass. They have full interior environment control but only space for one pilot/gunner (some have Robot interface capability). These machines of war have gravitic landing capability, but often operate from a large "carrier" ship nearby, as SMACs are very short-range.

Lifeboat: (A more sophisticated Drone version — normally used in passenger liners — is noted in the Robots/ Drones section). Lifeboats are installed in all starships and space vessels larger than a shuttle. Invariably they are very basic craft with a one-man console and ten to twenty acceleration couches. The console has simplified Astrogation/ piloting/ sensor controls allowing someone with basic skills to manage a planetary landing. Some have automatic settings which direct the on-board computer to locate (for instance) the nearest habitable planet. Power is provided by a small fusion reactor, and the lifeboat is driven by an N-Space drive rated at 5 or less, with basic gravitics for landing. Lifeboats are almost never Hyperspace capable. All have automatic TBD distress beacons and Microfreq communicators. They generally have medkits and twenty-day food supplies, a few hand stunners and survival equipment. Better versions also have 1-2 Medstasis beds for injured passengers.

Orbital Surveyor: A fully equipped planetary survey ship, it is designed to be dispatched from an orbiting starship. Surveyors have a Mk. 50 computer, extensive sensory and analysis equipment, and environmental support for a crew of 8 for 50 days. The craft has a three-man cockpit, a small lab, and a living area with eight bunks and five retractable acceleration couches. With powerful Fast Gravitics and a Fusion Drive, the ship is free to travel the planet surface and land just about anywhere. A Surveyor is theoretically capable of interplanetary travel (N-Space Rating 3) but has limited fuel.

VEHICLE STAT AND COST CHART

VEHICLE TYPE	MOTIVE	PSNGRS	CARGO	ENVIR	MASS	CAT	(DB)	ARMAMENT	MI	PWR	COST
SCOOTERS											
Buzzer	F GRAV	2	1	semi	2	22	(55)	—	—	¥	30,000
Buzzer II	F GRAV	2	1	semi	5	22	(55)	1 Mk5 Laser	—	§	35,000
GravSkooter	M GRAV	1	0	none	4	21	(30)	—	P	¥	25,000
SkoutSkooter	M GRAV	1	0	none	10	21	(40)	1 Mk5 Laser	W	§	28,000
CARS											
Wheeled Sedan	M Wheel	5	3	semi	2	22	(20)	—	N	¥	5,000
Wheeled Truck	M/S Wheel	2	60	semi	25	22	(10)	—	N	¥	50,000
Wheeled Van	M Wheel	8	6	semi	10	22	(15)	—	N	¥	10,000
Wheeled Sports Car	F Wheel	2	2	semi	2	22	(30)	—	N	¥	8,000
GEM Sedan	M GEM	5	4	semi	2	22	(30)	—	N	¥	8,000
GEM Truck	M/S GEM	2	50	semi	20	22	(20)	—	N	¥	80,000
GEM Van	M GEM	8	6	semi	10	22	(25)	—	N	¥	16,000
GEM Sports Car	F GEM	2	2	semi	2	22	(50)	—	N	¥	15,000
Gravitic Sedan	M Grav	4	2	semi	2	22	(35)	—	N	§	15,000
Gravitic Truck	M/S Grav	2	50	semi	20	22	(25)	—	N	§	150,000
Gravitic Van	M Grav	8	7	semi	8	22	(30)	—	N	§	30,000
Gravitic Sports Car	F Grav	2	2	semi	2	22	(60)	—	N	§	25,000
Explorers											
Exploration Walker	Walker	6	10	full	50	23	(20)	—	N	§	150,000
GEM Explorer	M GEM	8	8	full	30	23	(10)	—	N	§	100,000
Gravitic Explorer	M GRAV	6	4	full	15	22	(20)	—	N	§	180,000
MARINE CRAFT											
Open Speedboat	F HYPROP	4	2	none	1	21	(20)	—	N	¥	4,000
Open Airboat	M PROP	2	4	none	1	21	(10)	—	N	¥	
Open Hydrofoil	F HYFOIL	4	2	none	3	22	(30)	—	N	§	15,000
Seascout (explorer)	S HYFOIL	6	10	full	18	22	(20)	—	N	§	100,000
Discovery II (explorer)	F HYFOIL	8	12	full	25	23	(40)	—	P	§	160,000
Hydroskimmer	HYSKIM	2	3	none	2	21	(20)	—	N	¥	
Hydroskimmer	HYSKIM	4	8	full	3	21	(40)	—	N	§	60,000
Research Submersible	S SUBM	2	2	full	4	24	(10)	—	N	§	30,000
Exploration Submers.	F SUBM	6	10	full	18	24	(20)	—	N	§	100,000
AIRCRAFT											
Helicopter											
1-man	S PROP	1	5	none	1	21	(30)	—	N	§	6,000
2-man	S PROP	2	1	semi	2	22	(30)	—	N	§	15,000
Prop Plane											
2-man	M PROP	2	1	semi	1	21	(20)	—	N	§	12,000
4-man	M PROP	4	2	semi	3	22	(20)	—	N	§	25,000
Gravprop Plane											
2-man	F PROP	2	2	full	2	21	(30)	—	N	§	50,000
4-man	F PROP	4	4	full	5	22	(40)	—	N	§	90,000
High-speed Jet											
4-man	F JET	4	4	full	6	22	(30)	—	P	§	110,000
8-man	F JET	8	10	full	15	23	(40)	—	P	§	250,000
Gravitic Flitter											
Gravitic Belt	S GRAV	1	0	none	.005	N/A		—	N	¥	3,500
Gravitic Sled	M GRAV	2	1	none	.5	21	(30)	—	N	¥	12,000
2-man	F GRAV	2	3	full	1	22	(30)	—	N	§	80,000
6-man	F GRAV	6	4	full	4	22	(30)	—	P	§	200,000
10-man	F GRAV	10	6	full	12	22	(30)	—	P	§	500,000
Runabout	F PROP	4	2	semi	4	21	(10)	—	—	§	75,000
SPACECRAFT											
Suborbital Shuttle											
6-man	FUSION RCKT	6	10	full	20	23	(50)*30		P	§	800,000
20-man	FUSION RCKT	20	25	full	75	23	(50)*30		P	§	3,000,000
Small Spacecraft											
Maintenance Pod	N-Space Thrstr	2	2	full	3	21	(10)	—	N	§	30,000
Lifeboat (small)	N-Space 5	10	10	full	50	23	(10)	—	—	§	500,000
Lifeboat (large)	N-space 4	20	10	full	100	23	(10)	—	P	§	750,000

VEHICLE STAT AND COST CHART

VEHICLE TYPE	MOTIVE	PSNGRS	CARGO	ENVIR	MASS	CAT	(DB)	ARMAMENT	MI	PWR	COST
Orbit Shuttle											
6-man	FUSION RCKT	6	10	full	25	23	(50)	—	P	§	1,000,000
20-man	FUSION RCKT	20	30	full	90	23	(50)	—	P	§	3,600,000
Courier Shuttle	N-SpRtg 20	4	10	full	100	22	(90)	—	P	§	10,000,000
Hypershuttle	N-SpRtg 10/TLRtg 12	6	12	full	150	22	(90)	—	P	§	15,000,000

KEY:

MOTIVE: refer to the *Vehicular Movement Chart* for the explanation of these terms. For the spacecraft, the N-Space Rating indicates the acceleration capability x 10 kilometers per second^2. TL Rating is the number of light-years travelled per day.

PSNGRS: indicates the number of persons the vehicle is designed to carry comfortably — including pilot and crew. In an emergency each cumet of cargo space could be used for 'passengers', but only for limited periods, as it overloads the environmental control systems.

CARGO: additional cargo space available, in cubic meters (cumets).

ENVIR: amount of interior environmental control: *none* means that either there is no cabin or that the cabin has not atmospheric control; *semi* means that the cabin is enclosed but not necessarily sealed, and provides heat/cooling and some humidity control; *full* means that the cabin is completely insulated and sealed, and is equipped with complete environmental support. the number in parenthesis is how many days of environment (air, etc) are available per passenger (assuming enought fuel).

MASS: mass of the craft (empty) in tons. Multiply this number time 20 to determine the number of hits the vehicle can withstand.

AT (DB): The Armor type is listed, with the standard Defensive Bonus (DB) in parenthesis afterwards. This does not include any shield bonus.

ARMAMENT: Most vehicles do not have weapons, but it is possible to have weapons installed on some vehicles

MI: indicates whether the craft is equipped with a Mech Interface terminal for a robot. The space either has an "N' (for "no interface"), or one or more of the following: "P" (Pilot Interface), "W" (Weapons Interface), "S" (Sensor Interface).

PWR : Either batteries (¥) which last 10 to 50 hours of continuous operation; or a fusion reactor (§).

COST: the average cost for the vehicle in Elmonits.

VEHICULAR MOVEMENT CHART

(all speeds in kph unless otherwise noted)

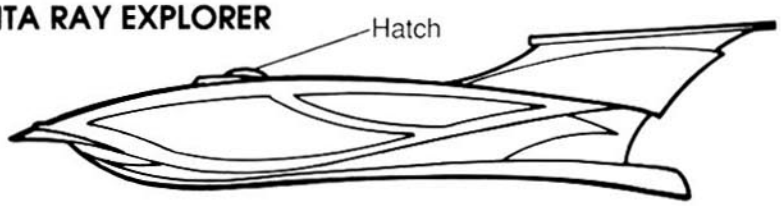
MOTIVE FORM	TERRAIN TYPE												
	Road	Trail	Clear	Dwnslope	Upslope	Rough	Woods	Swamp	Water	Ocean	Submrg	DnseAtm	ThinAtm
Slow Wheeled	50	30	30	+10	- 10	10	—	—	—	—	—	—	
Med. Wheeled	100	60	50	+20	- 20	20	—	—	—	—	—	—	—
Fast Wheeled	300	200	150	+20	- 20	20	—	—	—	—	—	—	—
Slow Tracked	35	30	30	+10	- 10	25	10	—	—	—	—	—	—
Med. Tracked	50	40	40	+10	- 10	30	15	—	—	—	—	—	—
Fast Tracked	150	100	80	+10	- 10	40	20	—	—	—	—	—	—
Walker	50	40	40	- 5	- 10	40	20	10	—	—	—	—	—
Slow GEM	50	50	50	+10	- 10	40	10	50	50	40	—	—	—
Med. GEM	100	100	100	+10	- 10	80	20	100	100	80	—	—	—
Fast GEM	300	300	300	+20	- 10	100	30	150	150	120	—	—	—
Slow Gravitic	100	100	100	+20	- 5	100	50	100	100	100	—	100*	—
Med. Gravitic	200	200	200	+20	- 0	200	50	200	200	200	—	300*	400*
Fast Gravitic	500	500	500	+20	- 0	300	50	300	300	300	—	500*	800*
Slow Submer.	—	—	—	—	—	—	—	—	15	15	10	—	—
Med. Submer.	—	—	—	—	—	—	—	—	40	40	30	—	—
Fast Submer.	—	—	—	—	—	—	—	—	120	100	150	—	—
Slow Hydrofoil	—	—	—	—	—	—	—	30	60	50	—	—	—
Fast Hydrofoil	—	—	—	—	—	—	—	50	150	120	—	—	—
Hydroskimmer	—	—	—	—	—	—	—	40	250	200	—	—	—
Slow Hydroprop	—	—	—	—	—	—	—	20	40	40	—	—	—
Fast Hydroprop	—	—	—	—	—	—	—	35	75	60	—	—	—
Slow Prop	—	—	—	—	—	—	—	—	—	—	—	150	120
Med. Prop	—	—	—	—	—	—	—	—	—	—	—	400	350
Fast Prop	—	—	—	—	—	—	—	—	—	—	—	750	700
Slow Jet	—	—	—	—	—	—	—	—	—	—	—	500	1000
Med. Jet	—	—	—	—	—	—	—	—	—	—	—	1000	2500
Fast Jet	—	—	—	—	—	—	—	—	—	—	—	1800	3200
Chem Rocket	—	—	—	—	—	—	—	—	—	—	—	2000	4000
Fusion Rocket	—	—	—	—	—	—	—	—	—	—	—	2400	5000

* indicates speeds only attainable by gravitic vehicles capable of high—altitude lift.

MANTA RAY EXPLORER

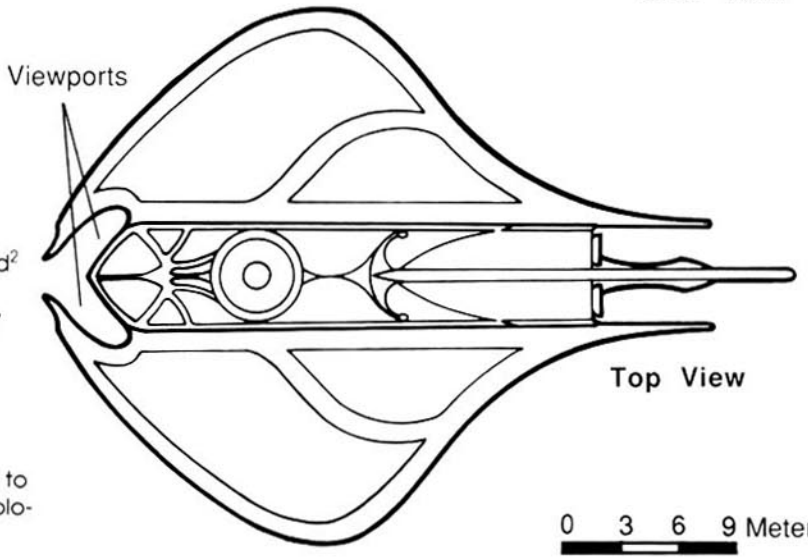


Front View



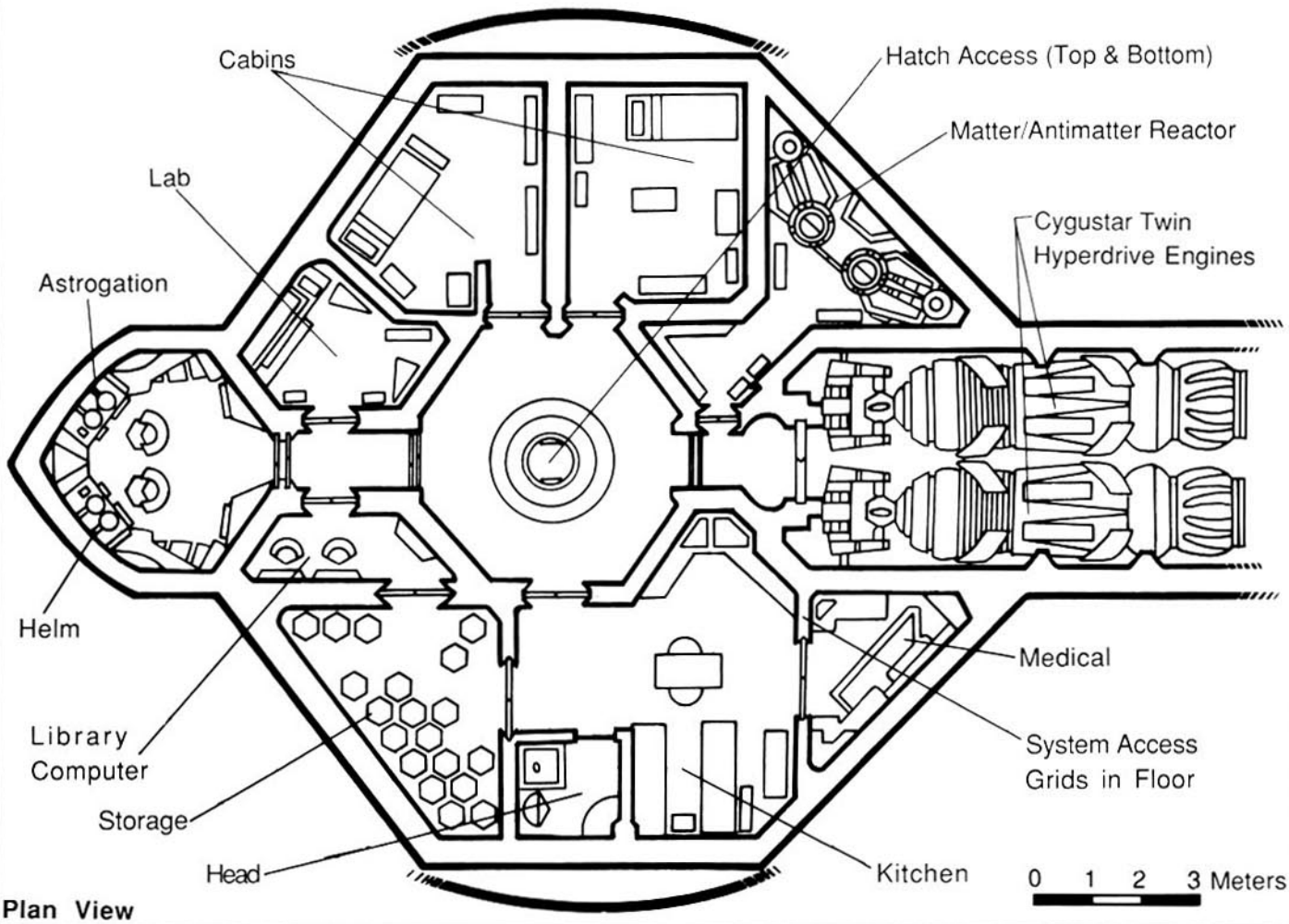
Side View

CLASS: Explorer
PRODUCER: Cygnus Shipyards/Kashmere
TONNAGE/HITS: 1200
COMPUTER Mk#: 50
ARMOR TYPE: 23
DB BREAKDOWN: (+35 EW, +30 Screens)
EW VALUE: +35
DEFLECTOR SCREEN RATING: +30
RQ'D CREW: 1 Astro/Pilot; 2 Tech
CARGO CAPACITY: 600 cumets
MAX SUBLIGHT ACCEL: Rating 16 = 130 km/second^2
MANEUVERING THRUSTERS: Rating 16 = 13 km/rd^2
TRANSLIGHT DISPLACEMENT: Rating 14 = 12 LY/day
OPERATING RANGE: 200 LY
LANDING CAPABILITY: Yes
WEAPONRY:
— two forward-mounted Mk 10 Laser Cannons
NOTES: This versatile ship is not only capable of planetary landing but underwater maneuvering to a considerable depth. It is ideal for in-depth explorations of earthlike worlds.



Top View

0 3 6 9 Meters



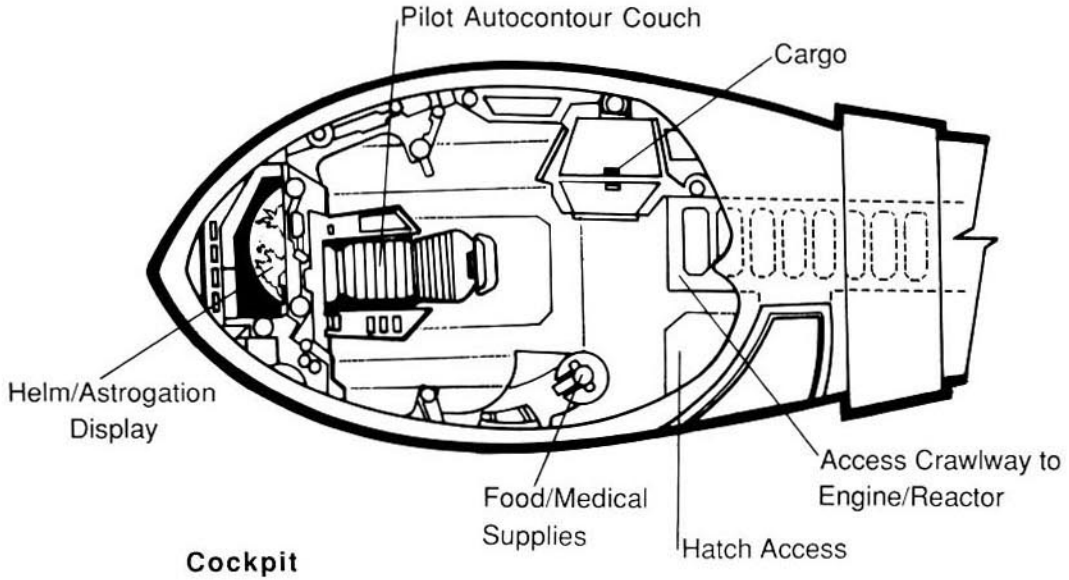
Plan View

DEBARTON COURIER

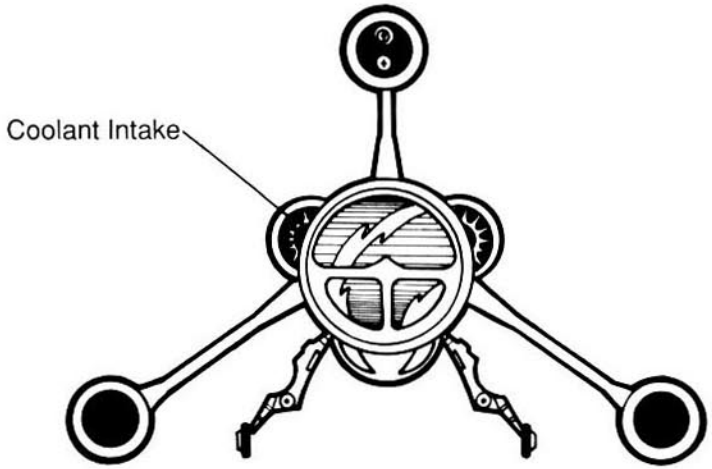
Interstellar Courier

0 .5 1 Meters

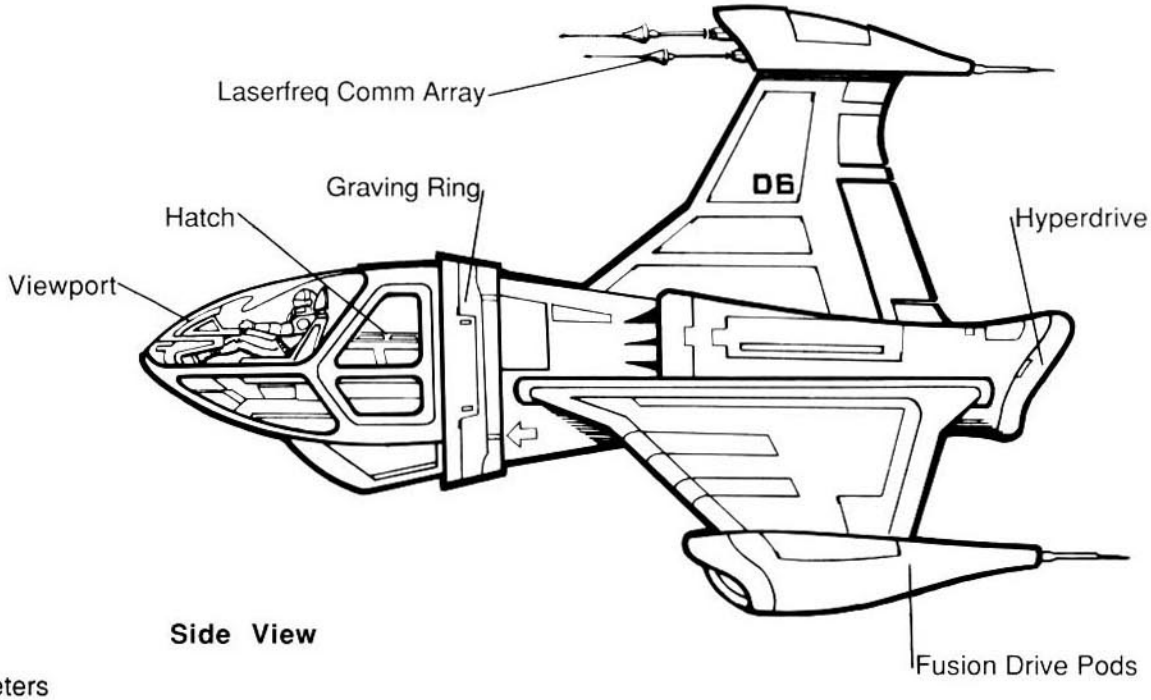
CLASS: Light Courier
PRODUCER: Imara Shipyards (Carlisle)/Hayes Hyperdyne
TONNAGE/HITS: 60
COMPUTER Mk#: 15
ARMOR TYPE: 22
DB BREAKDOWN: (+10 screens, +30 evade, +30 EW)
EW VALUE: 30
DEFLECTOR SCREEN RATING: 10
RQ'D CREW: 1 Astro/Pilot/Tech
CARGO CAPACITY: 5 Cumets
MAX SUBLIGHT ACCEL: Rating 20 = 150 km/sec^2
MANEUVERING THRUSTERS: Rating 20 = 15 km/rnd
TRANSLIGHT DISPLACEMENT: Rating 25 = 16.25 LY/day
OPERATING RANGE: 200 light-years
LANDING CAPABILITY: Yes
WEAPONRY: None



Cockpit

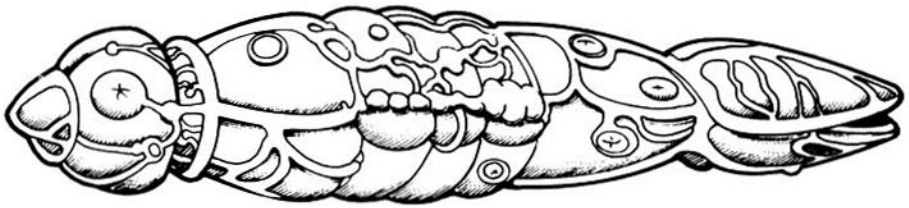


Front View

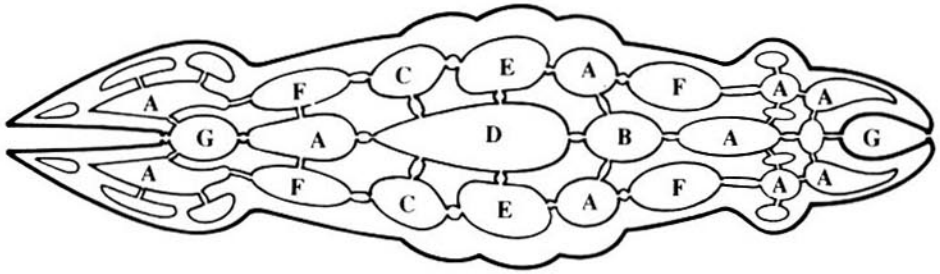


Side View

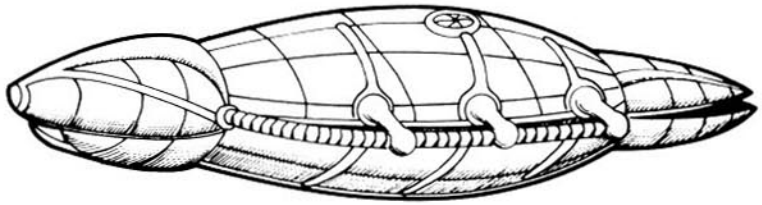
0 2 4 Meters



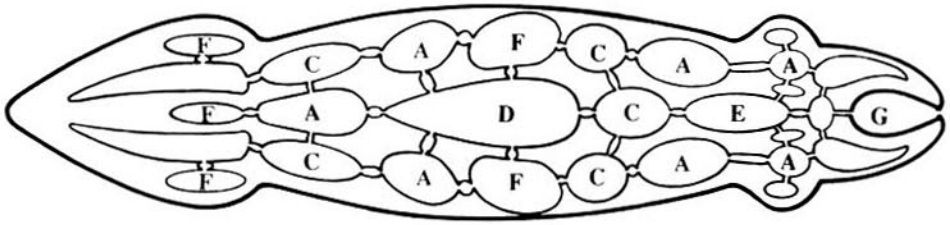
Primary Type



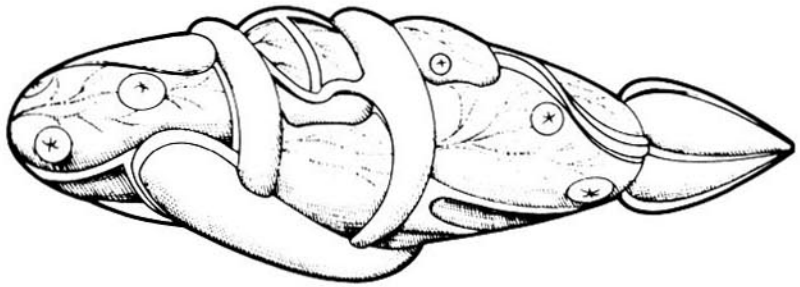
Upper and Lower Sections



Newer 'Childbearer'



Middle Section Cutaway



Older 'Childbearer'

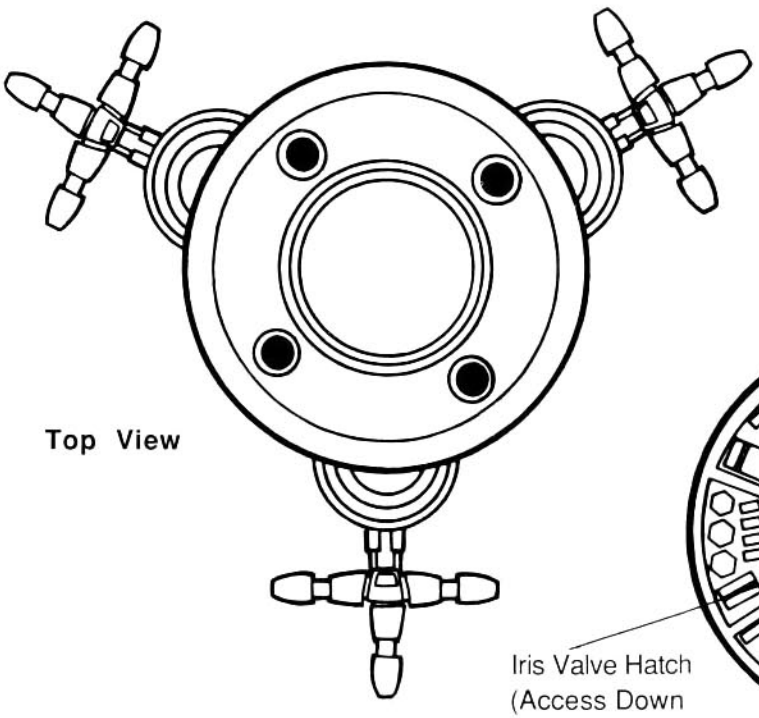
A - Operations
B - Control
C - Stores
D - Processing
E - Fusion Drives
F - Residence
G - Entry/Exit Points

0 50 100 150 300 Meters

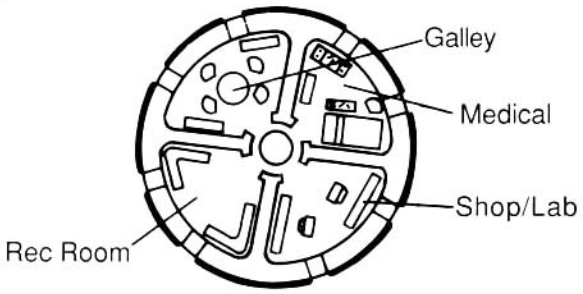
EED SHIPS

CLASS: Primary
PRODUCER: Eed
TONNAGE/HITS: 100,000
COMPUTER Mk#: ?
ARMOR TYPE: 25
DB BREAKDOWN: (+60 screens, +30 evade)
DEFLECTOR SCREEN RATING: 60
RQ'D CREW: None
PASSENGERS: 100
CARGO CAPACITY: 10,000 cumets
MAX SUBLIGHT ACCEL: Rating 12 = 110 km/sec^2
MANEUVERING THRUSTERS: Rating 12 = 11 km/rnd
TRANSLIGHT DISPLACEMENT: 14 = 12 LY/day
OPERATING RANGE: 500 light-years
LANDING CAPABILITY: No
WEAPONRY:
— 360° Mk 20 Autocannon

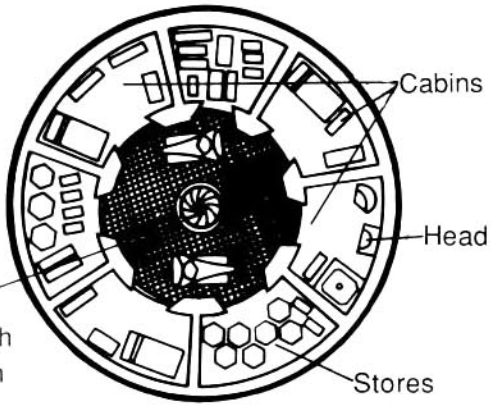
COLUMBARI



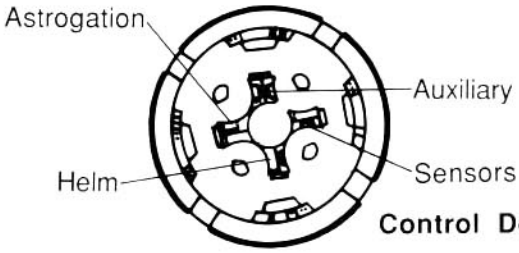
Top View



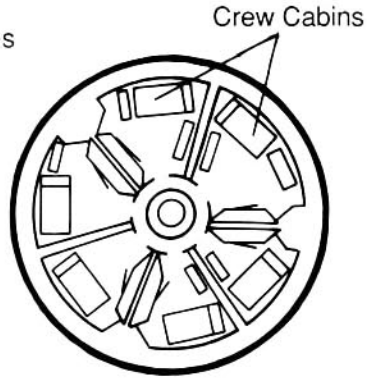
Service Deck (3)



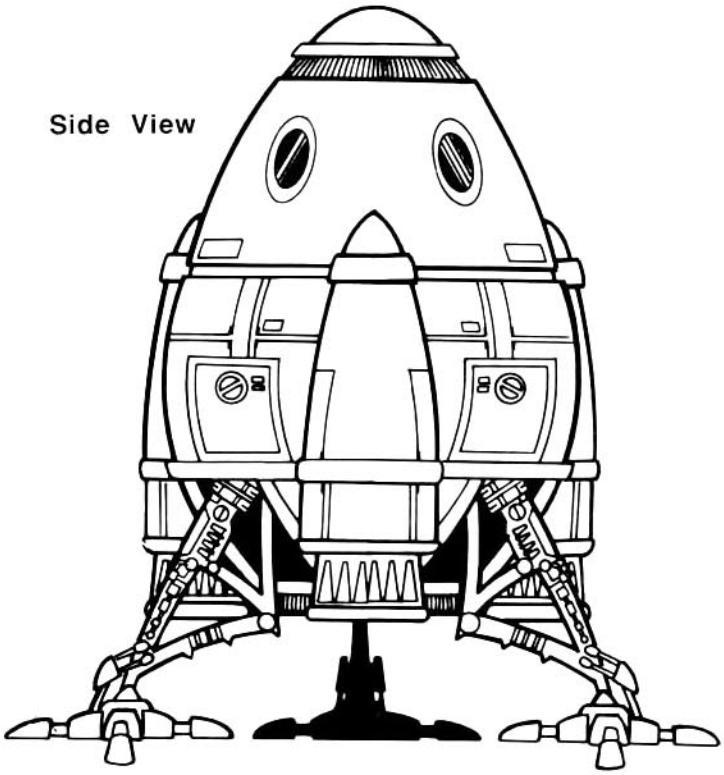
Cargo Deck (1)



Control Deck (4)



Cabin Deck (2)



Side View

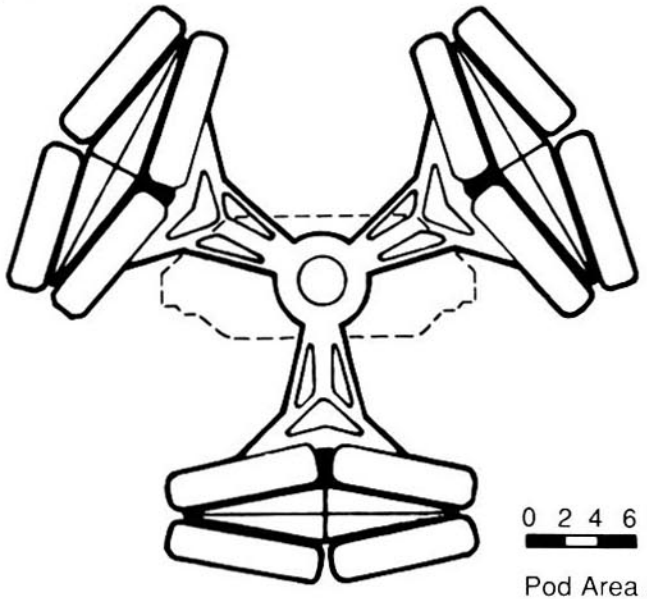
SHIP NAME: Columbari
PRODUCER: Red Star SSPI
OWNER: Imperial Shippers
CLASS: Medium Orbital Freigter
TONNAGE/HITS: 2,500
COMPUTER: Mk.45
ARMOR TYPE: 23 (+10 screens)
EW VALUE: 0
DB BREAKDOWN: (+10 screens)
SCREEN RATING: 10
CREW: 3 ASTRO, 6 TECH
PASSENGERS: 0
MAX SUBLIGHT ACCELERATION: RATING 3 = 30 KM/SEC/SEC
TRANSLIGHT DISPLACEMENT; RATING 0 = No Translight Capability
OPERATING DURATION: 6 Decadays
LANDING CAPABILITY: Yes
WEAPONRY: None
CARGO: 4,500 cumets

0 1 2 3 4 5 Meters

SHIP NAME: Fort Keberus
PRODUCER: Jade Voidmasters
OWNER: Imperial Science Institute
CLASS: Long-Range Survey
TONNAGE/HITS: 2,750
COMPUTER: Mk.50
ARMOR TYPE: 23 (+20)
EW VALUE: 0
SCREEN RATING: 20
CREW: 4 Astro, 8 Tech, 8 Support
PASSENGERS: 12 (or 36 in Cryo)
MAX SUBLIGHT ACCELERATION: Rating 16 = 130 km/sec/sec
MANEUVERING THRUST: Rating 16 = 13 km/rnd/rnd
TRANSLIGHT DISPLACEMENT: Rating 10 = 10 LY/day
OPERATING RANGE: 500 LY
LANDING CAPABILITY: No
WEAPONRY: None
NOTES: This class is sent on extended-duration explorations of the Frontier. The living areas spin to simulate gravity, an energy-saving device (bridge and mechanical areas have no gravity). As many as three of the pods on the spin section can be replaced with orbital landing vehicles.

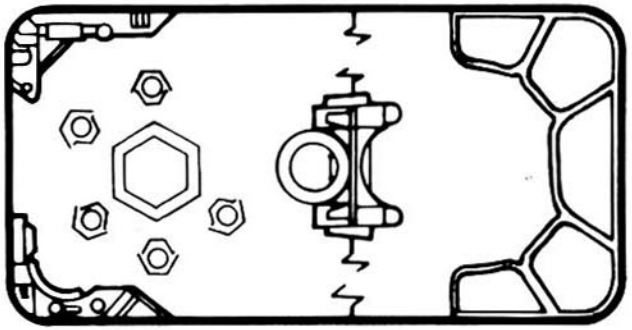
FORT KEBERUS

Translight Long Range Explorer

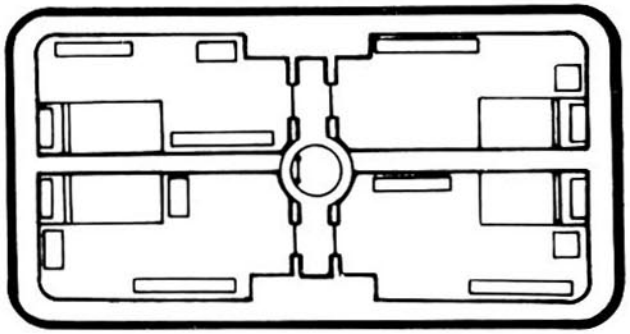


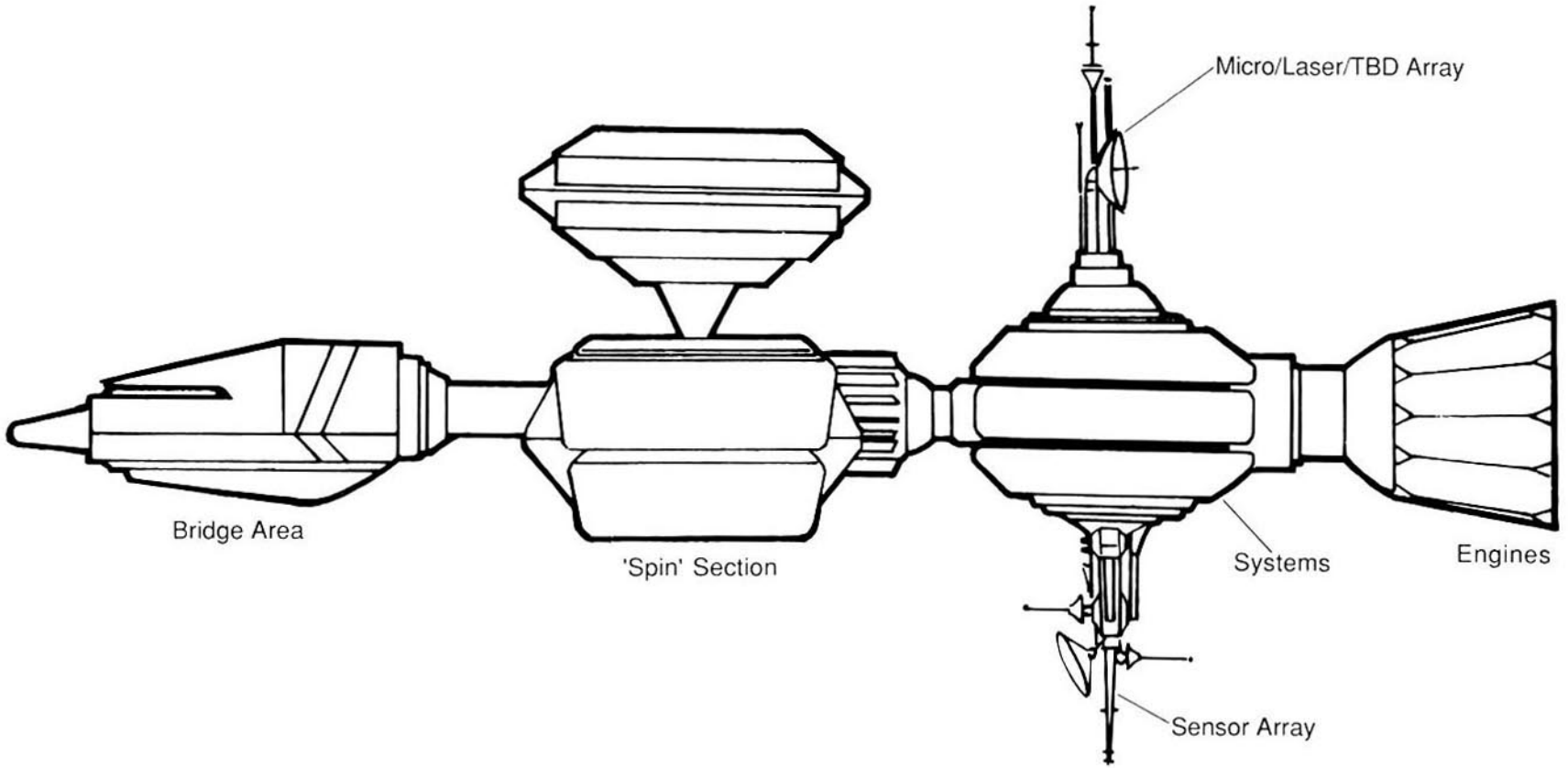
0 2 4 6 Meters

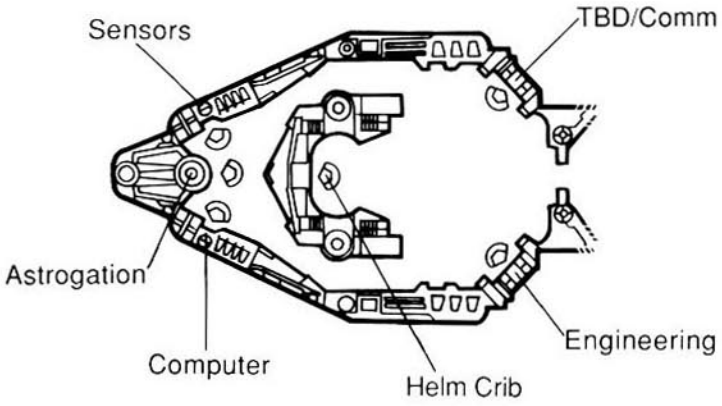
Pod Area Along Spin Axis (12 Pods In All)



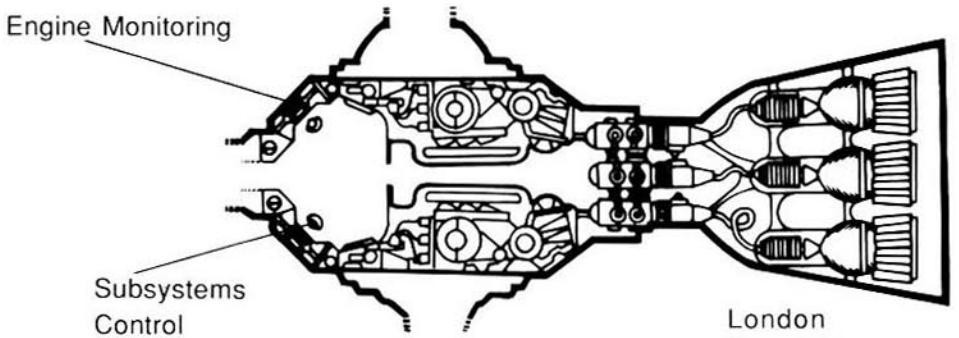
Cabin Pod (1 of 4)





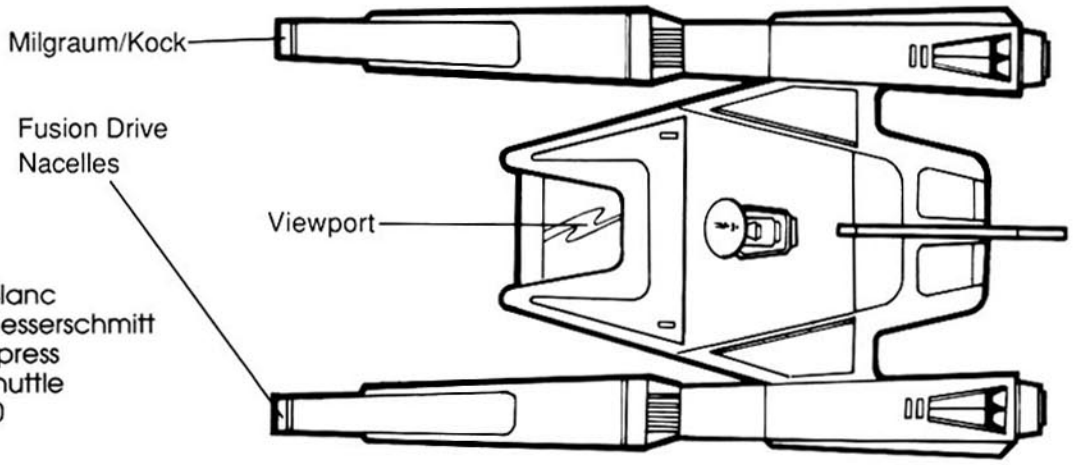


Bridge



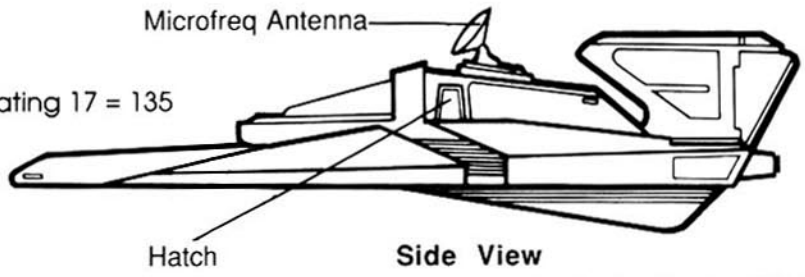
0 2 4 6 Meters

SPRINT BLANC



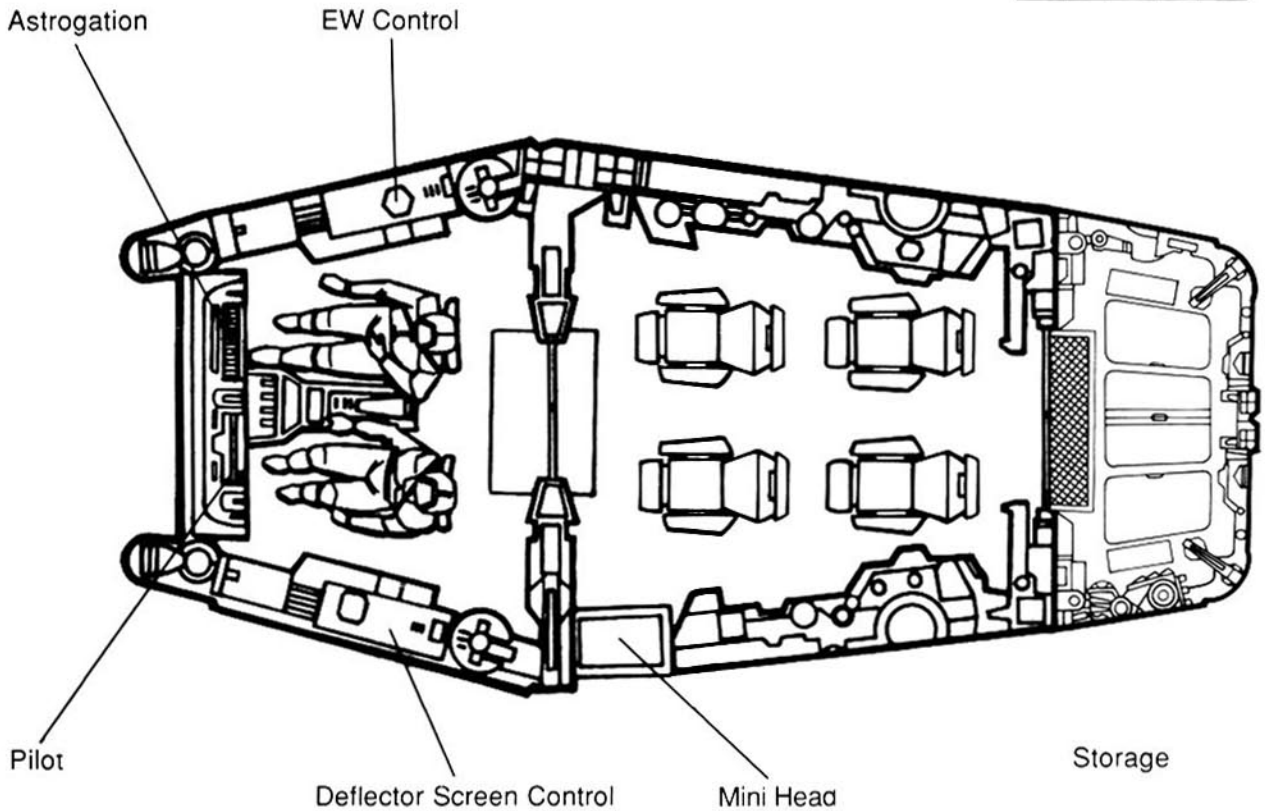
Top View

SHIP NAME: Sprint Blanc
PRODUCER: Vott-Messerschmitt
OWNER: Xantha Express
CLASS: Planetary Shuttle
TONNAGE/HITS: 450
COMPUTER: Mk.20
ARMOR TYPE: 22
DB BREAKDOWN: (+10 Screens, +10 EW, +10 Armor)
EW VALUE: 10
SCREEN VALUE: 10
CREW: 1 Pilot, 1 Tech
PASSENGERS: 4
MAXIMUM SUBLIGHT ACCELERATION: Rating 17 = 135 km/sec^2
MANEUVERING THRUST: 14 km/rnd^2
TRANSLIGHT DISPLACEMENT: Rating 0
OPERATING DURATION: 2 Decadays
LANDING CAPABILITY: Yes
WEAPONRY: none



Side View

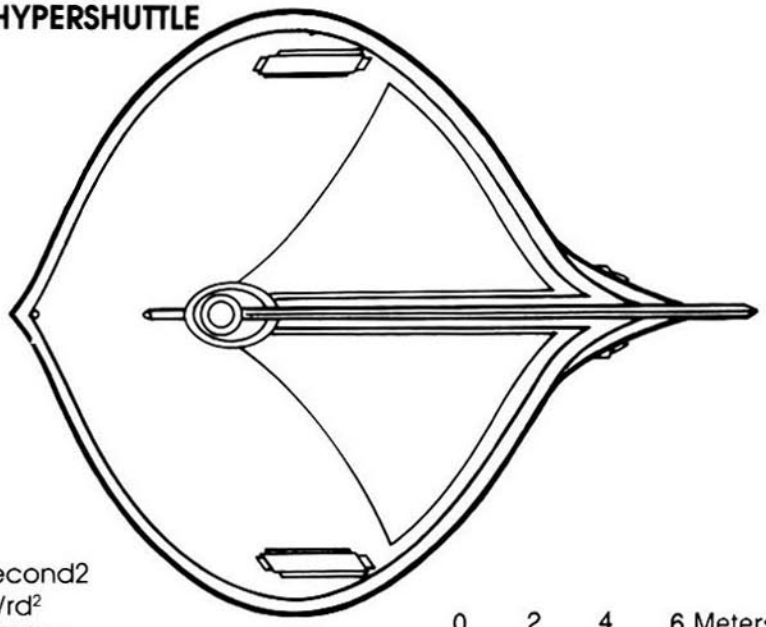
0 2 4 6 8 10 Meters



0 1 2 Meters

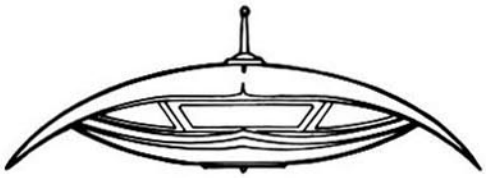
HYPERSHUTTLE

CLASS: Hypershuttle
PRODUCER: Cygnus Shipyards/Kashmere
TONNAGE/HITS: 600
COMPUTER Mk#: 50
ARMOR TYPE: 22
DB BREAKDOWN: (+40 EW, +40 Screens)
EW VALUE: 40
DEFLECTOR VALUE: 40
RQ'D CREW: 1 Astro/Pilot; 1 Tech
PASSENGERS: 6
MAX SUBLIGHT ACCEL: Rating 16 = 130 km/second2
MANEUVERING THRUSTERS: Rating 16 = 13 km/rd^2
TRANSLIGHT DISPLACEMENT: Rating 14 = 12 LY/day
OPERATING RANGE: 200 LY
WEAPONRY: None

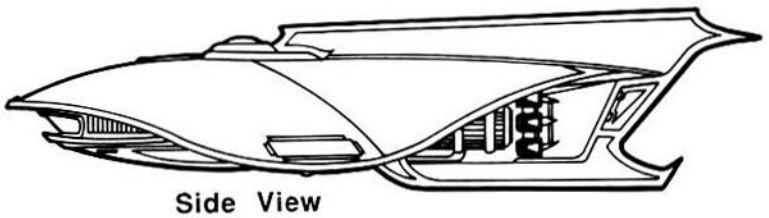


Top View

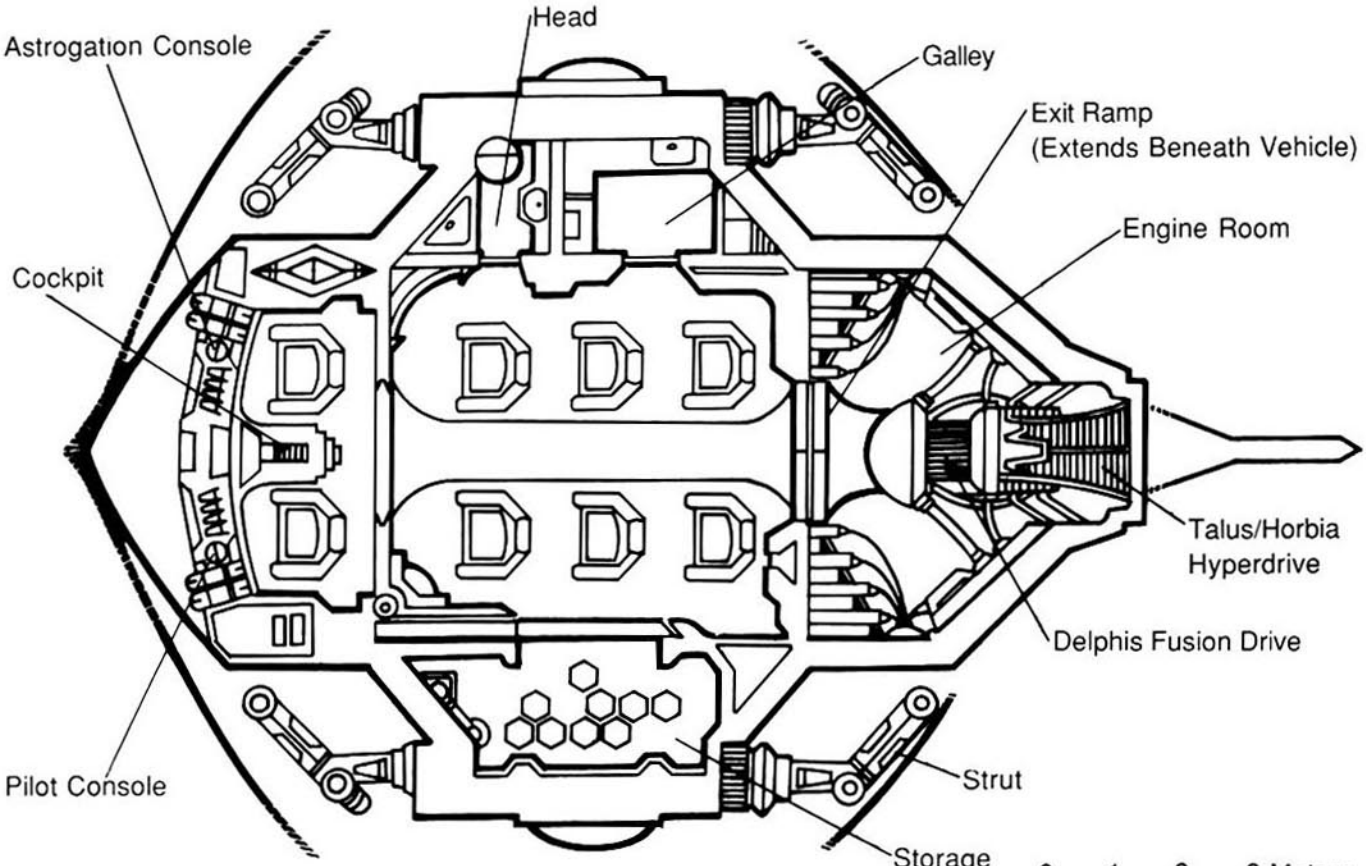
0 2 4 6 Meters



Front View



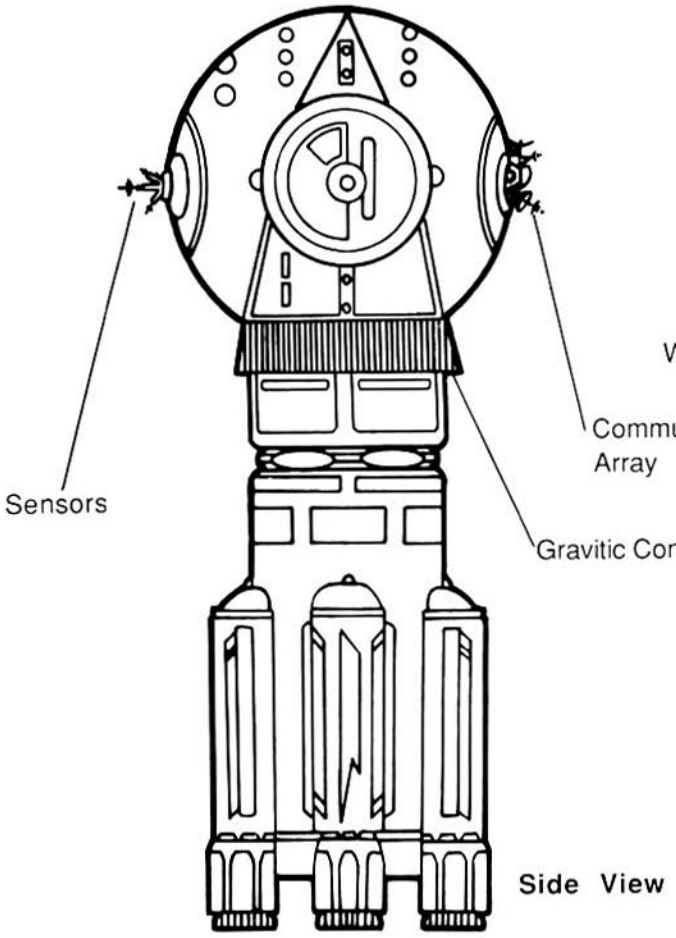
Side View



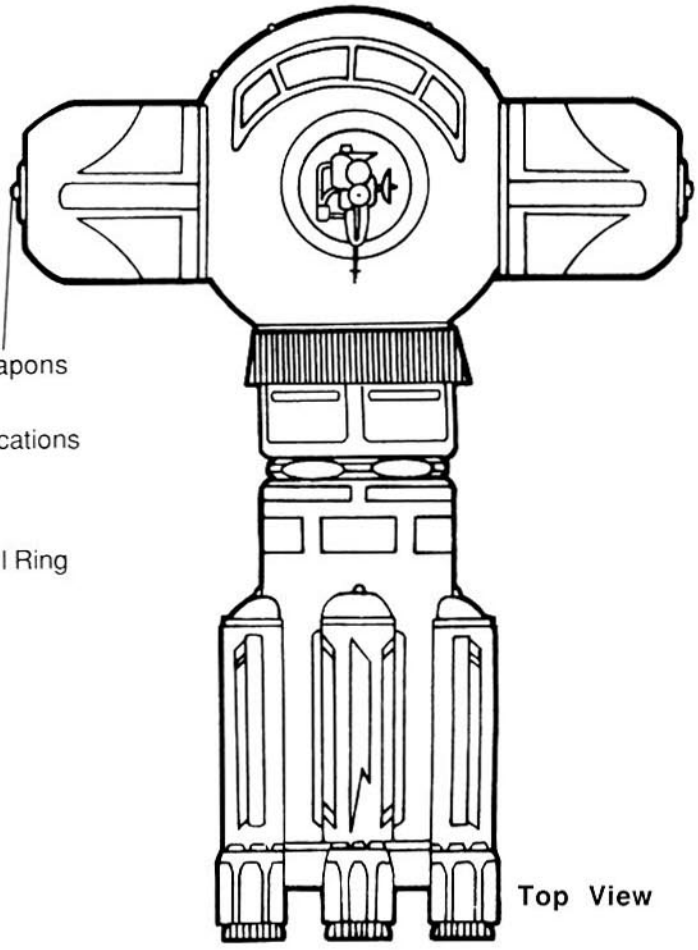
Plan View

0 1 2 3 Meters

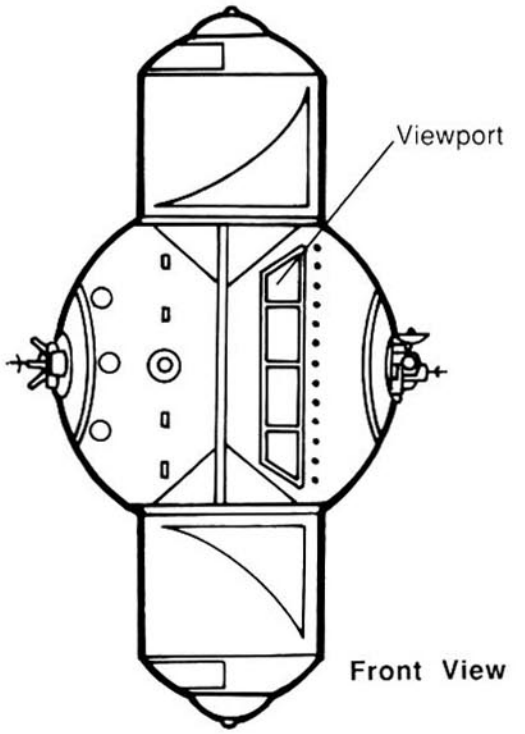
COLBURA MORANN



Side View

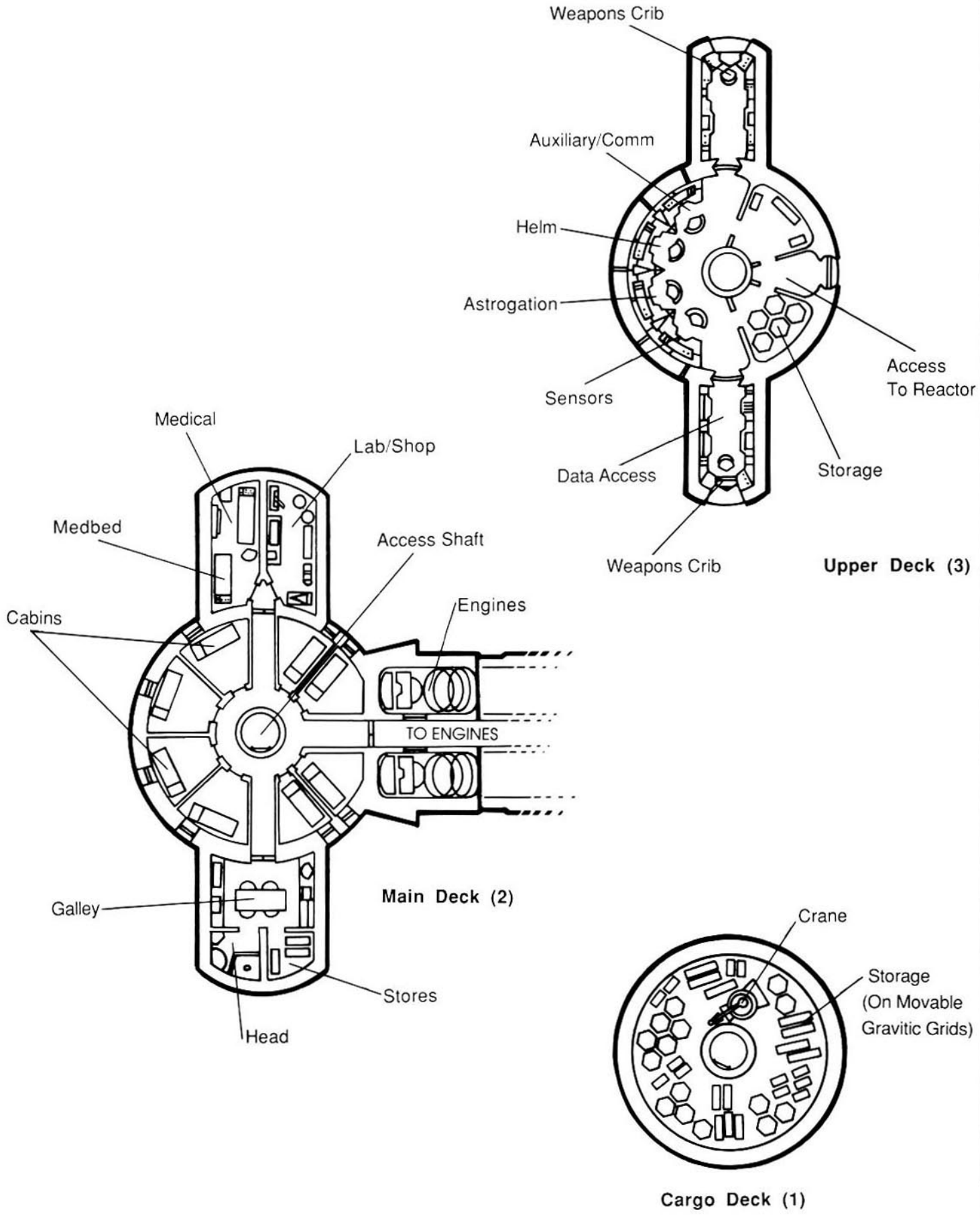


Top View

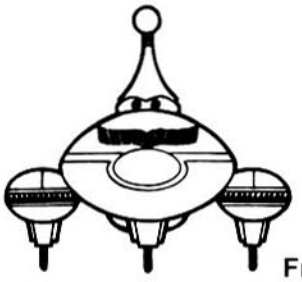


Front View

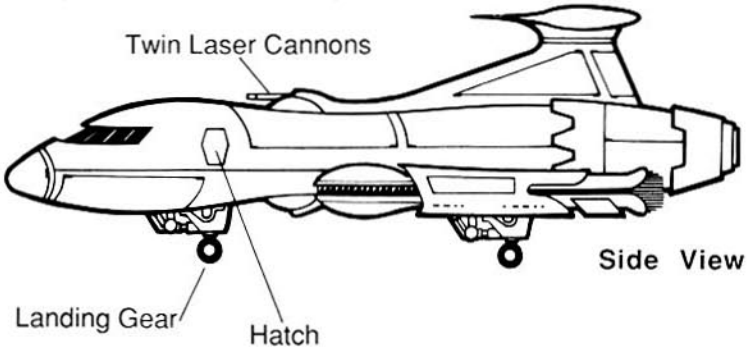
SHIP NAME: Colbura Morann
PRODUCER: Kubischev-Lloyd Amalgamated
OWNER: Gilliam Transvoid
CAPTAIN: Torus Fenelton Golmesh
CLASS: Small Hyperfreighter
TONNAGE/HITS: 3,150
COMPUTER: Mk.50
AUX COMPUTER: Mk.20
ARMOR TYPE: 23
DB BREAKDOWN: (+40 Screens, +30 Evade, +10 EW)
EW: 10
SCREENS: 40
CREW: 3 Astro, 5 Tech
PASSENGERS: 4
CARGO: 3000 cumets
MAX SUBLIGHT ACCELERATION: Rating 12 = 110 km/second^2
MANEUVERING THRUST: 6 km/rnd/rnd
TRANSLIGHT DISPLACEMENT: Rating 10 = 10 LY/day
OPERATING RANGE: 200 LY
LANDING CAPABILITY: Yes
WEAPONRY: 4 x Mk.15 Lasers
NOTES: A very popular spacecraft, the Colbura has proven its worth throughout the Empire. Thousands are still in service decades after their construction.


Weapons Crib
Auxiliary/Comm
Helm
Astrogation
Sensors
Access
To Reactor
Data Access
Storage
Weapons Crib
Upper Deck (3)
Medical
Lab/Shop
Medbed
Access Shaft
Engines
Cabins
TO ENGINES
Galley
Stores
Head
Main Deck (2)
Crane
Storage
(On Movable
Gravitic Grids)
Cargo Deck (1)

SURVEY (FLYING MERINO II)

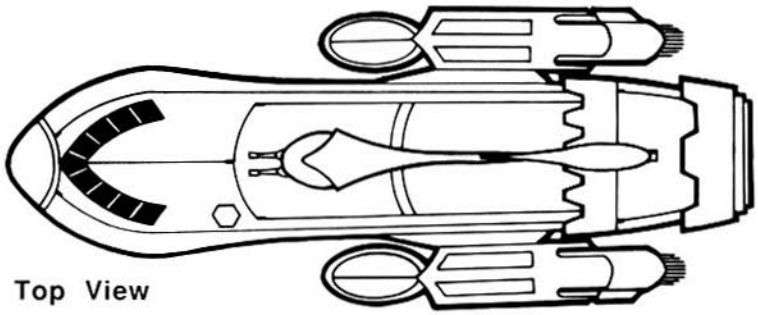


Front View



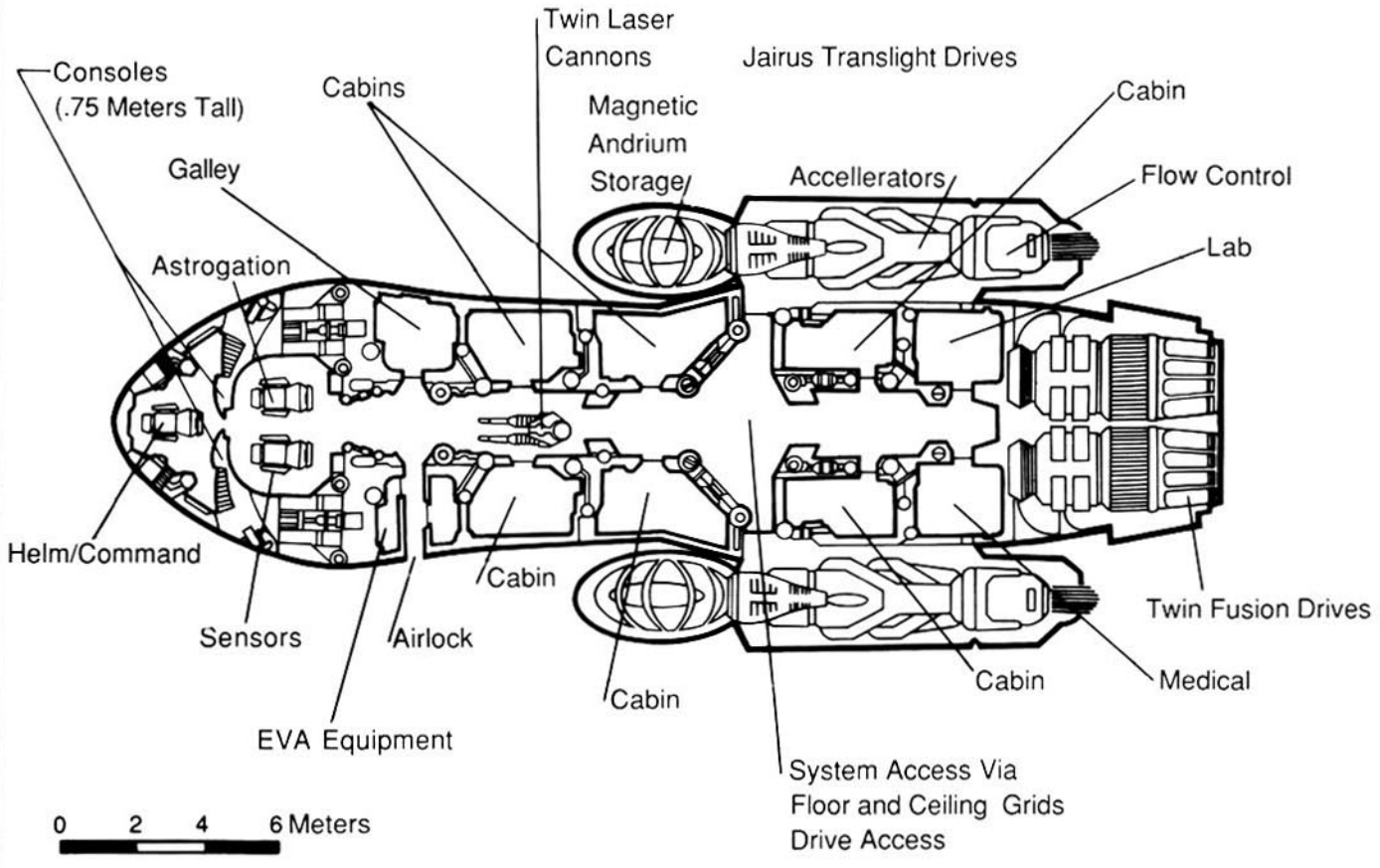
Side View

CLASS: Explorer/Scout
PRODUCER: Devon Transtar
TONNAGE/HITS: 1200
COMPUTER Mk#: 70
ARMOR TYPE: CAT 23 (80)
DB BREAKDOWN: (+30 EW, +50 Screens)
EW VALUE: 30
DEFLECTOR SCREEN RATING: 50
RQ'D CREW: 1 Pilot, 2 Tech (can be combined)
PASSENGERS: 6
CARGO CAPACITY: 800 cumets
MAX SUBLIGHT ACCEL: Rating = km/second^2
MANEUVERING THRUSTERS: Rating 16 = factor 13
TRANSLIGHT DISPLACEMENT: 14 = 12 LY/day
OPERATING RANGE: 300 LY
LANDING CAPABILITY: Yes
WEAPONRY:
— two turret-mounted Mk 10 Laser Cannons;
— twin fore-mtd Mk 10 M/A torpedo tubes
Notes: A staple of the IAI And ISI, the Survey scout is a convenient size for small crews sent on long voyages.



Top View

0 3 6 12 Meters



PART II: CONSTRUCTION & REPAIR

"It is true that I am a wretch. I have murdered the lovely and the helpless; I have strangled the innocent as they slept, and grasped to death his throat who never injured me or any other living thing. I have devoted my creator, the select specimen of all that is worthy of love and admiration among men, to misery..."

Frankenstein, by Mary Shelly
Terra Prelmp 9864

10.0
USING THE CONSTRUCTION/ RESEARCH CHART

Most construction and research refers to the *Construction/Research Chart* (pg.61).

This chart, like the maneuver charts, has a number of different "Difficulty Ratings", from Routine to Absurd. The appropriate difficulty must be assigned by the GM before a roll is made, with additional modifiers if applicable.

By glancing over the Chart one can see that the majority of the boxes have two numbers: the first one indicates — for research — the percentage of total desired research data acquired after the effort represented by that particular roll. For construction it indicates the percentage chance that the item will function properly initially after construction. Obviously, a test after the roll will reveal whether or not the item operates, though that can become involved (or even dangerous) with complex machines/organisms. It is suggested that in the case of complex construct and organisms such as Replicant and Clones that the PC be instructed to roll until a 100% total accumulated chance of success is achieved (or utter failure, or the creator gives up). If the item fails, successive rolls with a cumulative chance of success are permitted.

The second number in each box on the chart indicates how much time is expended to achieve the result. This is actual time at work, so sleep and break time should be added in when days or weeks become involved to calculate an actual time span.

Note: *Research is performed using Scientific skill bonuses; Construction is done using Technic skill bonuses. If a project seems to fall under more than one skill category, average the appropriate ones to get the skill bonus to be applied.*

Difficulty Ratings

When assigning difficulty, a few general guidelines should be kept in mind:

Routine: Is for very simple operations only, such as improvising wiring on an available generator to recharge an energy cell, or assembling a simple, modular device. With regard to research, this applies to checking one easy reference.

Easy: Applies to most elementary construction tasks, assembling a small apparatus with pre-made parts, for example. Research is slightly more involved than one reference; perhaps two or three sources need to be checked for 100% completeness.

Example: *Sanvok has a 40 bonus in Weapons Technology, and decides to take his Laser Pistol apart and put it together again (just for kicks). The GM determines that this is "Easy", and Sanvok rolls a 27 (plus 40 = 67). A 67 result in the easy column says that, after ten minutes the Laser Pistol is to the point where there is a 95% chance that it will operate correctly. Sanvok tests it — probably by shooting at something. He rolls an 03 (Note that this roll is unmodified and not open-ended). The Laser Pistol fails to work. He rolls again on the Easy column, getting a 67 (total, including bonus: 107). This reports a 99% after one more minute. The percent is cumulative, so there is a 100% chance the item now works. (Of course, there is still always the chance that the pistol will malfunction in normal action, as reflected in the Failure range of the weapon chart.)*

Moderate: For slightly more sophisticated operations, yet still in the 'simple' range.

Example: *Norvin, in his fully equipped workshop, decides to build a small power cell recharge device to run off his portable fusion reactor, so its easier to recharge his Blaster Rifle Power Packs. Abruptly he realizes (i.e., the GM tells him) that he has no idea of the specifics of the voltage/wattage of the Power Pack or how to alter the current. He goes to the handy Reference Computer (not necessarily a feature of a workshop, but invaluable for research) and calls up the Engineering Technical Reference Memory. The GM decides that all the data required for reasonable success in this operation will probably have to come from three or four sources (Power Pack specs, Portable Fusion Reactor specs, and current alteration details). He informs Norvin that this is a Moderate Research project. Norvin has a 60 skill bonus in Electronics and a 40 skill bonus in Power Systems Theory as Scientific Skills (the GM having determined that this is a Electronics and Power Systems Theory project, since the weapon itself really has little to do with it, Weapons Design is not applicable) so so Norvin's net add is 50 (average of 40 and 60). Norvin rolls a 78 (78 + 50 = 128). 128 cross-indexed on the chart reveals 100% completion in 20 minutes. Thus, Norvin gleans all the necessary information he needs in half an hour. The next step is actual construction, which requires the appropriate Technics skills. Once again, Electronic and Power Systems Technics are involved. Norvin bonuses in these are both 40, so the average is (not surprisingly) 40. Norvin's shop is, as we have noted, fully equipped, so the GM need not impose additional penalties for insufficient equipment and supplies. The GM determines that this operation is also Moderate. Norvin rolls 56 and adds his 40 bonus = 96. The result on the table reveals that after 20 minutes, Norvin has completed the project to the point where there is a 95% chance that the device will work. Norvin tests it, and rolls an 87 (well above the required 06+). It works (and will continue to work, under normal operation/malfunction rules).*

Hard: To be used for more complicated construction, perhaps involving the custom tooling or wiring of a complete unit; or simple organism synthesis (such as reproducing a drug). Also for the lower range of involved research or a creative design.

Complex: Appropriate for Cloning, non-experimental Replication, and extended Eugenics planning. Also used for creative micro-organism work (based on comparable research) and the construction of relatively basic new devices from 'raw' materials — a different type of multiscanner, for instance (again, based on comparable successful research). Detailed research with possible numerous cross-references uses this column.

Very Complex: This column should be used for Construction of sophisticated new systems and new types of Alterant Replication (based on research) and extremely detailed research, with at times unclear data.

Example: *Trevoc, after successfully completing research on creating a special Alterant Replicant with superior night vision, goes to his fully equipped lab and begins the necessary chromosome and gene alteration on the Replicant fetus. He rolls a 76, plus his 60 Genetic Engineering bonus, a total of 136. On the Very Complex table, the result is 50% complete after 57 days. He rolls again: 89 (plus 60 = 149) the result is an additional 55% (bringing his total to 100%) and an additional 53 days of work. Thus, the fetus is altered and developing in the growth tank after 110 days of work. Note that this does not include the 100 days while the fetus is in the tank, growing to maturity. See Section 12.0 for more details on Replication and Cloning.*

Absurd: Use this column for things which would normally be *Hard* to *Very Complex*, but when there are important facilities/ supplies unavailable. Caution is advised, however. Even in the universe of ***Space Master***, some things are "impossible", and if the GM deems something to be impossible, he should say so rather than allowing a roll.

Example: *Trevoc, with his total Genetic Engineering bonus of 60, and has gathered all the chemical components of the human body (water, salt, various trace metals, etc.) and announces to the GM that he wishes to create a Replicant, using no equipment. This, of course, is beyond Absurd; the GM calmly and reasonably informs Trevoc that unless he acquires the proper materials and equipment, he cannot even attempt the task. (then the GM goes home and screams)*

General Factors

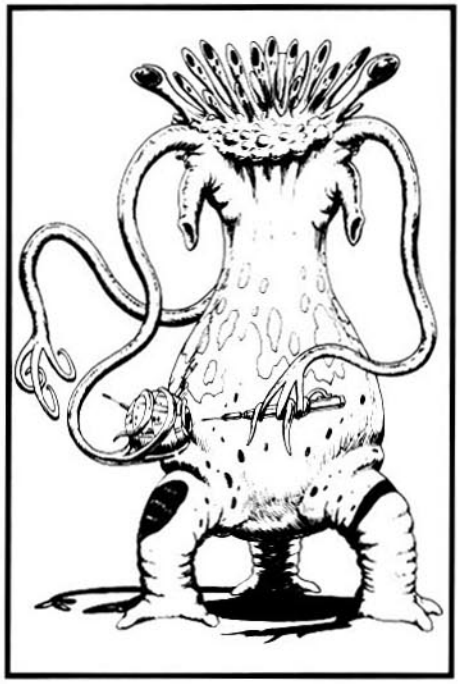
Once a column has been selected reflecting the empirical difficulty of the project, a few general factors are very important to consider, and to represent these, a numerical modification to the roll is suggested.

If Research:

- Are there adequate information sources available for the data- gathering in question — Or has some vandal stolen the needed volume?
  Suggest: Full data: ±0; Near Full -20; Partial: -30; Fragmentary: -50
- Is the environment conducive to research (no interruptions)?
  Suggest: Quiet: ±0; Rare Distractions: -20; Noisy: -30; Disruptive: -50
- Is the data appropriately recorded so that, when used, it will be accurate?
  Suggest: (storage type) Datadisc: ±0; Tapes: -20; Written Text: -30; Disorganized format: -50

If Construction:

- Are the tools and facilities available the appropriate ones?
  Suggest: Complete Equipment: ±0; Near Complete -20; Partial: -30; Sorely underequipped: -50
- Are there adequate materials, and are they of suitable quality?
  Suggest: Complete: ±0; Near Complete -20; Partial: -30; Wanting: -50



- Is the environment suitable and conducive to the delicate work involved (i.e., not aboard a small spaceship under attack or a town during an earthquake)?
  Suggest: Quiet: ±0; Rare Distractions: -20; Noisy: -30; In Motion: -50 — -100 (varies).
- Are the plans/instructions/source data complete and accurate?
  Suggest: Full data: ±0; Near Full -20; Partial: -30; Fragmentary: -50

The research/construction roll(s) are made and modified by these factors as well as the PCs skill rank in the appropriate area. For very complex machines, several rolls should be made: one for each system, each possibly with different modifiers and complexities.

It is important to be aware at all times the cost of materials. In the Example above, Norvin was able to build his recharge device because his workshop was "fully equipped". This of course meant that it was fully stocked with the tools and materials needed. After the device is built, the workshop is no longer "fully equipped", and Norvin will have to pay a certain amount to restock it. This involves a determination of the *Cost in Parts*.

This important concept comes up in all types of construction, and repair of devices when they are seriously damaged. Naturally a complete price list of all conceivable mechanical and electronic parts would be tedious and extreme, so it is suggested that the GM review the general price lists and estimate a cost value. Remember that *in general* a Cost in Parts is about half the cost of an assembled machine or device (due to cost of labor, equipment, etc). However, if the players are stuck in some low-tech outpost, the price could be quite extreme (or the items could be completely unavailable!).

Group Research and Construction

Group research is almost always more productive than individual, and below are the factors to be included. Keep in mind that adequate facilities for the group are necessary for their full efficiency to be realized.

Single Science/Tech Project

A situation in which one skill is clearly the central one and any others are relatively irrelevant. Everyone on the 'team' must possess this skill bonus, and all the people's bonuses are averaged. The roll is also modified by the number of people in the team: for each person (more than one and up to ten) on the team, add +5 to the roll; for every one over ten (up to 20) add +2; every one after twenty add +1. The time listed on the chart should also be halved each time a person is added.

Example: *A project that would take one person 100 hours takes two people 50 hours, three people 25 hours, four people 12.5 hours, etc.*

Multiple Science/Tech Project

When a project seems to fall under several categories, the major applicable skills are averaged. Each person on the team need only know at least one of the necessary skills. Bonuses are as above, and the time is also halved as above.

11.0 MACHINES

*"While man is a marvellous machine indeed, I think I might have done better given a few million years and an entire planet to work with. I **shall** do better in a fraction of the time and at negligible cost."*

Paal Fractiis, Founding President
Virtual Humanatronics
Alpha Centauri, PreImp 5655

11.1 WEAPONS/SMALL DEVICES

Perhaps the most straightforward of the construction operations, these are normally handled with one roll. Standardized parts and other construction materials are readily available in most areas of reasonable technology, so construction, with proper instructions, should rarely be more than *Hard.*

11.2 ANDROID CONSTRUCTION

Constructing an Android is conceptually somewhere between constructing a Robot and creating an Alterant Replicant, and usually more expensive than either. It is recommended that the GM read over the Replicant rules to familiarize him/herself with the general concepts and difficulties so that they will better understand the mental facets of Android construction. Scientists designing an Android use the averaged skills of Cybernetics and Electronics. Techs building an Android use the average of their Cybernetic Tech and Electronic Tech skills. Android body construction should be considered a *Very Complex* procedure, and linking the body to the Molecutronic brain is another, *VeryComplex*, operation.

Android Materials and Equipment Costs

Equipment/Material	Cost
Molecutronic Brain	50,000
Complete Workshop	1,500,000
Vocal System	2,000
External (appearance) System	2,000
Energy/Power System	10,000
Muscular System	3,000
Nervous System	5,000
Skeletal System	2,500
Visual Sensors (eyes; 2)*	2,000
Audio Sensors (ears; 2)*	1,000
Compact Repair Kit	300
Simulskin refill (repairs 200 hits)	20
Major Repair Kit	2,500

* Superior versions can be obtained (at a higher cost).

See below for details on cost multipliers for superior systems. The Complete Workshop contains all tools and equipment necessary to construct an Android, including a computer and interfaces to program the Molecutronic brain, but no actual supplies.

11.21 STAT DEVELOPMENT AND BONUSES

An Android should be considered as being in two distinct and separate parts: the body and the mind, the 'mind' in this case being the Android Molecutronic Brain, a semi-living substance which stores and processes information in a way similar to that of the human brain — although more quickly and efficiently. Molecutronic brains also 'die' if their supply of energy is cut off, losing all memory. It is possible to place such a brain in another housing, such as a robot or vehicle, but it is generally considered a waste of the brain's unique learning (self-programming) potential.

Character Development stats are used here, so if another system is being used the GM should convert the given stats as closely as possible to his system. Five of the ten stats are linked to the Brain: Intuition, Empathy, Self-Discipline, Memory, and Reasoning, while the other five are associated with the body: Strength, Quickness, Presence, Constitution, and Agility.

Physical Capabilities

GM Note:*The following rules are suggested guidelines for the creation of a player character Android. The GM should read over them carefully and make any modifications he sees fit before allowing a player to consider being an Android. Androids produced by companies in the* ***Space Master*** *Milieu will be of varying sophistication, the type listed here as appropriate for players is 'above average.'*

The theoretical standard Android body has 100's in all of its physical attributes (Temporary and Potential), reflecting a +25 bonus. This bonus can be enhanced further by using improved, more expensive systems, instead of the 'standard parts'. See the cost chart at the end of the section for the standard system prices.

Since they are no more difficult to install, these systems do not make the construction roll more difficult. They *are* more costly, as can be seen below:

Cost Multiplier	System Bonus*
(x2)	+ 5 voice or appearance.
(x5)	+5 muscular or skeletal; +10 voice or appearance.
(x10)	+5 energy or nervous; +10 musculature or skeleton; +15 voice or appearance.
(x20)	+10 energy or nervous; +15 musculature or skeleton; +20 voice or appearance.
(x50)	+15 energy or nervous; +20 musculature or skeleton; +25 voice or appearance.
(x100)	+20 energy or nervous; +25 musculature or skeleton; + 30 voice or appearance.
(x200)	+25 energy or nervous; +30 musculature or skeleton.

* Note that this is the cost and bonus for a system; to be applied as stat bonuses, two or more systems are involved:

- Improved Strength: (skeletal and muscular systems)
- Improved Quickness: (muscular and nervous systems)
- Improved Agility: (muscular and nervous systems)
- Improved Presence: (voice, appearance)
- Improved Constitution: (skeletal and energy systems)

Example: *Ryk the Engineer has done his research to build an Android and is purchasing the needed parts. He wants his Android to have a +10 Presence and +10 Agility (i.e., a + 35 total in each, including intrinsic bonuses.) To do this, his Android must have +10 quality versions of all the following: Musculature, Nervous system, Voice, and Appearance. Note that other factors which only have one applicable enhanced system (such as Strength, for instance, for which only Musculature was improved) gain no bonus, because the skeleton could not take the strain should the improved muscles be used to capacity. Thus, Strength is +0. If Ryk spent the money to buy a +10 skeleton, his Android would thus have a +10 Strength bonus as well. (Then he would only need to buy a +10 energy system to enhance his Android's constitution....)*

After construction, the physical systems cannot be altered without a complete physical overhaul (a *Complex* operation).

Mental Capabilities

The stats of the molecutronic brain, once activated, are all 90 (Temporary) To determine potentials, roll one D10 adding two points. Potentials are rolled, then each is assigned to a desired stat. Android mental stats move toward their potential just as the humanoids' do. Note that this can generate stats as high as 102.

General attitudes and tendencies can also be programmed in, such as aggressiveness, compassion, specific fears, hatreds or loves, and prohibitions (such as refusing to kill a humanoid), and loyalty to a specific individual. Although none of these are absolutely guaranteed, as the brain is self-programming, and, after a point, self-motivating, the Android should be almost incapable of disobeying explicit program directives.

Note: *The GM may wish to institute a "secret" percentage chance of a hidden flaw in the Android Brain, such a hidden hatred; homicidal tendencies triggered by an unlikely event, etc. This 'unreliability' would explain a racial dislike for Androids in some areas, if that is desired.*

11.22 SKILL DEVELOPMENT

The Android chooses a profession, and makes skill picks, etc. It 'matures' after a fashion, as it goes through a ten year period of development during which it gains its adolescent and apprenticeship skill levels (this ten year period can be bypassed via intense programming, but this involves expensive "Background Data", as well as an additional Complex operation. Also, this data is rather basic, and of necessity lacking in trivial — yet helpful — background 'experience'). In general though, an Android develops and learns just like a PC with the following exceptions: Androids cannot be Telepathic; and they do not pick Body Development. See below for Android repair information.

11.23 ANDROIDS IN COMBAT

In combat and most other areas of day-to-day play, an Android should be considered a sentient being: subject to attacks and criticals as would a normal sentient. For example, an Android would 'bleed' precious lubricating and power fluids, and it could be 'stunned' by a serious strike which might temporarily incapacitate its system (the GM may wish to have Androids more resistant to stuns, however, perhaps being stunned for only half as long, or, for instance, subtracting 1 from any stun total).

However, Androids do not 'lose consciousness'; all take 200 hits plus their total Con bonus before being incapacitated. Most Androids have a built-in safety mechanism which causes them to 'play dead' long before that point is reached, so they can repair themselves later (unless analysis of the situation tells them that playing dead will do no good).

Another important factor about Androids is their superior AT: Android flesh is AT 4 (rather than normal sentient AT 1). Furthermore, Androids with a musculature and skeleton of +20 or better have an effective AT of 12.

11.24 ANDROID PHYSIOLOGY AND REPAIR

Androids do not eat, although they can drink and process liquids, eliminating them the same way sentients do. Their body extracts any needed hydrogen to fuel their internal high-efficiency microfusion reactor: the Android power center ("heart"). Supplemental water is stored in the stomach area to keep eyes and mucous membranes moist, for a complete 'living' appearance. Androids seem to breathe, though it is an artificial convention, as are pulse and heartbeat.

The most advanced Android designs are absolutely indistinguishable from a living being to human senses, and some are fully capable of all applicable sentient physiological functions (this is a necessity for the advanced pleasure models). Some cultures consider Android capability of certain functions to be an abomination.

Androids can be equipped with 'special abilities' just as Alterant Replicants and mutations. The GM should review the special abilities section (In the **Player Book,** 12.5) and assign costs for each. Naturally, an Android would not have corresponding physiological problems associated with most special abilities. In addition, other special sense or manipulation skills (e.g., infra-red vision, heightened tactile sense) are possible.

Androids do not 'heal' as do living sentients; they must be repaired. Simple concussion hit damage can be dealt with using a Compact Repair Kit, which includes a container of substance nearly identical to the Android flesh, and a device very similar to the Medical Dermal Closer. The Android (assuming he has boxes in Cybernetic Technics and is not incapacitated) can perform these simple repairs easily at the rate of 10 hits per round. Destroyed sections of skin cannot be cosmetically repaired in every detail the field; this requires appropriate facilities (a Major Repair Kit will do).

For more severe damage, such as 'muscle' or 'bone' damage, a Major Repair Kit is necessary. This "kit" is actually a set of two 1/3 cumet containers holding a portable computer and a number of very specialized devices and materials. The computer is programmed with necessary specialized Android anatomy data, and acts as a guide for repair/construction purposes. For these serious repairs, the Malfunction/Repair Chart should be consulted. Match the severity of the critical with the repair column: Routine = "A"; Light = "B"; Moderate = "C"; Severe = "D"; Very Severe = "E" (not using the Extremely Severe column) and use the critical roll(s) as a subtraction from the repair roll(s). Treat "66" as "100". Separate criticals require separate repairs.

Example: *An 87 "C" critical is rolled on Billy the Android. Therefore, to repair the damage, the Moderate column of the Repair/Malfunction table is used. Billy's owner Ryk has a 60 Cybernetic Tech bonus, and rolls a 65. 65 + 60 = 125, minus 87 equals 38. Thus, a 38, which reads 20 minutes to repair with 10% CIP (cost in parts). The 10% is ten percent of the damaged area, which the GM must subjectively decide the approximate value of.*

Naturally there will be inconsistencies between the actual critical to the Android and the written crit on the table designed for living beings, but the GM is urged to extrapolate to the nearest mechanical equivalent. In some instances (such as a destroyed eye or heart) a replacement is obviously necessary, and the Repair Chart alone is not enough. Unless there are specific replacements available (they could be purchased ahead of time) the Android will be crippled until such replacements can be found.

11.3 LARGER CONSTRUCTS

The custom construction of larger machines than small devices will be dealt with in excruciating detail in future ***Space Master*** products, however, the GM may wish to extrapolate the general guidelines given above and allow his characters to build larger constructs such as robots, vehicles and even spacecraft.

12.0 ORGANISMS

In the universe of ***Space Master*** some cultures have made an art of genetic manipulation. Engineered microbes and other tiny organisms serve as everything from food to computers to garbage consumers. On many planets can be found plants and animals created specifically for certain environments and for certain functions. Cloning of Sentients has become (relatively) simple, and artificially constructed and bred people are even possible.

The GM should keep in mind that, even in the far future the social ramifications of some of these things would be significant: racial resentment of Alterant Replicants; mistrust of Clones (perhaps because of 'tampering' by the Genetic engineers), etc.

12.1 MICRO-ORGANISMS

The possibilities for engineering custom-made micro-organisms are virtually limitless; they are the origin of many drugs used for healing in ***Space Master***, as well as poisons. The GM must make judgements here, although the engineering of micro-organisms is usually less complex than such undertakings as an Alterant Replicant. *Moderate* is applicable for most simple tasks. Genetic Tech skills are used for construction in this area.

12.2 ALTERANT REPLICATION

Alterant Replication is a process whereby a living fetus is altered by artificial means at the genetic level to produce an different (usually improved in some way) being or creature. The *Research/Construction Chart* (pg.61) is used, and — in general — the greater the abilities of the new Replicant, the more difficult the operation.

Conceptually similar to the simpler genetic alterations, Replication involves implanting new genetic material into a fetus ("blank" fetuses are produced in large numbers using a modified cloning process) and growing the prepared fetus at an accelerated rate in a special tank.

Very expensive, sophisticated machinery is necessary to perform the operation of altering the chromosomal structure to the new form, involving extensive programming and delicate operations. Once the fetus has been altered, it is placed in a growth tank to develop to the desired maturity: 100 days to full growth (20 year-old equivalent for full maturity; with five days in the tank equalling 1 year if the Replicant is to be brought out prematurely and perhaps raised as a normal hominoid).

When creating a Replicant, first the appropriate research is required to determine exactly how the genes are to be altered. Genetics is the Scientific skill used. If the desired Replicant type has already been created by someone else (this can be determined by a percentage roll, likelihood determined by the GM) the Research is *Easy*. If it is a new type, research is *Very Complex*. The GM is urged to place restrictions on how powerful or sophisticated the designed Replicant can be.

It is suggested that no special stat bonus exceed +30 (in addition to an intrinsic stat bonus) and that the average of all bonuses never exceed 15. These restrictions should be even lower for Eugenics Products (+20 maximum special stat bonuses, and a maximum total average of 12). Review the *Race Statistic Chart* (**Player Book**, pg 31) for trends. For Replicants, Empathy and Intuition starts at -20 for purposes of modification, and for Eugenic products, these stats start at -10. For Construction, Genetics Technics is used, and Replicant Construction is always *Very Complex* unless otherwise noted.

An additional difficulty factor should be assigned, depending on how many special abilities the Replicant will have, and how good its stats will be. For instance, in the *Race Statistics Chart* when averaging all the stat bonuses, the Type I (warrior) has a +10 average bonus. Thus, the creator of this Replicant might be given a 100 (10 x 10.0) modifier to his detriment (-100) when rolling to construct the Replicant. (If using data from a type already created, the difficulty modifier is halved — assuming construction data records are accessible). That is just the Stat modifier section. Also to be considered is the Resistance Roll modification section. As can be seen, all Replicants are at Base -50 vs. Channeling and Essence. They are intrinsically at this level because those Realms are virtually unknown in ***Space Master***, and those who do know of them don't bother with them. Any improvement of those conditions must start from the -50 level. Against the other areas, Replicants start at +0, as with Stat modifiers.

In the area of healing and injury, Replicants' soul departure delay is two rounds; this is generally considered irrevocable. Stat deterioration is +5, but can be reduced at a cost of 5 modifier penalty per 1 point of deterioration decrease. Recovery factor is base 1.0, but can be improved (or reduced) at a modifier of ± 5 per .5x of recovery rate (can't be reduced below .1x).

Each 'Starting Language' costs in the form of a 10 modifier, and it is implanted and permanently known.

Hit dice start at D8, with a +5 cost per extra "side" of die roll. The flat bonus per level costs +10 per +1 hit/lvl.

Max hits start at 100, and can be raised or lowered at a rate of five hits/ +1 modifier. The GM can also stipulate that the desired gene material for superior stats, bonuses, etc. must be bought specifically and installed at a base cost x the bonus as a multiplier (see costs below).

Lifespan is generally set at approximately 20 years (after removal from the growth tank) and can be increased at the following rate: # of years equivalent to modifier on a one-to-one correspondence (i.e., twenty extra years of life equals a 20 modifier). The lifespan can also be decreased, but at no bonus. Replicants don't age until their programmed expiration, when they age very rapidly (one year/hour) until death at a 100 year-old equivalent.

Example:*The first creator of the Type I (Warrior) Replicant's modifiers: 100 from total average Stat bonus enhancement, 40 for average RR enhancement, 5 due to reduced Stat deterioration, 5 from improved healing rate, 10 from two extra "die-sides" and 20 for two extra automatic hits/lvl. Total modifier: 170 to the creator's detriment. See the cost chart for associated expenses.*

GENETIC MATERIALS COSTS CHART

Replication Materials	Cost
Genetic Combination Eqpmt	2 mil
Memory Transfer Eqpmt	150,000
Growth Tank w/monitors	300,000
Growth Fluids (1 use)	500
'Blank' fetus*	5,000
Additional Genetic Material (each stat):*	
+5	500
+10	1,000
+15	2,000
+20	4,000
+25	8,000
+30	16,000
Background	1,000-10,000

* Price highly variable; often available only on the Black Market (3x Normal Cost) w/lower quality and reliability).

Genetic material cost is given for gene material which will provide a stat bonus for one specific stat, which replaces material in a 'blank' fetus.

General physiological/appearance factors (sex, eye and hair color, skin tones, height and other body proportions, etc.) are set by the creator at no additional cost — within reason and subject to other factors: Replicants with superior strength are probably taller and definitely bulkier than average; those with great agility less so, etc.

Psychological background (in general) is pre-programmed as desired, including general attitudes and inclinations.

Some Replicants do not deal well with the fact of their origins. The GM may wish to institute a rule in which a Replicant must make a roll with SD as a modifier vs 'disenchantment'. If they fail (roll under 100) — and depending on how badly — they will become depressed and unhappy and perhaps even commit suicide. Below is a small table which can be used to determine depression severity.

Roll	Result
01-05	Criminally Suicidal (violent; secondarily Homicidal)
06-25	Suicidal.
26-50	Inactive/Semi-Comatose.
51-75	Surly and prone to RRs vs. respect for authority.
76-90	Deeply Depressed (-25 for all actions).
91-100	Depressed, at -5 for all activity.

Some can be helped with treatment (attempting to roll over 100 with SD mod, one per month while in "intensive treatment", all at an additional - 50, modified by the therapist's Psychology bonus. An addition subtraction of -10 is added for each month of a roll under 100) if they succeed, they are cured.

When the Replicant is removed from the growth tank, his stats are rolled in the same manner as a Player Character, including Temps and Potentials, etc. Profession, as well as Adolescent and Apprenticeship skill selection are also pre-programmed. It is naturally assumed that the stats will be assigned to further enhance the programmed strengths of the Replicant. After "birth" from the tank, skill point selection is theoretically the decision of the Replicant, though naturally it will obey the wishes of its master if imprinted (see below) or whatever authority figure is available if it is suitably passive in the area.

Imprinting (the very strong bonding of the Replicant to — or against — a certain individual) is more involved. Imprinting and must be done within one day of the Replicant's emergence. The method is this: a subconscious 'trigger' is pre-implanted, with the desired inclination (devotion, love, selfless protectiveness, open dislike, cunning, murderous hatred, etc.) formed into a phrase in one of the Starting Languages. When the phrase is spoken, the Replicant is exposed to the "imprintee" (or an image of same — a full color holograph is best) and thus Imprinted. Imprinting to more than one person is rarely effective and often results in damage and confusion to the Replicant.

12.3 CLONING

Cloning is much more straightforward that Alterant Replication, since genetic 'tinkering' is not involved. A living flesh sample is taken from the donor, and grown in a fetus propagation tank (different from and more complex than a regular growth tank). Successful completion of this phase alone is a *Very Complex* operation, and takes the time indicated on the chart. Then the fetus is prepared and placed in the normal growth tank for the term, again a (unmodified, except for the creator Genetic Tech bonus) *Very Complex* task. After both operations are completely successful, the living Clone emerges. He or she has the exact Potential stats as the Donor (though Temps are at 1st level equivalent) and intrinsic abilities. The new Clone has no skills, however.

This problem can be avoided or corrected in two ways: The Clone can be awakened as an infant (after about 10 days in the growth tank) and trained. This may result in slightly different skill development (the GM should enforce this possibility, since the new Clone is a person, and just as capable of independent thought and free will as the donor).

Alternatively, the Clone can receive memories from the clone sample donor. This is invariably traumatic, and can possibly kill or mentally damage the Clone. The proper "Memory Transfer" equipment is required, and a roll on the *Hard* column of the *Research/Construction Chart* is needed. If 100% success is not achieved immediately, the Clone must roll over 100, with Memory as a modifier. If he fails, there is a 20% chance of death (irreversible in this case). If the Clone survives, his Potential Memory and Reasoning is reduced by the number equal to the amount less than 100 rolled to awaken the memories, and its actual skill knowledge is reduced by the same amount. Subsequent attempts to restore memories after the Clone has failed once will definitely kill it. If the Clone resists, the Creator may roll again, attempting to complete the memory restoration.

Assuming the restoration is successful, the Clone will have all memories and skills of the original, up to the point the sample was taken. However, the Clone is now a separate entity, and its environment immediately begins to take effect. There will be inevitable attitude divergences as the Clone has new experiences and makes its own choices.

Example: *Trevoc is trying to transfer the memories of someone into a clone of that person. He rolls a 77 (plus his 60 bonus = 137) On the chart, 137 indexes to 70% success. So, the Clone must make a Roll. Its Temp Memory is 80, so a 20% chance of failure. Trevoc rolls 16. Ooops, not high enough. Trevoc rolls the chance of death: 47. Well, it doesn't die, but its Memory and Reasoning are reduced by 30 (100 - 70 = 30). His 87 Pot. Memory is now 57, and his 76 potential Reasoning is now 46. Not good. Also, 30% of the Clone's background and skill knowledge is lost, the specifics to be decided by the GM, probably by assigning numbers to the total number of Trevoc's skills and rolling, removing those skills until about 30% are gone.*

It is also possible to grow a Clone fetus, then proceed with Alterant Replication procedures, thus improving on an already existing set of Stats and personality traits. The result is a combination: whatever is not altered in the Replication process carries through from the original. This procedure is more delicate, however, and the RRs necessary when Memory Restoration is attempted on a normal Clone must be followed at every step of this Clone Alteration. Any failed rolls by the fetus (using Adolescent level Temp Constitution as a modifier during Alteration) results in death. Memory Restoration to an Alterant Clone is done in the same way as normal Clones, except that failure of a roll by the Clone invariably results in death.

CONSTRUCTION / RESEARCH CHART

	Routine	Easy	Moderate	Hard	Complex	Very Complex	Absurd
-151	Light malfunction to the equipment.	Moderate malfunction to the equipment.	Moderate malfunction to the equipment.	Moderate malfunction to the equipment.	Severe malfunction to the equipment.	Severe malfunction to the equipment. 10 days wasted.	Physically impossible
(-150) — (-101)	Routine malfunction to equipment.	Routine malfunction to equipment.	Routine malfunction to equipment.	Routine malfunction to equipment.	50 hrs. wasted; 50% of materials (clone. replicant, machine parts, etc.) destroyed.	No progress; 50 days wasted and 100% of materials destroyed due to error.	Project botched after one year. All materials lost.
(-100) — (-51)	5% 5 minutes.	5% 40 mins.	Upgrade to HARD. Waste 1 hour.	5% 100 hours.	10 hours lost; 20% of materials destroyed due to error.	Problem 30 days into task. 50% chance project destroyed (If research: wrong data). 50% no damage, no progress.	5% 6 yrs. Slight progress, but equipment acts up: roll Very Severe malfunction.
(-50) — (-26)	10% 2 minutes (12 rounds).	10% 40 mins.	5% 4 hours.	5% 80 hours.	5% 350 hrs. If construction, 10% of material destroyed.	10% 100 days. If construction, 20% of material destroyed and must be replaced.	5% 5 yrs. If construction, 50% of materials damaged.
(-25) — 0	20% 1 minute (6 rounds).	10% 30 mins.	10% 2 hour.	10% 60 hours.	10% 350 hours.	20% 90 days. If construction, 10% of material destroyed and must be replaced.	5% 4 yrs. If construction, 20% of materials damaged.
01 — 20	40% 6 rounds.	30% 30 mins.	20% 1 hour.	20% 50 hours.	15% 350 hours.	10% 85 days.	5% 3 yrs. If construction, 10% of materials damaged.
21 — 40	60% 6 rounds.	50% 30 mins.	30% 50 mins.	25% 40 hours.	15% 300 hours.	15% 83 days.	5% 2 yrs.
41 — 55	80% 6 rounds.	70% 20 mins.	40% 50 mins.	30% 40 hours.	20% 300 hours.	20% 80 days.	5% 1.5 yrs.
56 — 65	90% 6 rounds.	95% 20 mins.	50% 40 mins.	35% 30 hours.	25% 300 hours.	30% 80 days.	5% 1 year.
66 — 75	95% 6 rounds.	95% 10 mins.	60% 40 mins.	40% 30 hours.	25% 250 hours.	30% 78 days.	6% 1 year.
76 — 85	99% 6 rounds.	99% 10 mins.	70% 35 mins.	45% 30 hours.	25% 250 hours.	35% 75 days.	7% 1 year.
86 — 95	100% 6 rounds.	99% 5 mins.	70% 30 mins.	50% 30 hours.	30% 250 hours.	35% 72 days.	8% 1 year.
96 — 105	100% 6 rounds.	99% 2 mins.	95% 20 mins.	50% 30 hours.	40% 250 hours.	35% 70 days.	9% 1 year.
106 — 115	100% 5 rounds.	99% 1 min.	98% 20 mins.	55% 25 hours.	40% 200 hours.	40% 69 days.	10% 1 year.
116 — 125	100% 4 rounds.	99% 1 min.	99% 20 mins.	60% 25 hours.	40% 200 hours.	40% 64 days.	10% 300 days.
126 — 135	100% 4 rounds.	99% 5 rounds.	100% 20 mins.	65% 25 hours.	45% 200 hours.	45% 60 days.	10% 250 days.
136 — 145	100% 3 rounds.	99% 5 rounds.	100% 20 mins.	70% 25 hours.	50% 200 hours.	50% 57 days.	10% 200 days.
146 — 155	100% 3 rounds.	99% 5 rounds.	100% 15 mins.	80% 25 hours.	50% 125 hours.	55% 53 days.	10% 150 days.
156 — 165	100% 2 rounds.	99% 5 rounds.	100% 10 mins.	95% 25 hours.	50% 110 hours.	50% 51 days.	10% 120 days.
166+	100% 1 round.	100% 4 rounds.	100% 10 mins.	100% 20 hours	60% 100 hours.	60% 50 days.	10% 100 days.

Note: all percentages refer to the fraction of research / construction on the project that has been completed by the given roll. Times (unless otherwise noted) indicate the amount of time required to complete the given percentage of the project.

MALFUNCTION / REPAIR CHART

	ROUTINE (1-5)	LIGHT (6)	MODERATE (7)	SEVERE (8)	VERY SEVERE (9)	EXT. SEVERE (10)
-151	Sad job. Damage/Mal function becomes Very Severe after 1 round.	Dam/Mal becomes very severe after 1 round.	You deliver 10 pts. of damage to the system. Roll again.	You deliver 30 pts. of damage to the system. Repair on extremely severe column.	You deliver 150 Hits to the system. System is a write off.	System is destroyed (Explosively if possible). 100% crew casualty rate.
(-150) — (-101)	Dam/Mal becomes severe after 4 rounds.	Dam/Mal becomes severe after 5 rounds.	Dam/Mal becomes extremely severe after 1 minute.	Dam/Mal becomes very severe. After one hour waste 10% CIP.	System is a write off after 2 hours of tinkering.	1 — 100% of repair crew becomes casualties. System destroyed.
(-100) — (-51)	Dam/Mal becomes moderate after 4 rounds.	Dam/Mal becomes moderate after 6 rounds.	Dam/Mal becomes very severe after 2 minutes.	Dam/Mal becomes very severe after 6 rounds.	Dam/Mal upgraded to extremely severe after 1 hour.	2 members of repair crew takes appropriate "D" critical strike.
(-50) — (-26)	Dam/Mal becomes light after 3 rounds.	20 minutes with 5% CIP. otherwise 30 minutes.	Dam/Mal becomes severe after 1 minute.	3 hours to repair with 10% CIP.	72 hours to repair with 50% CIP.	1 member of repair crew takes appropriate "C" critical strike.
(-25) — 0	You fumble with device for 5 minutes until it is working again.	10 Minutes to repair unit. Unit operates at -25% with a routine malfunction.	40 minutes to repair with 10% CIP. You overload circuits causing a random malfunction.	2 hours to repair with 10% CIP.	48 hours to repair with 50% CIP.	1 — 100 Hits to system. Try again.
01 — 20	3 minutes to repair.	8 minutes to repair.	30 minutes to repair damage with 10% CIP. Malfunction repaired — no cost.	90 minutes to repair damage with 10% CIP. 60 minutes to repair malfunction with 10%.	36 hours to repair unit to 50% effectiveness, 48 hours to fully repair. 50% CIP.	Repair may not be attempted until 2 "severe" procedures are completed.
21 — 40	2 minutes to repair.	5 minutes to repair. "Routine" malfunction will occur next time system is used.	20 minutes to repair with 10% CIP.	1 hour to repair with 10% CIP.	24 hours to repair with 25% CIP.	200 hours to repair with 50% CIP.
41 — 55	1 minute to repair.	5 minutes to repair.	15 minutes to repair with 5% CIP. 25 min. otherwise.	1 hour to repair damage with 10% CIP. Malf. repaired without cost.	24 hours to repair with 25% CIP.	120 hours to repair with 50% CIP.
56 — 65	5 rounds to repair.	5 minutes to repair.	13 minutes to repair with 5% CIP. 25 min. otherwise.	55 min. to repair damage with 10% CIP. Malf. repaired without cost.	24 hours to repair damage with 25% CIP. Malf. repaired without cost.	110 hours to repair to 50% effectiveness. 120 hours to repair fully. 50% CIP.
66 — 75	5 rounds to repair.	5 minutes to repair.	12 minutes to repair. Dam/Mal becomes "light" after 1 round.	50 min. to repair damage with 10% CIP. Malf. repaired without cost.	18 hours to repair damage with 25% CIP. Malf. repaired without cost.	110 hours to repair with 50% CIP.
76 — 85	4 rounds to repair.	4 minutes to repair.	10 minutes to repair.	45 minutes to repair damage with 10% CIP. Malfunction repaired by two light procedures.	15 hours to repair with 10% CIP.	100 hours to repair with 50% CIP.
86 — 95	4 rounds to repair.	4 minutes to repair.	9 minutes to repair.	40 minutes to repair with 5% CIP.	15 hours to repair with 10% CIP.	90 hours to repair damage with 50% CIP. Malfunction repaired without cost.
96 — 105	3 rounds to repair.	3 minutes to repair.	8 minutes to repair.	40 minutes to repair.	13 hours to repair damage with 10% CIP. Malf. repaired without cost.	Repair reduced to 2 "moderate" procedures.
106 — 115	3 rounds to repair.	2 minutes to repair.	7 minutes to repair damage. 6 minutes to repair malfunction.	30 minutes to repair with 5% CIP. 40 minutes to repair otherwise.	10 hours to repair unit to 50%capacity. 11 hours to repair fully. 10% CIP.	80 hours to repair with 50% CIP.
116 — 125	2 rounds to repair.	2 minutes to repair.	You isolate 3 "routine" procedures to repair unit. Start next round.	30 minutes to repair.	8 hours to repair. 10% CIP.	70 hours to repair damage with 50% CIP. Malfunction repaired without cost.
126 — 135	2 rounds to repair.	6 rounds to repair.	5 minutes to repair.	25 minutes to repair.	5 hours to repair. 10% CIP.	70 hours to repair damage or 60 hours to repair malfunction. Both have 25% CIP.
136 — 145	You may use equipment next round.	4 rounds to repair.	Unit at -25% in 3 minutes. Unit repaired in 5 minutes.	20 minutes to repair.	5 hours to repair. 10% CIP. Malfunction is downgraded to severe.	60 hours to repair to 50% effectiveness. 70 hours to repair fully. 25% CIP.
146 — 155	Unit ready next round.	3 rounds to repair.	Unit at -50% in 6 rounds. Unit repaired in 5 minutes.	20 minutes to repair damage. Malf. repair is 3 routine procedures.	4 hours to repair. 10% CIP.	50 hours to repair with 25% CIP.
156 — 165	Unit ready. You have 1/2 of the round left.	2 rounds to repair.	3 minutes to repair.	Downgrade repair to moderate after 5 minutes.	3 hours to repair. 10% CIP.	Procedure reduced to 2 "severe" repair procedures.
166+	Quick adjustment. You have the full round to act.	1 round to repair.	2 minutes to repair.	10 minutes to repair.	Reassesment of systems shows 2 "light" repairs are required.	40 hours to repair with 25% CIP.

Note: Concussion hits repaired on a vehicle in a 25 hour period = a Mechanical Tech repair roll divided by 10.
Note: If only one person is working on a repair, double the times listed. Double the necessary time if no repair scanner or diagnostic computer is used during the repair.
CIP refers to Cost-in-Parts. This is the indicated percentage of the parent unit cost which must be invested to bring about the desired repair.

MALFUNCTION AND DAMAGE CHART

1st Roll	AREA	2nd Roll	SYSTEM
1-2	MECHANICAL (5%)	1	Environment: Lose atmosphere in 1-10 hrs
		2	Environment: Lose heat/cool in 1-10 hours
		3-5	Bulkhead/Airlock/Hangar Frozen/malfunctions
		6	Landing Gear Inoperative
		7-8	Internal Lighting Systems out.(Emergency on)
		9	Running/Landing Lights out.
		10	Other System:
3-5	ELECTRONIC (15%)	1	Helm Control (Main/Auxiliary)
		2	Navigation Control (Main/Auxiliary)
		3	Other Console
		4	Other Console
		5	Communications
		6	Electronic Warfare
		7-8	Sensors
		9	Medical
		10	Other System:
6-7	COMPUTER (10%)	1	Deflector Shield Control
		2-3	Sensor Analysis (now at 1-100)
		4	Computer aided Astrogation
		5-6	Memory Banks (Courseplots/archives)
		7	Autopilot
		8	Sentient Functions/Diagnostics
		9	Main Processing Core (All above out)
		10	Other System:
8-9	POWER SYSTEMS (60%)	1	Sublight Drives
		2	Translight Drives
		3	Main Reactor/ Aux Reactor
		4	RIF Generator
		5-6	Deflector Shields
		7	Internal Gravitics
		8	External Gravitics
		9	Control Surfaces
		10	Other System:
10	WEAPONS (10%)	1-2	Central Control.
		3	Central HUD
		4	Tracking Control (Computer)
		5	Other System:
		6	Weapon System:
		7	Weapon System:
		8	Weapon System:
		9	Weapon System:
		10	Weapon System:

ROLL SEPARATELY FOR SEVERITY:

1-5 — **Routine** (system operative but 50% chance Mod. Malf. each time stressed or hour of use)
6 — **Light** (System at 75% of normal capability)
7 — **Moderate** (System at 50% of normal capability — or if a multiple system, half have failed).
8 — **Severe** (System Inoperative until repaired or upgraded).
9 — **Very Severe** (System Inoperative until repaired or upgraded).
10 — **Extremely Severe** (noperative until repaired/upgraded. May be irreparable w/o spacedock).

WEAPON MALFUNCTION CHART

Roll	Weapon Type			
	HAND-HELD OR PORTABLE ENERGY	HAND-HELD OR PORTABLE PROJECTILE	GRENADE, ROCKET, OR EXPLOSIVES	FORCEKNIFE OR POWERSWORD
(-34)-0	Weapon cooling; Forfeit 1d5 Fire Phases.	Safety catch on; Percep or WpnT. to notice what's wrong.	Minor guidance or structural flaw causes a -20 modifier.	Temporary power drain; Blade "blinks out" this round.
01-30	Wire breaks inside weapon; Final shot is at -10	Dud round/minor ammo jam; Better sit this one out.	Weak blast; any Critical effects are reduced by 1.	Minor power drain; Blade dims a little attacks at -20
31-50	Short circuit fries internal wiring and drains En Cell.	Barrel slightly off; All shots are at -15	Launcher problem or misdirected blast; attack is at -20.	Focal problem; Blade blurs; Range is x2 but attacks at -40
51-65	Weapon works, but fires a little off target (-25).	Weapon Jammed; Clearing it is a Routine WpnT maneuver.	Warhead/timer flaw; Explosion occurs 1d20 seconds late.	Capacitor flaw; Blade is very dim and attacks at -30.
66-75	Fire control stuck (50% "ON") If ON, take one attack at +50.	Weapon jammed and damaged; Failure chance is doubled.	Arming mechanism or fire control stuck in "safe" position.	Power surge causes a +10 before shorting weapon out.
76-90	Surge Damages lens or focal capacitor; last shot is at +15.	Obstructions in barrel cause all shots to go off at -50.	Charge seems to be a dud; but it will explode in 1d10 rounds	Major power drain; Blade barely visible; Attacks at -50.
91-100	Crackling sound emits from weapon; Failure chance is x3.	If Autoloader, gun overheats for 1 min/Mk. if not, reroll.	Launcher/arming mechanism fails; Charge never detonates.	Badly focused blade damages weapon; Failure chance is x3.
101-120	Power surge jolts user (PB attack at +20, no QU DB).	Extractor breaks; 10%/rd gun jams (50% if fired twice).	If set charge, detonator fails. Missile blows up 1d20m from user.	Major surge; Attack at +30 this round, then shorts out.
121-150	Flash towards user's face (PB attack at +40, no QU DB)	Pin malfunction; Shots fail to fire 50% of the time.	Explodes in launcher or near user (PB attack at +50).	As above plus user takes a "C" Elec Crit.
151-170	Weapon explodes (PB attack at +100, no QU DB, max as Mk. 5).	Blowback to user's face; Blinded 1d10 rds (10% perm).	Explodes before set/thrown (PB attack at +100, no QU DB).	As above but attack is at +50 and Crit is an "E".

13.0 MALFUNCTIONS AND REPAIR

This section deals with the breakdown of equipment, vehicles, weapons, and any other mechanical or electronic contrivance, known herein as a 'construct'. This section also deals with the rules fro repairing such malfunctions.

13.1 WHEN MALFUNCTIONS OCCUR

Malfunctions occur in one of two ways:

13.11 A POOR MANEUVER/ USE ROLL

Malfunctions most frequently occur because of user abuse, mishandling, or other unwarranted cruelty, as indicated on a use table or chart. These tables include: the *Vehicular and Astrogation Maneuver Chart* (**Player Book**, pg 84-85) or any Weapon Attack Table.

13.12 DURING NORMAL USE

This situation arises normally only in the case of vehicles, since weapons have a chance of malfunctioning every time they are fired anyway. The GM should enforce the possibility of any vehicle suffering a random malfunction at any given time.

13.2 VEHICLE MALFUNCTIONS AND DAMAGE

GMs should periodically roll to determine if a vehicle used by PCs has suffered a malfunction. This is a two-step process:

13.21 DID A MALFUNCTION OCCUR?

First we must find out if the vehicle suffered a breakdown. Some frequency guidelines are given here:

Interstellar Travel

1% chance of malfunction for every 10 light-years traversed (note that this should never go above 5%, as shunts over 50 light-years are 'blind' and very dangerous).

Interplanetary Travel

1% for each: planetary orbit traversed (including destination and departure points), landing/takeoff, day in flight.

Planetary Air travel

1% for each: 1000 (or fraction) kilometers travelled, landing/takeoff.

Planetary Ground Travel

1% for each: activation of vehicle, 100 (or fraction) kilometers travelled.

In each case, calculate the chance of a malfunction and roll. If no malfunction is indicated, the trip is mechanically uneventful. Should a malfunction be indicated, roll D100 to determine the percentage of the way through the trip the problem arises. This noted, the GM should roll again, to see if another breakdown has occurred. If yes, he should determine the percent of the way through the trip. As long as the GM gets malfunction results, he should keep rolling. This continues until the GM fails to roll a malfunction. If there are a lot of them, he should organize them in order of occurrence then assign the nature of the failure (13.22).

13.22 NATURE OF MALFUNCTION

When a vehicle (be it scooter or starship) is damaged or is determined to have a malfunction, the *Malfunction and Damage Determination Chart* (page 63) is consulted. On it are listed five categories, representing the five basic systems found in virtually any vehicle. The GM makes a 1D10 roll and references the system. Should the vehicle in question not possess one of these systems ('weapons' for instance) a roll indicating that system is ignored, and the GM rolls again until an appropriate one is obtained. He then makes a second 1D10 roll to discover the exact nature of the problem for each malfunction (some extrapolation may be necessary), notes it, and proceeds to roleplay the breakdowns (e.g., console indicators light up; ship lurches and drops out of hyper, etc)

13.3 WEAPON MALFUNCTIONS

For handheld weapons, this is dealt with handily by the weapon attack table itself. A 'Failure' result on the table has a chance of either being a fumble, a charge depletion (for energy weapons) or a malfunction. Should this result of an exceptionally bad attack roll in the ***Space Master*** combat system be encountered, roll 1D10 to determine the Severity of the Malfunction incurred:

ROLL	SEVERITY	MOD
1-5	Routine	-35
6	Light	-20
7	Moderate	±0
8	Severe	+30
9	Very Severe	+50
10	Extremely Severe	+70

The Severity Modifier found above is applied to a roll of 1D100, and the total is referenced against the *Weapon Malfunction Chart* (pg 63). Unless otherwise stated, the Malfunction thus determined will remain in effect until it is repaired.

13.4 REPAIRS

Repairs are handled using the *Malfunction/Repair Chart* (pg 62). A designated repairman rolls on the chart, adding his appropriate Tech Skill. (The GM may wish to impose modifiers using the *Static Action Chart* in the **Player Book,** pg 78). Cross-indexing the severity of the malfunction against the total roll, the time to repair is determined. If more than one person attempts the repair, all bonuses are totalled and *one* roll made (assuming this is practical; obviously five people can't be repairing one multiscanner at once!) It must be stressed that only one roll at a time is allowable for each repair. If someone else wants to repair the device other than the initial Tech, the same net roll is used, with the new Tech Skill modifier.

Example: *Trevoc, having discvered that the divalium crystal covnverter on the hyperdrive has suffered a* ***Severe*** *malfunction, goes back with his'hypnospanner to make repairs. He has a +70 in Power System Technics, and rolls (open-ended) The result is a (oops!) -189! The modified roll is a -119. Not good. Trevoc asks the GM if his shipmate Boff Binkly can try the repair, with his +15 Power System Tech bonus. The answer is no; Trevoc made his repair attempt and he's stuck with it.*

Note that there are sometimes two different indications, one for *Malfunction* and one for *Damage.* Damage only occurs as a result of unusual stress (combat or unusual maneuvers) and the Malfunction result is used unless otherwise indicated.

In addition to the repair time indicated, the chart sometimes has a notation "—% CIP" ('Cost In Parts'). This means that a given percent of the system's original value in parts is necessary to make the repair. In most cases the GM will have to estimate costs (easy for a small device or weapon), but for vehicle systems, the Malfunction and Damage Chart provides a guide. The "%" listed under *area* column indicates the percent of the total vehicle cost is in the given system, and the "%" in the *system* column indicates the percentage of that portion.

MASTER WEAPONS CHART 1: PROJECTILE WEAPONS

NAME	TYPE	RATE	F	RANGE (METERS) PB	SR	MR	LR	RANGE MODIFIERS PB	SR	MR	LR	TABLE USED	Ammunition Notes Shots	Bursts	Load	Notes
CONVENTIONAL PISTOLS:																
5mm Lt Pistol	1H Proj	2/rnd	2	1	10	20	50	+15	0	-30	-90	Sml Proj Mk.1	10		Mag	
10mm Med Pistol	1H Proj	2/rnd	2	2	15	30	80	+15	0	-30	-90	Sml Proj Mk.2	10		Mag	
12mm Hvy Pistol	1H Proj	2/rnd	2	2	20	40	100	+15	0	-30	-90	Sml Proj Mk.3	10		Mag	
CONVENTIONAL MACHINE PISTOLS:																
5mm Lt MP	1H Proj	2 bursts	3	2	5	20	50	+15	0	-30	-90	Sml Proj Mk.1		6	Mag	
		2/rnd	2	2	5	20	50	+15	0	-30	-90	Sml Proj Mk.1	30		Mag	
10mm Med MP	1H Proj	2 bursts	3	2	10	30	80	+15	0	-30	-90	Sml Proj Mk.2		12	Mag	
		2/rnd	2	2	10	30	80	+15	0	-30	-90	Sml Proj Mk.2	60		Mag	
CONVENTIONAL RIFLES:																
5mm Lt Rifle	2H Proj	2/rnd	2	2	30	90	150	+15	0	-30	-90	Sml Proj Mk.1	15		Mag	
10mm Med Rifle	2H Proj	2/rnd	2	3	50	150	500	+15	0	-30	-90	Sml Proj Mk.2	15		Mag	
12mm Hvy Rifle	2H Proj	2/rnd	2	5	100	200	700	+15	0	-30	-90	Sml Proj Mk.3	15		Mag	
CONVENTIONAL ASSAULT RIFLES:																
5mm Lt AR	2H Proj	2/rnd	2	2	25	50	100	+15	0	-30	-90	Sml Proj Mk.1	30		Mag	
		2 bursts	3	2	20	40	80	+15	0	-30	-90	Sml Proj Mk.1		6	Mag	
10mm Med AR	2H Proj	2/rnd	2	3	40	120	400	+15	0	-30	-90	Sml Proj Mk.2	60		Mag	
		2 bursts	3	3	30	100	300	+15	0	-30	-90	Sml Proj Mk.2		12	Mag	
CONVENTIONAL MACHINE GUNS:																
10mm Lt MG	Sup Proj	2 bursts	3	3	50	150	500	+15	0	-30	-90	Sml Proj Mk.3		8	Mag	
														20	Belt	
10mm Med MG	Sup Proj	2 bursts	3	5	50	200	800	+15	0	-30	-90	Sml Proj Mk.3		8	Mag	
														20	Belt	
12mm Hvy MG	Sup Proj	2 bursts	3	10	100	300	1000	+15	0	-30	-90	Sml Proj Mk.4		10	Belt	
														20	Belt	
CONVENTIONAL SHOTGUNS:																
15mm Shotgun	2H Proj	2/rnd	2	3	20	40	60	+15	0	-30	-90	Shotgun	2		Brch	a
													5		Mag	a
15mm Sawed-off	2H Proj	2/rnd	2	2	10	20	30	+15	0	-30	-90	Shotgun	2		Brch	a
													5		Mag	a
15mm Autoshot	2H Proj	2 bursts	3	3	15	30	50	+15	0	-30	-90	Shotgun		3	Mag	
		2/rnd	2	3	20	40	60	+15	0	-30	-90	Shotgun	15		Mag	
20mm Shotgun	2H Proj	2/rnd	2	3	25	50	80	+30	0	-30	-90	Shotgun	2		Brch	a
													5		Mag	a
20mm Sawed-off	2H Proj	2/rnd	2	2	15	25	50	+30	0	-30	-90	Shotgun	2		Brch	a
													5		Mag	a
20mm Autoshot	2H Proj	2 bursts	3	3	20	40	70	+30	0	-30	-90	Shotgun		3	Mag	
		2/rnd	2	3	25	50	80	+30	0	-30	-90	Shotgun	15		Mag	
NEEDLEGUNS:																
Needle Pistol	1H Proj	2 bursts	4	3	10	20	30	+15	0	-30	-90	Sml Proj Mk.1		2	Mag	
Needle Carbine	2H Proj	2 bursts	4	3	15	25	35	+15	0	-30	-90	Sml Proj Mk.2		4	Mag	
Needle Rifle	2H Proj	2 bursts	4	3	20	30	40	+15	0	-30	-90	Sml Proj Mk.3		6	Mag	
TANGLEGUNS:																
Tangle Pistol	1H Proj	2/rnd	2	2	4	6	10	+15	0	-30	-90	Entangle Mk.3	2		Mag	
Tangle Carbine	2H Proj	2/rnd	2	2	5	15	30	+15	0	-30	-90	Entangle Mk.4	4		Mag	
Tangle Rifle	2H Proj	2/rnd	2	2	10	30	60	+15	0	-30	-90	Entangle Mk.5	6		Mag	
TASERGUNS:																
Taser Pistol	1H Proj	1/rnd	5	2	3	4	5	+15	0	0	0	Sml Proj Mk.1	1		Brch	b
Taser Carbine	2H Proj	2/rnd	5	2	5	10	30	+15	0	-30	-90	Sml Proj Mk.2	5		Mag	b
Taser Rifle	2H Proj	2/rnd	5	2	10	20	100	+15	0	-30	-90	Sml Proj Mk.3	5		Mag	b
ROCKETGUNS:																
Rocket Pistol	1H Proj	2/rnd	4	0	100	300	900	0	0	-30	-90	Sml Proj Mk.3	5		Mag	
Rocket Carbine	2H Proj	2/rnd	4	0	100	300	900	0	0	-30	-90	Sml Proj Mk.3	10		Mag	
		2 bursts	4	0	75	150	450	0	0	-30	-90	Sml Proj Mk.3		2	Mag	
Rocket Rifle	2H Proj	2/rnd	4	0	100	300	900	0	0	-30	-90	Sml Proj Mk.3	15		Mag	
		2 bursts	4	0	75	150	600	0	0	-30	-90	Sml Proj Mk.3		3	Mag	
MAGNETIC LINEAR ACCELERATORS:																
MLA Pistol	1H Proj	2/rnd	5	5	100	500	1000	+15	0	-30	-90	Sml Proj Mk.4	4		Mag	c
MLA Rifle	2H Proj	2/rnd	5	5	200	600	2000	+15	0	-30	-90	Sml Proj Mk.5	6		Mag	d
GRENADE LAUNCHERS:																
Grenade Rifle	Launcher	2/rnd	2	10	30	60	100	+100	+50	0	-50	Launcher Error	5		Mag	e
ROCKET PROPELLED GRENADE LAUNCHERS:																
RPG Launcher	Launcher	1/rnd	2	10	100	200	600	+100	+50	+20	0	Launcher Error	1		Brch	f
PORTABLE MISSILE LAUNCHERS:																
PML	Launcher	1/rnd	2	(See ammo notes)				+100	+50	+20	0	Launcher Error	1		Brch	f
PML Quad	Launcher	2/rnd	2	(See ammo notes)				+100	+50	+20	0	Launcher Error	4		Brch	f
PML Autofeed	Launcher	2/rnd	2	(See ammo notes)				+100	+50	+20	0	Launcher Error	6		Mag	f

Ammunition Notes Key:
Mag = Magazine
Belt= Belt of shells
Brch= Breech load

Special Notes:
a = Use Sml Proj attack table when using slug ammunition.
b = Any critical achieved automatically results in an "E" Stun critical instead.
c = Linex system powered by a Utility Cartridge.
d = Linex system powered by a Utility Pack.
e = Will fire only Mk.1 or Mk.2 grenades.
f = Will fire Mk.1 through Mk.5 warheads.

MASTER WEAPONS CHART 2: ENERGY WEAPONS

NAME	TYPE	RATE	F	RANGE (METERS) PB	SR	MR	LR	RANGE MODIFIERS PB	SR	MR	LR	TABLE USED	NOTES
LASERS:													
Mini Laser	1H Energy	1/rnd	7	1	5	10	15	+15	0	-30	-90	Laser Mk.1	1 Utility or Weapon Cell.
Laser Pistol	1H Energy	2/rnd	7	3	20	50	200	+15	0	-30	-90	Laser Mk.2	1 Weapon Cell.
Assault Laser	2H Energy	2/rnd	7	3	25	75	300	+15	0	-30	-90	Laser Mk.3	1 Weapon Cartridge.
Laser Rifle	2H Energy	2/rnd	7	3	30	100	400	+15	0	-30	-90	Laser Mk.4	1 Weapon Cartridge.
Heavy Laser	Sup Energy	2/rnd	7	5	100	500	2000	+15	0	-30	-90	Laser Mk.5	1 Weapon Pack.
BLASTERS:													
Mini Blaster	1H Energy	1/rnd	5	1	5	10	15	+15	0	-30	-90	Blaster Mk.1	1 Utility or Weapon Cell.
Blast Pistol	1H Energy	2/rnd	5	3	20	40	120	+15	0	-30	-90	Blaster Mk.2	1 Weapon Cell.
Assault Blast	2H Energy	2/rnd	5	3	25	70	150	+15	0	-30	-90	Blaster Mk.3	1 Weapon Cartridge.
Blast Rifle	2H Energy	2/rnd	5	3	30	90	250	+15	0	-30	-90	Blaster Mk.4	1 Weapon Cartridge.
Heavy Blaster	Sup Energy	2/rnd	5	5	80	400	1000	+15	0	-30	-90	Blaster Mk.5	1 Weapon Pack.
FLAMERS:													
Mini Flamer	1H Energy	1/rnd	10	1	2	3	5	+15	0	-30	-90	Flamer Mk.1	1 Flamer Cell.
Flame Pistol	1H Energy	2/rnd	10	2	5	10	15	+15	0	-30	-90	Flamer Mk.2	1 Flamer Cell.
Assault Flamer	2H Energy	2/rnd	10	3	10	20	30	+15	0	-30	-90	Flamer Mk.3	1 Flamer Cartridge.
Flame Rifle	2H Energy	2/rnd	10	4	20	40	60	+15	0	-30	-90	Flamer Mk.4	1 Flamer Cartridge.
Heavy Flamer	Sup Energy	2/rnd	10	5	40	80	120	+15	0	-30	-90	Flamer Mk.5	1 Flamer Pack.
STUNNERS:													
Mini Stunner	1H Energy	1/rnd	5	1	2	3	10	+15	0	-30	-90	Stunner Mk.1	1 Utility or Weapon Cell.
Stun Pistol	1H Energy	2/rnd	5	3	5	10	50	+15	0	-30	-90	Stunner Mk.2	1 Weapon Cell.
Assault Stun	2H Energy	2/rnd	5	3	10	20	100	+15	0	-30	-90	Stunner Mk.3	1 Weapon Cartridge.
Stun Rifle	2H Energy	2/rnd	5	3	15	30	200	+15	0	-30	-90	Stunner Mk.4	1 Weapon Cartridge.
Heavy Stunner	Sup Energy	2/rnd	5	5	20	60	300	+15	0	-30	-90	Stunner Mk.5	1 Weapon Pack.
		1/rnd	5	5	10	20	100	+15	0	-30	-90	Stunner Mk.3	Affects all in 30 deg. arc.
DISRUPTORS:													
Mini Disruptor	1H Energy	1/rnd	5	1	2	3	10	+15	0	-30	-90	Disruptor Mk.1	1 Utility or Weapon Cell.
Disrupt Pistol	1H Energy	2/rnd	5	3	5	10	50	+15	0	-30	-90	Disruptor Mk.2	1 Weapon Cell.
Assault Disrupt	2H Energy	2/rnd	5	3	10	20	100	+15	0	-30	-90	Disruptor Mk.3	1 Weapon Cartridge.
Disrupt Rifle	2H Energy	2/rnd	5	3	15	30	200	+15	0	-30	-90	Disruptor Mk.4	1 Weapon Cartridge.
Heavy Disruptor	Sup Energy	2/rnd	5	5	20	60	300	+15	0	-30	-90	Disruptor Mk.5	1 Weapon Pack.
PLASMATIC REPEATORS:													
PR Rifle	2H Energy	2 burst	9	3	20	40	100	+15	0	-30	-90	Blaster Mk.5	1 Weapon Microfusion Reactor.
Heavy PR	Sup Energy	2 burst	9	3	30	80	250	+15	0	-30	-90	Blaster Mk.5	1 Weapon Microfusion Reactor.

MASTER WEAPONS CHART 3: MELEE WEAPONS

Name	Type	F	Melee Mk.#	Melee Crit	Missile Mk.#	Missile Crit	Range/OB Mod			Notes
Dagger/Knife	1H Edged	1	1	Slash	1	Puncture	3/-10	8/-20	17/-30	
Main Gauche	1H Edged	2	1	Slash	1	Puncture	3/-15			May parry other melee weapons at +15 to DB.
Rapier	1H Edged	4	2	Puncture	—	—				Mk.1 vs AT's 9-20.
Short Sword	1H Edged	2	2	Slash	1	Slash	3/-30			
Hand Axe	1H Edged	4	2	Slash	1	Slash	3/-15	8/30	17/-45	Mk.3 vs AT's 9-12 & 17-20 when used in melee.
Scimitar	1H Edged	4	3	Slash	—	—				
Broadsword	1H Edged	3	3	Slash	—	—				
Falchion	1H Edged	5	3	Slash	—	—				Mk.4 vs AT's 9-12 & 17-20.
Force Knife	1H Edged	6	3	Slash	—	—				Advanced energy weapon.
Club	1H Crush	4	1	Krush	1	Krush	3/-40			
Whip	1H Crush	6	1	Entangle	—	—				Mk.2 vs AT's 1-4. Melee range is 3 meters.
Mace	1H Crush	2	2	Krush	1	Krush	3/-35			
Warhammer	1H Crush	4	2	Krush	1	Krush	3/-20	8/-40	17/-60	Mk.3 vs AT's 9-12 & 17-20 when used in melee.
Morning Star	1H Crush	8	3	Krush	—	—				
Quarterstaff	2 Handed	3	2	Krush	—	—				Mk.3 vs AT's 1-4.
War Mattock	2 Handed	6	4	Krush	—	—				Mk.3 vs AT's 5-8 & 13-16.
Flail	2 Handed	8	4	Krush	—	—				
Battle Axe	2 Handed	5	4	Slash	—	—				
2-Handed Sword	2 Handed	5	4	Slash	—	—				
Power Sword	2 Handed	9	5	Slash	—	—				Advanced energy weapon.
Bola	2 Handed	7	1	Krush	2	Krush	17/0	30/-20	50/-40	
Javelin	Pole Arm	4	2	Puncture	2	Puncture	3/0	17/-20	30/-40	
Spear	Pole Arm	5	2	Puncture	2	Puncture	3/-10	8/-20	17/-30	
Pole Arm	Pole Arm	7	3	Puncture	—	—				Mk.4 vs AT's 9-12 and 17-20.
Mounted Lance	Pole Arm	7	4	Puncture	—	—				If dismounted, use as spear.

Note : Each attack with a melee weapon has an OB modifier associated with it: Mk.1=-50, Mk.2=-40, Mk.3=-30, Mk.4=-15, Mk.5=0

MASTER WEAPONS CHART 4: ARCHAIC MISSILE WEAPONS

Name	Type	F	Missile Mk.#	Critical	Range/OB mod				
Sling	Thrown	6	2	Krush	3/+25	20/0	40/-40	60/-65	
Short Bow	Bow	4	2	Puncture	3/+10	30/0	60/-40	80/-70	
Light Crossbow	Bow	5	3	Puncture	3/+15	30/0	70/-35	100/-50	130/-75
Composite Bow	Bow	4	3	Puncture	3/+15	30/0	70/-35	100/-60	
Long Bow	Bow	5	4	Puncture	3/+20	30/0	70/-30	100/-40	140/-50
Heavy Crossbow	Bow	5	4	Puncture	6/+30	30/0	70/-25	100/-40	130/-55

Note: All missile attacks are resolved on the Small Projectile attack table.

SIMILAR WEAPONS CHART

Projectile Pistols:
Lt Pistol
Med Pistol
Hvy Pistol
Lt Machine Pistol (semi-auto mode)
Med Machine Pistol (semi-auto mode)
Tangle Pistol
Rocket Pistol
MLA Pistol

Conventional Machine Pistols:
Lt Machine Pistol (automatic mode)
Med Machine Pistol (automatic mode)
(Note: automatic/semi-automatic modes are similar skills for MP's)

Projectile Rifles:
Lt Rifle
Med Rifle
Hvy Rifle
Lt Assault Rifle (semi-automatic mode)
Med Assault Rifle (semi-automatic mode)
15mm Shotgun
20mm Shotgun
Tangle Carbine
Tangel Rifle
Taser Carbine
Taser Rifle
Rocket Carbine (semi-automatic mode)
Rocket Rifle (semi-automatic mode)
MLA Rifle

Conventional Assault Rifles:
Lt Assault Rifle (automatic mode)
Med Assault Rifle (automatic mode)
Lt Machine Gun (used unmounted)
(Note: automatic/semi-automatic modes are similar skills for AR's)

Conventional Machine Guns:
Lt Machine Gun
Med Machine Gun
Hvy Machine Gun

Conventional Shotguns:
15mm Shotgun
15mm Sawed-off Shotgun
20mm Shotgun
20mm Sawed-off Shotgun

Conventional Autoshotguns:
15mm Autoshotgun
20mm Autoshotgun

Needleguns:
Needle Pistol
Needle Carbine
Needle Rifle

Tangleguns:
Tangle Pistol
Tangle Carbine
Tangle Rifle

Taserguns:
Taser Pistol
Taser Carbine
Taser Rifle

Heavy Rocketguns:
Rocket Carbine (automatic mode)
Rocket Rifle (automatic mode)
(Note: Automatic/semi-automatic modes are similar skills for RG's)

Magnetic Linear Accelerators:
MLA Pistol
MLA Rifle

Portable Missile Launchers:
PML
PML Quad
PML Autofeed

Energy Mini Weapons:
Mini Laser
Mini Blaster
Mini Flamer
Mini Stunner
Mini Disruptor
Mini Struptorgun

Energy Pistols:
Laser Pistol
Blast Pistol
Flame Pistol
Stun Pistol
Disruptor Pistol
Struptorgun Pistol

Energy Rifles:
Assault Laser
Laser Rifle
Assault Blaster
Blast Rifle
Assault Flamer
Flame Rifle
Assault Stunner
Stun Rifle
Assault Disruptor
Disruptor Rifle
Assault Struptorgun
Struptorgun Rifle

Heavy Energy Weapons:
Heavy Laser
Heavy Blaster
Heavy Flamer
Heavy Stunner
Heavy Disruptor
Heavy Struptorgun
Heavy Plasma Repeator

Standard Lasers:
Laser Pistol
Assault Laser
Laser Rifle

Standard Blasters:
Blast Pistol
Assault Blaster
Blast Rifle

Standard Flamers:
Flame Pistol
Assault Flamer
Flame Rifle

Standard Stunners:
Stun Pistol
Assault Stunner
Stun Rifle

Standard Disruptors:
Disruptor Pistol
Assault Disruptor
Disruptor Rifle

Standard Struptorguns:
Struptorgun Pistol
Assault Struptorgun
Struptorgun Rifle

Plasmatic Repeators:
Plasma Repeator Rifle
Heavy Plasma Repeator

Recoil Support Weapons:
Lt Machine Gun
Med Machine Gun
Hvy Machine Gun
Heavy Blaster
Heavy Plasma Repeator

15.1 SMALL PROJECTILE ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-39
40-42	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40-42
43-45	0	0	0	2	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	43-45
46-48	0	0	1	2	2	2	2	0	0	0	0	0	3	2	0	0	0	0	0	0	46-48
49-51	0	1	2	2	2	2	2	2	0	0	0	2	3	3	2	0	0	0	2	0	49-51
52-54	1	1	2	2	2	2	2	2	0	0	1	2	4	3	3	2	0	0	3	2	52-54
55-57	1	1	2	2	2	2	2	2	0	1	2	2	4	4	3	2	0	1	4	3	55-57
58-60	1	2	2	3	2	2	2	3	1	1	2	3	4	4	4	3	1	1	5A	4	58-60
61-63	1	2	3	3	2	2	3	3	1	2	3	3	5	5	4	4	1	2	5A	5	61-63
64-66	1	2	3	3	2	3	3	3	2	2	3	3	5	5	5	5	2	2	6A	6A	64-66
67-69	1	3	4	3	3	3	3	4	2	3	4	3	5	6	5	5A	2	2	6A	6A	67-69
70-72	2	3	4	4	3	3	4	4	2	3	4	4A	6	6	6	6A	2	3	6B	6A	70-72
73-75	2	4	4	4A	3	4	4	5A	3	4	4	4A	6	6	6A	6A	2	3	6B	7A	73-75
76-78	2	4	4	5A	4	4	5	5A	3	4	4A	5A	6	7	6A	7A	3	4A	7B	7B	76-78
79-81	2	4	5A	5A	4	5	5A	6A	3	4	5A	5A	6	7	7A	7A	3	5A	7B	7B	79-81
82-84	2	4	5A	5B	5	5	6A	6B	4	4	5A	6B	7	7A	7A	7B	4A	6A	8C	8B	82-84
85-87	3	5	5A	6B	5	6	6A	7B	4	5A	6B	6B	7	7A	7B	7B	5A	6B	9C	8C	85-87
88-90	3	5A	6A	6B	5	6	7A	7B	4	6A	6B	7B	7	8A	8B	8B	6B	7B	10C	8C	88-90
Maximum Result for MARK 1 Weapon																					
91-93	3	6A	6A	7B	6	7A	7A	8B	5	6A	7B	8B	8B	8B	8B	9B	7B	8B	12C	9C	91-93
94-96	4	6A	7A	7B	6	7A	8A	8B	5	6A	7B	8B	8B	9B	9B	10B	8B	9C	13C	11C	94-96
97-99	4	7A	7A	8B	7A	8A	8A	9B	6	7A	8B	9B	9B	9B	10B	11B	9C	10C	15D	13D	97-99
100-102	4	7A	8A	8B	7A	8A	9A	10B	6	7A	8B	9B	9B	10B	11B	12B	10C	12C	17D	15D	100-102
103-105	5	8A	8A	9B	8A	9A	9A	11B	7A	8A	9B	10B	10A	11B	12B	13C	11C	14C	19D	17D	103-105
Maximum Result for MARK 2 Weapon																					
106-108	5	8A	9A	9B	8A	9A	10A	12B	7A	8A	9B	10B	11B	12B	13C	14C	12C	16D	21D	19E	106-108
109-111	6	9A	9A	10B	9A	10A	11A	13B	8A	9A	10B	11B	12B	13C	15C	16D	14D	18D	22E	21E	109-111
112-114	6	9A	10A	11B	9A	10A	12B	14B	8A	9A	10B	11C	13C	14C	17D	18D	16D	20D	23E	23E	112-114
115-117	7	10A	10A	12B	10A	11A	13B	16C	9A	10B	11B	12C	14C	16D	19D	20D	18D	22D	24E	25E	115-117
118-120	7A	10A	11A	13B	10A	12A	14B	18C	10A	11B	12B	13C	15D	18D	21D	22E	20D	24D	25E	27E	118-120
Maximum Result for MARK 3 Weapon (Mark 1 vs. RM AT's 5-20)																					
121-123	8A	11A	11B	14B	11A	13B	15B	20C	11B	12B	13C	14C	16D	20D	23E	24E	22D	26E	27E	29E	121-123
124-126	8A	11A	12B	15C	11A	14B	16C	22C	12B	13C	15C	16D	18D	22E	25E	26E	24E	28E	29E	31E	124-126
127-129	9A	12A	12B	16C	12B	15B	17C	24C	13C	14C	17D	18D	20E	24E	27E	28E	26E	30E	31E	33F	127-129
130-132	9A	12B	13B	17C	13B	16C	19C	26C	14C	15D	19D	20D	22E	26E	29E	30E	28E	32E	33F	35F	130-132
133-135	10A	13B	14B	18C	14B	18C	21C	28D	15C	16D	21D	22E	24E	28E	31E	32F	30E	34F	35F	37G	133-135
Maximum Result for MARK 4 Weapon (Mark 2 vs. RM AT's 5-20)																					
136-138	11B	13B	16C	20D	16C	20C	23D	30D	16D	17D	23E	24E	26E	30E	33F	34F	32F	36F	37G	39G	136-138
139-141	12B	14C	18C	22D	18C	22D	25D	32E	17D	19E	25E	26E	28E	32F	35F	36G	34F	38G	39G	41H	139-141
142-144	13B	15C	20D	24D	20D	24D	27E	34E	18E	21E	27E	28F	30F	34F	37G	38G	36G	40G	41H	43H	142-144
145-147	14C	17D	22D	26E	22D	26E	29E	36E	19E	23E	29F	30F	32F	36G	39G	40G	38G	42H	43H	45H	145-147
148-150	15C	19D	24D	28E	24E	28E	31E	38E	20E	25F	31F	32F	34G	38G	41G	42G	40H	44H	45H	47H	148-150
Maximum Result for MARK 5 Weapon (Mark 3 vs. RM AT's 5-20)																					
151-153	17D	21D	26E	30E	26E	30E	33E	39G	22F	27F	33F	34G	35G	39G	42G	43G	41H	45H	46H	48H	151-153
154-156	19D	23E	28E	32E	28E	32E	35G	40G	24F	29F	35G	36G	36G	40G	43G	44H	42H	46H	47H	49H	154-156
157-159	21D	25E	30E	34F	30E	34G	37G	41G	26F	31G	37G	38G	37G	41G	44H	45H	43H	47H	48H	50H	157-159
160-162	23E	27E	32F	36F	32G	36G	39G	42G	28G	33G	39G	40H	38G	42H	45H	46H	44H	48H	49H	51H	160-162
163-165	25E	29F	34F	38G	34G	38G	40G	43H	30G	35G	41H	42H	39H	43H	46H	47H	45H	49H	50H	52H	163-165
Maximum Result for MARK 4 Weapon vs. RM AT's 5-20																					
166-168	27E	31F	36G	40G	36G	39G	41H	44H	32G	37H	42H	43H	40H	44H	47H	48H	46H	50H	51H	53H	166-168
169-171	29F	33G	38G	41G	38G	40H	42H	45H	34H	39H	43H	44H	41H	45H	48H	49H	47H	51H	52H	54H	189-171
172-174	31F	35G	39G	42H	39H	41H	43H	46H	36H	40H	44H	45H	42H	46H	49H	50H	48H	52H	53H	55H	172-174
175-177	33G	37G	40H	43H	40H	42H	44H	47H	38H	41H	45H	46H	43H	47H	50H	51H	49H	53H	54H	56H	175-177
178-180	35G	39H	41H	44H	41H	43H	45H	48H	40H	42H	46H	47H	44H	48H	51H	52H	50H	54H	55H	57H	178-180
Maximum Result for MARK 5 Weapon vs. RM AT's 5-20																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All Criticals are *Puncture*.
Note: For Autofire/Burst fire against 1 target all Puncture crits become Shrapnel crits, and concussion hits are increased by 50% (round up).
01-0X = Failure (Consult *Master Weapons Chart*, pp65-67, for actual failure range). If Failure is rolled, roll 1D10: 01-05: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 6-10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96)

F = 'E' Puncture Critical + 'A' Impact Critical G = 'E' Puncture Critical + 'B' Impact Critical H = 'E' Puncture Critical + 'C' Impact Critical

15.2 SHOTGUN ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	34-36
37-39	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	2	2	37-39
40-42	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	2	3	40-42
43-45	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	2	0	2	3	3	43-45
46-48	0	0	0	1	0	0	0	2	0	0	0	1	0	0	1	3	1	2	3	4	46-48
49-51	0	0	0	2	0	0	1	3	0	0	0	2	0	0	1	3	1	2	4	4	49-51
52-54	0	0	1	2	0	0	1	4	0	0	1	2	0	0	2	4	2	3	4a	5	52-54
55-57	0	0	1	2	0	0	2	4	0	0	1	2	0	0	3	4	2	3	5a	5a	55-57
58-60	0	0	2	3	0	0	3	5	0	0	2	3	0	0	3	5	2	4	5a	6a	58-60
61-63	0	0	2	3	0	0	4	5	0	0	2	3	0	1	4	5	3	4	6a	6a	61-63
64-66	0	0	2	3a	0	1	4	6a	0	0	2	3a	0	2	4	6a	3	5	6a	7a	64-66
67-69	0	1	3	4a	0	2	5	6a	0	1	3	4a	0	3	5	6a	4	5a	7a	7a	67-69
70-72	0	2	3	4a	0	3	5	7a	0	2	3	4a	0	3	5	7a	4	6a	7a	8a	70-72
73-75	0	2	3a	5a	0	3	6a	7a	0	2	3a	5a	1	4	6a	7a	5	6a	8b	9a	73-75
76-78	0	2	4a	5a	1	4	6a	8a	0	2	4a	5a	2	4	6a	8a	5	7a	9b	10b	76-78
79-81	0	3	4a	6b	2	4	7a	8b	0	3	4a	6b	3	5	7a	9b	6a	7a	10b	11b	79-81
82-84	0	3a	5a	6b	3	5a	7a	9b	0	3a	5a	6b	4	6a	8a	10b	6a	8b	11b	12b	82-84
85-87	0	4a	5b	7b	4	6a	8b	10b	0	4a	5b	7b	5	7a	9b	11b	7a	9b	12b	13b	85-87
88-90	0	4a	6b	8b	5	7a	9b	11b	0	4a	6b	8b	6	8a	10b	12b	8a	10b	13b	14b	88-90
Maximum Result for Long Range																					
91-93	1	5a	6b	9b	6	8a	10b	12b	1	5a	6b	9b	7	9a	11b	13b	10a	12b	15b	16b	91-93
94-96	1	5a	7b	10b	7	9a	11b	13b	1	5a	7b	10b	8	10a	12b	14b	12b	14b	17b	18b	94-96
97-99	2	6b	7b	11b	8	10b	12b	14b	2	6b	7b	11b	9	11b	13b	15b	14b	16b	19b	21b	97-99
100-102	2	6b	8b	12b	9	11b	13b	15b	2	6b	8b	12b	10	12b	14b	16b	16b	18b	21b	24b	100-102
103-105	3	7b	8b	13b	10	12b	14b	16b	3	7b	8b	13b	11	13b	16b	18b	18b	20b	23b	27b	103-105
Maximum Result for Medium Range (Long Range vs. RM AT's 5-20)																					
106-108	3	7b	9b	14b	11	13b	16b	18b	3	7b	9b	14b	12	14b	18b	20b	20b	23A	25A	30A	106-108
109-111	4	8b	10b	15b	12	14b	18b	20b	4	8b	10b	15b	13	15b	20b	22b	22b	26A	27A	33B	109-111
112-114	4	8b	11b	16b	13	15b	20b	22b	4	8b	11b	16b	14	16b	22b	24b	24A	29A	30B	36B	112-114
115-117	5	9b	12b	17A	14	16b	22b	24A	5	9b	12b	17A	15	17b	24b	26A	27A	32B	33B	39B	115-117
118-120	5	9b	13A	18A	15	17b	24A	26A	5	9b	13A	18A	16	18b	26A	28A	30B	35B	36B	42B	118-120
Maximum Result for Short Range (Medium Range vs. RM AT's 5-20)																					
121-123	6a	10b	15A	20A	16a	19b	26A	28A	6a	10b	16A	21A	17a	20b	28A	30A	32B	37B	39B	45C	121-123
124-126	7a	11b	17A	22A	17b	21b	28A	30A	7a	12b	19A	24A	18b	22A	30A	32B	34B	39B	42C	48C	124-126
127-129	8a	12b	19A	24A	18b	23A	30A	32B	8b	14b	22A	27A	19b	24A	32B	34B	36B	41C	45C	50D	127-129
130-132	9b	13b	21A	26A	19b	25A	32B	34B	9b	16A	25A	30B	20A	26A	34B	36B	38C	43C	48D	53D	130-132
133-135	10A	14A	23A	28B	20A	27A	34B	36B	10A	18A	28B	33B	21A	28A	36B	38B	40D	45D	51D	56D	133-135
Maximum Result for Point Blank Range (Short Range vs. RM AT's 5-20)																					
136-138	11A	16A	25A	30B	21A	29A	36B	38B	12A	21A	31B	36B	23A	31B	38B	41C	42D	47D	53D	58D	136-138
139-141	12A	18A	27A	32B	22A	31B	38B	42C	14A	24A	34B	39B	25B	34B	42B	44C	44D	49D	55D	60E	139-141
142-144	13A	20A	29B	34B	23B	33B	40C	44C	16A	28B	37B	42C	27B	37B	44C	47D	46D	51D	57E	62E	142-144
145-147	14A	22B	31B	36B	24B	35C	43C	47D	18B	31B	40C	45C	30C	40C	47D	50D	48D	53E	59E	64E	145-147
148-150	15A	24B	33B	38B	25C	37C	46D	50D	20B	34C	43C	48C	33D	43D	50D	53D	50E	55E	61E	66E	148-150
Maximum Result for Point Blank Range with Special Ammo * (Point Blank Range vs. RM AT's 5-20)																					
151-153	18A	27B	36B	41C	28C	39D	48D	52D	23C	37C	45C	50D	36D	45D	52D	55D	NA	NA	NA	NA	151-153
154-156	21B	30B	39C	44C	31D	42D	50D	54D	26C	40C	47D	52D	39D	47D	54D	57E	NA	NA	NA	NA	154-156
157-159	24B	33C	42C	47D	34D	45D	52D	56E	29C	43D	49D	54D	42D	49D	56E	59E	NA	NA	NA	NA	157-159
160-162	27B	36C	45D	50D	37D	48D	54E	58E	32D	46D	51D	56E	45D	51E	58E	61E	NA	NA	NA	NA	160-162
163-165	30C	39D	48D	53E	40D	51E	56E	60E	35D	49D	53E	58E	48E	53E	60E	63E	NA	NA	NA	NA	163-165
Maximum Result for Point Blank Range with Special Ammo * vs. RM AT's 5-20																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

01-0X = Failure (Consult *Master Weapons Chart*, pp65-67, for actual failure range). If Failure is rolled, roll 1D10: 01-05: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 6-10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

NA = not applicable
a = 'A' Puncture or Slash Critical Strike (type depends on ammo used).
b = 'B' Puncture or Slash Critical Strike (type depends on ammo used).
A, B, C, D, E = Shrapnel Critical Strikes.

* — Special Ammo with these Maximum Result levels include: Super-teflon coated shot versus ATs 5-8 and Irulon coated shot versus ATs 9-20. The GM may also wish to include other special ammo (e.g., "high-powered" shell, armored piercing shot, etc.).

15.3 GRENADE / EXPLOSIVE WARHEAD ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-02	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-02
03-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	03-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	34-36
37-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	37-39
40-42	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	1	2	40-42
43-45	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	1	2	43-45
46-48	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	2	0	1	2	2A	46-48
49-51	0	0	0	1	0	0	1	1	0	0	1	1	0	0	1	2	1	1	2	3A	49-51
52-54	0	0	0	1	0	0	1	1	0	0	1	1	0	0	1	2	1	2	2	3A	52-54
55-57	0	0	1	2	0	0	1	2	0	0	1	2	0	0	1	3A	1	2	3	3A	55-57
58-60	0	0	1	2	0	0	1	2	0	0	1	2	0	0	2	3A	1	2	3A	4A	58-60
61-63	0	0	1	2	0	0	1	2	0	0	1	2	0	0	2	3A	1	2A	3A	4A	61-63
64-66	0	0	1	2	0	0	2	3	0	0	1	3	0	1	2	4A	1	3A	4A	4A	64-66
67-69	0	0	1	2	0	1	2	3	0	0	2	3	0	1	3	4A	2	3A	4A	5A	67-69
70-72	0	1	1	3	0	1	2	3	0	1	2	3A	0	1	3	5A	2A	3A	4A	5A	70-72
73-75	0	1	1	3A	1	1	2	4	0	1	2	4A	1	2	4	5A	2A	4A	5A	5A	73-75
76-78	0	1	2	3A	1	1	3	4	0	1	3	4A	1	2	4	5A	2A	4A	5A	6A	76-78
79-81	0	1	2	3A	1	1	3	4A	0	1	3	5A	1	2	5	5A	2A	4A	5A	6A	79-81
82-84	0	1	2	3A	1	2	3	4A	1	1	4	5A	1	3	5A	6A	3A	5A	6A	6A	82-84
85-87	0	1	2	3A	1	2	3	4A	1	1	4A	5A	2	3	6A	6A	3A	5A	6A	7A	85-87
88-90	0	1	3A	3A	1	2	4	4A	1	2	4A	6A	2	3A	6A	6A	3A	5B	6B	7B	88-90
Maximum Results For 5th Blast Radius																					
91-93	1	1	3A	3A	2	2	4	4A	1	2	5A	6A	3A	4A	6A	7A	4B	6B	7B	7B	91-93
94-96	1	2	3A	4A	2	2	4A	5A	1	2	5A	6B	3A	4A	7A	7B	4B	6B	7B	8B	94-96
97-99	1	2	3A	4A	2	3	4A	5A	1	2A	5A	7B	3A	4A	7B	7B	4B	7B	7B	8B	97-99
100-102	1	2	3A	4B	2	3	4A	5B	2	3A	6B	7B	3A	4A	7B	8B	5B	7B	8B	8B	100-102
103-105	1	2	4A	4B	3	3A	5A	5B	2A	3A	6B	7B	4B	5B	8B	8B	5B	8C	8C	9C	103-105
Maximum Results For 4th Blast Radius																					
106-108	1	3	4B	5B	3	3A	5A	6B	2A	3A	6B	8B	4B	5B	8B	9B	6C	8C	9C	9C	106-108
109-111	2	3	4B	5B	3	3A	5B	5B	2A	3A	7B	8B	4B	5B	9B	9C	6C	9C	9C	10C	109-111
112-114	2	3	4B	5B	3A	4A	5B	6B	2A	4B	7B	9C	5B	6B	9C	10C	7C	9C	10C	10C	112-114
115-117	2	3A	5B	6B	3A	4A	6B	6C	3A	4B	8C	9C	5B	6B	10C	10C	7C	10C	10C	11C	115-117
118-120	2	4A	5B	6B	3A	4B	6B	6C	3A	4B	8C	10C	5C	7C	10C	11C	8C	10D	11D	11D	118-120
Maximum Results For 3rd Blast Radius																					
121-123	2	4A	6B	6C	3A	5B	6B	6C	3B	4B	4C	10C	6C	7C	11C	11C	8D	11D	11D	12D	121-123
124-126	3	4A	6B	6C	3A	5B	6C	7C	3B	5B	9C	11D	6C	8C	11C	12D	9D	11D	12D	12D	124-126
127-129	3A	4A	6C	7C	4A	5B	7C	8D	4B	5C	10C	11D	6C	8C	12D	12D	9D	12D	12D	13D	127-129
130-132	4A	5A	7C	7C	4B	6C	7C	9D	4C	6C	10D	12D	7C	9D	12D	13D	10D	12D	13D	14D	130-132
133-135	5A	5B	7C	8D	5B	6C	8C	10D	5C	7C	11D	12D	8D	9D	13D	14D	11D	13E	13E	15E	133-135
Maximum Results For 2nd Blast Radius																					
136-138	6B	6B	7C	9D	6C	7C	9C	11D	6C	8C	11D	13D	9D	10D	13D	15D	12E	14E	14E	16E	136-138
139-141	7B	7C	8D	10D	7C	8D	10D	12D	7C	9D	12D	14D	10D	11D	14D	16E	13E	15E	14E	17E	139-141
142-144	8C	8C	9D	11D	8D	9D	11D	13E	8D	10D	12D	15E	11D	12D	14E	17E	14E	16E	15E	18E	142-144
145-147	9D	9D	10D	12E	9D	10E	12E	14E	9D	11E	13E	16E	12E	13E	15E	18E	15E	17E	15E	19E	145-147
148-150	10E	10E	11E	13E	10E	11E	13E	15E	10E	12E	14E	17E	13E	14E	16E	18E	16E	18E	16E	20E	148-150
Maximum Results For Ground Zero																					
151-153	10E	11E	12E	13E	11E	11E	13E	15E	11E	12E	14E	17E	13E	14E	16E	18E	16E	18E	16E	20E	151-153
154-156	11E	12E	13E	13E	12E	12E	13E	15E	12E	13E	14E	12E	13E	14E	16E	18E	16E	18E	16E	20E	154-156
157-159	12E	13E	14E	14E	13E	13E	14E	15E	13E	14E	15E	17E	14E	15E	16E	18E	16E	18E	16E	20E	157-159
160-162	13E	14E	15E	15E	14E	14E	15E	16E	14E	15E	16E	17E	15E	16E	17E	18E	16E	18E	16E	20E	160-162
163-165	14E	15E	16E	16E	15E	15E	16E	17E	15E	16E	17E	18E	16E	17E	18E	19E	16E	18E	16E	20E	163-165
Maximum Results For Ground Zero vs. RM AT's																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: Hits shown on chart are multiplied x the Mk number of the grenade. Critical type is determined by the type of Grenade (see pg 12).

01-02 = Failure. If Failure is rolled, roll 1D10: 01-05: Grenade malfunction, roll on *Weapon Malfunction Chart* (pg 63); 6-10: fumble, rol on *Weapon Fumble Table* (pp 95-96).

MODIFIERS:

+ 5: per Mk# of explosive
+40: ground zero
+30: 2nd blast radii
+20: 3rd blast radii
+10: 4th blast radii
+35: if "touching" target when it explodes
-x: Defender's cover bonus
-y: Defender's armor quality bonus
-z: Defender's applicable miscellaneous bonuses
- Shield Projectile DB vs Shrapnel & General Purpose Grenades
- Shield Energy DB vs Concussion & Plasma Grenades

15.4 LASER ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-45
46-48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	46-48
49-51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	49-51
52-54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	52-54
55-57	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	3A	2	55-57
58-60	0	0	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	1	3A	3	58-60
61-63	0	0	2	2	0	0	2	2	0	0	2	2	0	0	2	2	1	1	3A	3A	61-63
64-66	0	0	2	3A	0	0	2	3A	0	0	2	3A	0	0	2	3A	1	2	4A	3A	64-66
67-69	0	0	3A	3A	0	0	3A	3A	0	0	3A	3A	0	1	3A	3A	1	2	4A	3A	67-69
70-72	0	0	3A	3A	0	1	3A	3A	0	0	3A	3A	0	2	3A	3A	2	3	4B	4A	70-72
73-75	0	0	3A	4A	0	2	3A	4A	0	1	3A	4A	0	3A	3A	4A	2	3A	5B	4B	73-75
76-78	0	0	4A	4A	0	3A	4A	4A	0	2	4A	4A	2	3A	4A	4B	2	4A	5B	5B	76-78
79-81	0	1	4A	4A	2	3A	4A	5A	0	3A	4A	4A	3A	4A	4B	5B	3	4A	6B	5B	79-81
82-84	0	2	4A	5A	3A	4A	4A	5B	0	3A	4A	5A	3A	4A	5B	5B	3A	5A	6B	6C	82-84
85-87	0	3A	5A	5B	3A	4A	5B	5B	2	4A	5A	5B	4A	5B	5B	6C	4A	5B	6C	6C	85-87
88-90	0	3A	5B	5B	4A	5A	5B	6B	3A	4A	5B	5B	4B	5B	6C	6C	5A	6B	7C	7C	88-90
Maximum Result for MARK 1 Weapon																					
91-93	0	3A	5B	5B	4A	5B	6B	6B	3A	4A	5B	6B	5B	5C	6C	7C	5B	6C	7C	7C	91-93
94-96	0	4A	5B	6B	4A	5B	6B	7C	3A	4A	6B	6B	5B	6C	7C	7D	6B	7C	7C	8D	94-96
97-99	3A	4A	6B	6B	5B	6B	7C	7C	4A	5A	6B	6B	5C	6C	7D	8D	6C	7C	8D	8D	97-99
100-102	3A	4A	6B	6B	5B	6B	7C	8C	4A	5B	6B	7B	6C	7C	8D	8D	7C	8C	8D	9D	100-102
103-105	3A	5A	6B	7B	5B	6B	8C	8C	4A	5B	7B	7B	6C	7C	8D	9D	7C	8D	9D	10D	103-105
Maximum Result for MARK 2 Weapon (Mark 1 vs. RM AT's 5-20)																					
106-108	4A	5B	7B	7C	6B	7C	8C	9C	5A	5B	7B	8C	7C	8D	9D	10D	8D	9D	10D	11E	106-108
109-111	4A	5B	7B	8C	6C	7C	9C	10D	5B	6B	8C	9C	7D	8D	10D	11E	8D	9D	11D	12E	109-111
112-114	4A	6B	7C	8C	7C	8C	10D	11D	5B	6B	9C	10C	8D	9D	11E	12E	9D	10D	12E	13E	112-114
115-117	5A	6B	8C	9C	7C	8D	11D	12E	6B	7C	10C	11C	8D	10E	12E	13E	9D	11E	13E	14F	115-117
118-120	5A	6B	8C	9C	8D	9D	12E	13E	6B	7C	11C	12D	9E	11E	13E	14F	10E	12E	14F	15F	118-120
Maximum Result for MARK 3 Weapon (Mark 2 vs. RM AT's 5-20)																					
121-123	5A	7B	9C	11D	8D	10E	13E	14E	7B	8C	12C	13D	10E	12E	14F	15F	11E	13E	15F	16F	121-123
124-126	6A	7C	10C	12D	9D	11E	14E	15E	7C	9C	13D	14D	11E	13F	15F	16F	12E	14F	16F	17F	124-126
127-129	6B	8C	11D	13D	10E	12E	15E	16F	8C	10C	14D	15E	12F	14F	16F	17G	13F	15F	17F	18G	127-129
130-132	7B	8C	12D	14D	11E	13E	16F	17F	9C	11D	15E	16E	13F	15G	17G	18G	14F	16F	18G	19G	130-132
133-135	7B	9C	13D	15E	12E	14F	17F	18G	10C	12D	16E	17F	14G	16G	18G	19G	15F	17F	19G	20G	133-135
Maximum Result for MARK 4 Weapon (Mark 3 vs. RM AT's 5-20)																					
136-138	8C	10C	14E	16E	13F	15F	18G	19G	11D	13E	17F	18F	15G	17G	19G	20H	16F	18G	20G	21H	136-138
139-141	8C	11D	15E	17F	14F	16G	19G	20H	12D	14E	18F	19G	16G	18G	20H	21H	17G	19G	21H	22H	139-141
142-144	9C	12D	16E	18F	15G	17G	20H	21H	13E	15F	19G	20G	17G	19H	21H	22H	18G	20H	22H	23H	142-144
145-147	9D	13E	17F	19F	16G	18H	21H	22H	14E	16F	20G	21H	18H	20H	22H	23H	19H	21H	23H	24H	145-147
148-150	10D	14E	18F	20G	17H	19H	22H	23H	15F	17G	21H	22H	19H	21H	23H	24H	20H	22H	24H	25H	148-150
Maximum Result for MARK 5 Weapon (Mark 4 vs. RM AT's 5-20)																					
151-153	11E	15F	19G	21G	18H	20H	23H	24H	16F	18G	22H	23H	20H	22H	24H	25H	21H	23H	25H	26H	151-153
154-156	12E	16F	20G	22H	19H	21H	24H	25H	17G	19H	23H	24H	21H	23H	25H	26H	22H	24H	26H	27H	154-156
157-159	13F	17G	21H	23H	20H	22H	25H	26H	18G	20H	24H	25H	22H	24H	26H	27H	23H	25H	27H	28H	157-159
160-162	14F	18G	22H	24H	21H	23H	26H	27H	19H	21H	25H	26H	23H	25H	27H	28H	24H	26H	28H	29H	160-162
163-165	15G	19H	23H	25H	22H	24H	27H	28H	20H	22H	26H	27H	24H	26H	28H	29H	25H	27H	29H	30H	163-165
Maximum Result for MARK 5 Weapon vs. RM AT's 5-20																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All Criticals are *Heat*.
01-0X = Failure (Consult *Master Weapons Chart*, pp 65-67 for actual failure range). If Failure is rolled, roll 1D10: 01-06: charge depleted; 07-09: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

F = 'E' Heat Critical + 'A' Puncture Critical
G = 'E' Heat Critical + 'B' Puncture Critical
H = 'E' Heat Critical + 'C' Puncture Critical

15.5 BLASTER ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-60
61-63	0	0	0	0	1	2	3	3	0	0	0	0	2	3	4	4	1	2	3	4	61-63
64-66	0	0	0	0	1	2	3	3	0	0	0	0	2	3	4	4	2	3	4	5	64-66
67-69	0	0	0	0	2A	3A	3A	4A	0	0	0	1	3A	4A	5A	5A	3A	4A	5A	6A	67-69
70-72	0	0	0	1	2A	3A	4A	4A	0	0	1	2	3A	4A	5A	6A	4A	5A	6A	7A	70-72
73-75	0	0	1	2	3A	4A	4A	5A	0	1	2	3	4A	5A	6A	7A	5A	6A	7A	8A	73-75
76-78	0	1	2	3	3B	4B	5B	6B	1	2	3	4A	4B	5B	6B	8B	6B	7B	8B	9B	76-78
79-81	1	2	3	4	4A	5A	5A	7A	2	3	4A	5A	5A	6A	7A	9A	7A	8A	9A	10A	79-81
82-84	2	3	4	5A	4B	5B	6B	8B	3	4	5A	6A	6B	7B	8B	10B	8B	9B	10B	11B	82-84
85-87	3	4	5	6A	5A	6A	7A	9A	4	5A	6A	7B	7A	8A	9A	11A	9A	10A	11A	12A	85-87
88-90	4	5	6A	7A	6C	7C	8C	10C	5	6A	7B	8B	8C	9C	10C	12C	10C	11C	13C	14C	88-90
Maximum Result for MARK 1 Weapon																					
91-93	5	6	7A	8B	7C	8C	9C	11C	6	7A	8B	9B	9C	11C	12C	14C	12C	13C	15C	16C	91-93
94-96	6	7	8A	9A	8A	10A	11A	13A	7A	8A	9A	10A	11A	13A	14A	16A	14A	15A	17A	18A	94-96
97-99	7	8A	9A	10B	9D	12D	13D	15D	8A	9A	10B	11C	13D	15D	16D	18D	16D	17D	19D	20D	97-99
100-102	8A	9A	10A	11A	11B	14B	15B	17B	9A	10A	11A	13B	15B	17B	18B	20B	18B	19B	21B	22B	100-102
103-105	9A	10A	11B	12B	13D	16D	17D	19D	10A	11B	12B	15C	17D	19D	20D	22D	20D	21D	23D	24D	103-105
Maximum Result for MARK 2 Weapon (Mark 1 vs. RM AT's 9-12 & 17-20)																					
106-108	10A	11A	12A	13C	15C	18E	19C	21E	11A	12B	14A	17D	19C	21E	22C	24E	22C	23E	25C	26E	106-108
109-111	11A	12A	13B	14A	17E	20C	21E	23C	12A	14A	16C	19C	21E	23C	24E	26C	24E	25C	27E	28C	109-111
112-114	12A	13B	14C	16C	19E	22E	23E	25E	13B	16C	18C	21D	23E	25E	26E	28E	26E	27E	29E	30E	112-114
115-117	13A	14A	15B	18B	21D	24D	25D	27D	14A	18B	20B	23B	25D	27D	28D	30D	28D	29D	31D	33D	115-117
118-120	14B	15B	16C	20C	23F	26F	27F	29F	15B	20C	22D	25E	27F	29F	30F	34F	30F	31F	33F	36F	118-120
Maximum Result for MARK 3 Weapon (Mark 2 vs. RM AT's 9-12 & 17-20)																					
121-123	15A	16C	17A	22D	25A	28F	29A	32F	17B	22D	24A	27E	29A	32F	32A	36F	32A	33F	36A	39F	121-123
124-126	16B	17A	19C	24A	27F	30A	31F	35A	19C	24A	26D	29A	31F	34A	35F	39A	34F	35A	39F	42A	124-126
127-129	17B	18C	21D	26D	29F	32F	33F	38F	21C	26D	28E	31F	33F	36F	38F	42F	36F	38F	42F	45F	127-129
130-132	18A	19B	23B	28B	31B	34B	35B	41B	23A	28B	30B	33B	35B	38B	41B	45B	38B	41B	45B	48B	130-132
133-135	19C	20D	25D	30E	33G	36G	38G	44G	25D	30E	32E	35F	37G	40G	44G	48G	40G	44G	48G	51G	133-135
Maximum Result for MARK 4 Weapon (Mark 3 vs. RM AT's 9-12 & 17-20)																					
136-138	20C	22D	27E	32E	35G	38G	41G	47G	27D	32E	34F	38F	39G	42G	47G	51G	42G	47G	51G	54G	136-138
139-141	21B	24C	29C	34C	37C	40C	44C	50C	29B	34C	36C	41C	41C	44C	50C	54C	44C	50C	54C	57C	139-141
142-144	22D	26E	31E	36F	39H	42H	47H	53H	31E	36F	39F	44G	43H	47H	53H	57H	47H	53H	57H	60H	142-144
145-147	23C	28D	33D	38D	41D	45D	50D	56D	33C	38D	42D	47D	45D	50D	56D	60D	50D	56D	60D	63D	145-147
148-150	24E	30E	35F	40F	43H	48H	53H	59H	35F	40F	45G	50G	48H	53H	59H	63H	53H	59H	63H	66H	148-150
Maximum Result for MARK 5 Weapon (Mark 4 vs. RM AT's 9-12 & 17-20)																					
151-153	27E	33F	38G	43G	46H	51H	55H	61H	38F	43G	48G	52H	51H	56H	61H	64H	56H	61H	65H	67H	151-153
154-156	30D	36D	41D	46D	49D	54D	57D	62D	41D	46D	51D	54D	54D	59D	62D	65D	59D	63D	67D	68D	154-156
157-159	33F	39G	44G	49H	52H	56H	59H	63H	44G	49G	53H	56H	57H	61H	63H	65H	62H	65H	68H	69H	157-159
160-162	36E	42E	47E	52E	55E	58E	61E	64E	47E	52E	55E	58E	60E	63E	64E	66E	65E	67E	69E	70E	160-162
163-165	39G	45H	50H	55H	58H	60H	63H	65H	50H	55H	57H	60H	63H	64H	65H	66H	68H	69H	70H	71H	163-165
Maximum Result for MARK 5 Weapon vs. RM AT's 9-12 & 17-20																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All Criticals are *Heat*.
01-0X = Failure (Consult *Master Weapons Chart*, pp 65-67 for actual failure range). If Failure is rolled, roll 1D10: 01-06: charge depleted; 07-09: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

F = 'E' Heat Critical + 'A' Radiation Critical
G = 'E' Heat Critical + 'B' Radiation Critical
H = 'E' Heat Critical + 'C' Radiation Critical

15.6 FLAMER ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34-36
37-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	37-39
40-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	40-42
43-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	43-45
46-48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	46-48
49-51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4A	2	49-51
52-54	0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	1	1	2	5A	3	52-54
55-57	0	0	0	2	0	0	0	2	0	0	0	2	0	0	1	2	2	3	5A	4A	55-57
58-60	0	0	1	3A	0	0	1	3A	0	0	1	3A	0	1	2	3A	3	4A	6A	5A	58-60
61-63	0	0	2	4A	0	0	2	4A	0	0	2	4A	0	1	2	4A	4A	4A	6A	5A	61-63
64-66	0	1	2A	4A	0	1	3A	4A	0	1	2A	4A	0	2	3A	4A	4A	5A	7A	6A	64-66
67-69	0	2	2A	5A	0	2	3A	5A	0	2	3A	5A	1	2	3A	5A	5A	5A	7A	6A	67-69
70-72	0	2A	3A	5A	1	2A	4A	5A	0	2A	3A	5A	1	3A	4A	5A	5A	6A	8A	7A	70-72
73-75	0	2A	3A	6A	1	3A	4A	6A	1	2A	4A	6A	2	3A	4A	6A	6A	6A	8A	7A	73-75
76-78	1	2A	4A	6A	2	3A	5A	6A	1	3A	4A	6A	2	4A	5A	6A	6A	7A	9B	8A	76-78
79-81	1	3A	4A	7A	2	4A	5A	7A	2	3A	5A	7A	3	4A	5A	7A	7A	7A	9B	8A	79-81
82-84	2	3A	5A	7A	3	4A	6A	7A	2	4A	5A	7A	3	5A	6A	7A	7A	8A	10B	9B	82-84
85-87	2	4A	5A	8B	3	5A	6A	8A	3	4A	6A	8A	4	5A	6A	8A	8A	8B	10B	9B	85-87
88-90	3A	4A	6B	8B	4A	5A	7A	8A	3A	5A	6A	8A	4A	6A	7A	8A	8B	9B	11B	10B	88-90
Maximum Result for MARK 1 Weapon																					
91-93	3A	5A	6A	9B	4A	6A	8A	9B	4A	5A	7A	9B	5A	7A	8A	9B	9B	10B	13C	11B	91-93
94-96	4A	5A	7A	10B	5A	7A	9A	10B	4A	6A	8A	10B	6A	8A	9A	10B	10B	11B	15C	12C	94-96
97-99	4A	6A	7B	11B	5A	8A	10B	11B	5A	6A	9B	11B	7A	9A	10B	11B	11B	12C	17C	13C	97-99
100-102	5A	6A	8B	12B	6A	9A	11B	12B	5A	7A	10B	12B	8A	10A	11B	12B	12C	14C	19C	15C	100-102
103-105	5A	7B	8B	13B	6A	10B	12B	13B	6A	8B	11B	13B	9A	11B	12B	13B	14C	16C	21C	17C	103-105
Maximum Result for MARK 2 Weapon (Mark 1 vs. RM AT's 5-20)																					
106-108	6A	7B	9B	14C	7A	11B	13B	14C	6A	9B	12B	14C	10A	12B	13B	14C	16C	18C	23D	19C	106-108
109-111	6A	8B	10B	15C	7A	12B	14B	15C	7A	10B	13B	15C	11A	13B	14B	15C	18C	20C	25D	21D	109-111
112-114	7A	8B	11C	16C	8A	13B	15C	16C	7A	11B	14C	16C	12A	14B	15C	17C	20C	22D	27D	23D	112-114
115-117	7A	9B	12C	17C	9A	14B	16C	17C	8A	12B	15C	17C	13A	15B	16C	19C	22D	24D	29D	25D	115-117
118-120	8B	9C	13C	18C	10B	15C	17C	18C	8B	13C	16C	18C	14B	16C	17C	21C	24D	26D	31D	27D	118-120
Maximum Result for MARK 3 Weapon (Mark 2 vs. RM AT's 5-20)																					
121-123	8B	10C	14C	19D	11B	16C	18C	19D	9B	14C	17C	19D	15B	17C	18C	23D	26D	28D	33E	29E	121-123
124-126	9B	10C	15C	20D	12B	17C	19C	21D	10B	15C	18C	20D	16B	18C	19C	25D	28D	30D	35E	31E	124-126
127-129	9B	11C	16D	21D	13B	18C	20D	23D	11B	16C	19D	21D	17B	19C	21D	27D	30D	32E	37E	33E	127-129
130-132	10B	12C	17D	22D	14B	19C	21D	25D	12B	17C	20D	22D	18B	21C	23D	29D	32E	34E	39E	35E	130-132
133-135	10C	13D	18D	23D	15C	20D	22D	27D	13C	18D	21D	23D	19C	22D	25D	31D	34E	36E	41E	37E	133-135
Maximum Result for MARK 4 Weapon (Mark 3 vs. RM AT's 5-20)																					
136-138	11C	14D	19D	24E	16C	21D	23D	29E	14C	19D	22D	25E	20C	23D	27D	33E	36E	38E	43E	39E	136-138
139-141	12C	15D	20D	25E	17C	22D	25D	31E	15C	20D	23D	27E	21C	24D	29D	35E	38E	40E	45E	41E	139-141
142-144	13C	16D	21E	26E	18C	23D	27E	33E	16C	21D	24E	29E	22C	25D	31E	37E	40E	42E	47E	43E	142-144
145-147	14C	17D	22E	27E	19C	24D	29E	35E	17C	22D	25E	31E	23C	27D	33E	39E	42E	44E	49E	45E	145-147
148-150	15D	18E	23E	28E	20D	25E	31E	37E	18D	23E	27E	33E	24D	29E	35E	41E	44E	46E	51E	47E	148-150
Maximum Result for MARK 5 Weapon (Mark 4 vs. RM AT's 5-20)																					
151-153	17D	20E	25E	30E	22D	27E	33E	39E	20D	25E	29E	35E	26D	31E	37E	43E	46E	48E	53E	49E	151-153
154-156	19D	22E	27E	32E	24D	29E	35E	41E	22D	27E	31E	37E	28D	33E	39E	45E	48E	50E	55E	51E	154-156
157-159	21D	24E	29E	34E	26D	31E	37E	43E	24D	29E	33E	39E	30D	35E	41E	47E	50E	52E	57E	53E	157-159
160-162	23D	26E	31E	36E	28D	33E	39E	45E	26D	31E	35E	41E	32D	37E	43E	49E	52E	54E	59E	55E	160-162
163-165	25E	28E	33E	38E	30E	35E	41E	47E	28E	33E	37E	43E	34E	39E	45E	51E	54E	56E	61E	57E	163-165
Maximum Result for MARK 5 Weapon vs. RM AT's 5-20																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

01-0X = Failure (Consult *Master Weapons Chart*, pp 65-67 for actual failure range). If Failure is rolled, roll 1D10: 01-07: charge depleted; 07-09: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

A = 'A' Heat critical.
B= 'B' Heat critical the first round struck **and** an 'A' the following round.
C= 'C' Heat critical the first round struck **and** an 'A' the following round.
D= 'D' Heat critical the first round struck **and** a 'B' the following round.
E= 'E' Heat critical the first round struck **and** a 'C' the following round.

15.7 STUNNER / DISRUPTOR ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	34-36
37-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	37-39
40-42	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	2	3	40-42
43-45	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	2	3	43-45
46-48	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	1	3	4	46-48
49-51	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	2	3A	4	49-51
52-54	0	0	0	2	0	0	1	2	0	0	0	2	0	0	1	2	1	2	4A	5	52-54
55-57	0	0	0	3	0	0	1	3	0	0	1	3	0	0	1	3	1	2	4A	5A	55-57
58-60	0	0	1	3	0	0	2	3	0	0	1	3	0	1	2	3	1	3	5A	6A	58-60
61-63	0	0	1	4	0	1	2	4	0	0	2	4	0	1	2	4A	2	3	5A	6A	61-63
64-66	0	0	2	4	0	1	3	4	0	1	2	4	0	2	3	4A	2	3	6A	7A	64-66
67-69	0	1	2	5	0	2	3	5A	0	1	3	5	1	2	3	5A	2	4A	6A	7A	67-69
70-72	0	1	3	5	1	2	4	5A	0	2	3	5	1	3	4A	5A	3	4A	7A	8A	70-72
73-75	0	2	3	6	1	3	4	6A	1	2	4	6A	2	3	4A	6A	3	4A	7A	8A	73-75
76-78	1	2	4	6	2	3	5A	6A	1	3	4	6A	2	4	5A	6A	3	5A	8A	9B	76-78
79-81	1	3	4	7A	2	4	5A	7A	2	3	5	7A	3	4	5A	7A	4A	5A	8A	9B	79-81
82-84	2	3	5	7A	3	4	6A	7A	2	4	5A	7A	3	5	6A	7B	4A	5A	9B	10B	82-84
85-87	2	4	5A	8A	3	5	6A	8A	3	4	6A	8A	4	5	6A	8B	4A	6A	9B	10B	85-87
88-90	3	4	6A	8A	4	5	7A	8B	3	5	6A	8A	4	6	7A	8B	5A	6A	11B	10B	88-90
Maximum Result for MARK 1 Weapon																					
91-93	3	5	6A	9A	4	6	8A	9B	4	5	7A	9A	5	7A	8B	9B	6A	7A	11B	13C	91-93
94-96	4	5	7A	10A	5	7A	9A	10B	4	6	8A	10A	6	8A	9B	10C	7A	8A	12C	15C	94-96
97-99	4	6	7A	11A	5	8A	10B	11B	5	6	9A	11B	7	9A	10B	11C	8A	9B	13C	17D	97-99
100-102	5	6	8A	12A	6	9A	11B	12C	5	7A	10B	12B	8	10B	11C	12C	9A	10B	15D	19D	100-102
103-105	5	7	8A	13B	6A	10B	12B	13C	6	8A	11B	13B	9A	11B	12C	13D	10B	11B	17D	21D	103-105
Maximum Result for MARK 2 Weapon (Mark 1 vs. RM AT's 5-20)																					
106-108	6	7	9A	14B	7A	11B	13C	14C	6	9A	12B	14B	10A	12B	13C	14D	11B	13B	19D	23D	106-108
109-111	6	8	10A	15B	7A	12B	14C	15D	7A	10A	13B	15C	11A	13B	14C	15D	12B	15B	21D	25D	109-111
112-114	7	8A	11A	16B	8A	13B	15C	16D	7A	11B	14C	16C	12A	14B	15D	17D	13B	17C	23D	27E	112-114
115-117	7	9A	12B	17C	9A	14B	16D	17D	8A	12B	15C	17C	13A	15C	16D	19D	15B	19C	25E	29E	115-117
118-120	8	9A	13B	18C	10A	15C	17D	18D	8A	13B	16C	18C	14B	16C	17D	21D	17C	21C	27E	31E	118-120
Maximum Result for MARK 3 Weapon (Mark 2 vs. RM AT's 5-20)																					
121-123	8	10A	14B	19C	11A	16C	18D	19D	9A	14B	17C	19D	15B	17C	18D	23E	19C	23C	29E	33E	121-123
124-126	9A	10B	15B	20C	12B	17C	19D	21E	10B	15C	18C	20D	16B	18D	19D	25E	21C	25C	31E	35E	124-126
127-129	9A	11B	16B	21D	13B	18D	20D	23E	11B	16C	19D	21D	17C	19D	21E	27E	23C	27D	33E	37E	127-129
130-132	10A	12B	17C	22D	14C	19D	21E	25E	12B	17C	20D	22E	18C	21D	23E	29E	25C	29D	35E	39E	130-132
133-135	10A	13B	18C	23D	15C	20D	22E	27E	13B	18C	21D	23E	19C	22D	25E	31E	27D	31D	37E	41E	133-135
Maximum Result for MARK 4 Weapon (Mark 3 vs. RM AT's 5-20)																					
136-138	11A	14B	19C	24D	16C	21D	23E	29E	14B	19C	22D	25E	20C	23D	27E	33E	29D	33D	39E	43E	136-138
139-141	12B	15C	20C	25E	17C	22D	25E	31E	15C	20D	23E	27E	21C	24E	29E	35E	31D	35E	41E	45E	139-141
142-144	13B	16C	21D	26E	18D	23E	27E	33E	16C	21D	24E	29E	22D	25E	31E	37E	33D	37E	43E	47E	142-144
145-147	14B	17C	22D	27E	19D	24E	29E	35E	17C	22D	25E	31E	23D	27E	33E	39E	35E	39E	45E	49E	145-147
148-150	15B	18C	23D	28E	20D	25E	31E	37E	18C	23D	27E	33E	24D	29E	35E	41E	37E	41E	47E	51E	148-150
Maximum Result for MARK 5 Weapon (Mark 4 vs. RM AT's 5-20)																					
151-153	17C	20D	25D	30E	22D	27E	33E	39E	20D	25E	29E	35E	26D	31E	37E	43E	38E	42E	48E	52E	151-153
154-156	19C	22D	27E	32E	24D	29E	35E	41E	22D	27E	31E	37E	28E	33E	39E	45E	39E	43E	49E	53E	154-156
157-159	21D	24D	29E	34E	26E	31E	37E	43E	24D	29E	33E	39E	30E	35E	41E	47E	40E	44E	50E	54E	157-159
160-162	23D	26E	31E	36E	28E	33E	39E	45E	26E	31E	35E	41E	32E	37E	43E	49E	41E	45E	51E	55E	160-162
163-165	25E	28E	33E	38E	30E	35E	41E	47E	28E	33E	37E	43E	34E	39E	45E	51E	42E	46E	52E	56E	163-165
Maximum Result for MARK 5 Weapon vs. RM AT's 5-20																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All Criticals are *Stun* for Stunners **and** *Internal Disruption* for Disruptor

01-0X = Failure (Consult *Master Weapons Chart*, pp 65-67 for actual failure range). If Failure is rolled, roll 1D10: 01-06: charge depleted; 07-09: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

16.1 MELEE WEAPON ATTACK TABLE (against SM ATs)

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-18
19-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	19-21
22-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	22-24
25-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3A	2	25-27
28-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4A	2	28-30
31-33	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	4A	3A	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2A	0	0	5A	4A	34-36
37-39	0	0	0	0	0	0	0	1	0	0	0	2	0	1	2	3A	0	0	5A	4A	37-39
40-42	0	0	0	1	0	0	0	1	0	0	1	2	0	1	3	3A	0	1	6A	5A	40-42
43-45	0	0	0	1	0	0	0	2	0	0	2	3A	0	2	3A	4A	0	2	6B	5A	43-45
46-48	0	0	0	2	0	0	1	2	0	1	2	3A	1	2	4A	4A	0	3A	7B	6B	46-48
49-51	0	0	1	2	0	0	1	3	0	1	3	4A	1	3	4A	5A	1	3A	7B	6B	49-51
52-54	0	0	1	3	0	1	2	3	0	2	3A	4A	2	3A	5A	5A	2	4A	8B	7B	52-54
55-57	0	1	2	3	0	1	2	4	1	2	4A	5A	2	4A	5A	6A	3A	4B	8C	7B	55-57
58-60	0	1	2	4	1	2	3	4A	1	3	4A	5A	3	4A	6A	6B	3A	5B	9C	8C	58-60
61-63	1	2	3	4	1	2	3	5A	2	3	5A	6A	3A	5A	6A	7B	4A	5B	9C	8C	61-63
64-66	1	2	3	5	2	3	4	5A	2	4A	5A	6A	4A	5A	7A	7B	4B	6C	10C	9C	64-66
67-69	2	3	4	5	2	3	4A	6A	3	4A	6A	7A	4A	6A	7B	8B	5B	6C	10D	9C	67-69
70-72	2	3	4	6A	3	4	5A	6A	3A	5A	6A	8A	5A	6A	8B	9C	5B	7C	11D	10D	70-72
73-75	3	4	5	6A	3	4	5A	7B	4A	5A	7A	9B	5A	7B	8B	10C	6C	8C	11D	10D	73-75
76-78	3	4	5	7A	4	5A	6A	8B	4A	6A	7A	10B	6A	7B	9B	11C	6C	9D	12D	11D	76-78
79-81	4	5	6A	7B	4	5A	6B	9B	5A	6A	8B	11B	6A	8B	10C	12C	7C	10D	13E	12D	79-81
82-84	4	5A	6A	8B	5A	6A	7B	10C	6A	7A	9B	12B	7B	8B	11C	14D	8D	11D	14E	13E	82-84
85-87	5A	6A	7B	9B	6A	7B	8B	11C	7A	8A	10B	13B	8B	9C	12C	15D	9D	12E	15E	15E	85-87
88-90	6A	7B	8B	10C	7A	8B	9C	12C	8A	9B	11B	14C	9B	10C	13C	16D	10E	13E	16E	17E	88-90
Maximum Result for MARK 1 Weapon, -50 OB Mod. (Dagger/Knife)																					
91-93	7A	8A	10A	12B	8A	9B	11C	14C	9A	10B	13B	16C	10B	12C	14D	18E	11E	14E	17E	19E	91-93
94-96	8A	9A	12B	14B	9A	10B	13C	16C	10A	12B	15B	18C	12C	14C	16D	20E	12E	15E	18E	21F	94-96
97-99	9A	10B	14B	16B	10B	12B	15C	18C	12B	14B	17C	20C	14C	16C	18E	22F	14E	17E	20F	23F	97-99
100-102	10B	12B	16B	18B	12B	14C	17C	20C	14B	16B	19C	22C	16C	18D	20E	24F	16E	19E	22F	25F	100-102
103-105	11B	14B	18B	20C	14B	16C	19C	22D	16B	18C	21C	24C	18C	20D	22F	26G	18E	21E	24F	27F	103-105
Maximum Result for MARK 2 Weapon, -40 OB Mod. (Short Sword)																					
106-108	12B	16B	20B	22C	16C	18C	21C	24D	18B	20C	23C	26D	20D	22D	24F	28G	20E	23E	26F	29G	106-108
109-111	13B	18B	22C	24C	18C	20C	23D	26D	20C	22C	25D	28D	22D	24E	26G	30G	22E	25E	28G	31G	109-111
112-114	14B	19C	24C	26C	20C	22D	25D	28D	22C	24C	27D	30D	24D	26E	28G	32H	24E	27F	30G	33G	112-114
115-117	15C	20C	26C	28D	22C	24D	27D	30E	24C	26D	29D	32E	26E	28E	30G	34H	26E	29F	32G	35H	115-117
118-120	16C	21C	28D	30D	23D	26D	29E	32E	26C	28D	31E	34E	28E	30E	32G	36H	28E	31F	34H	37H	118-120
Maximum Result for MARK 3 Weapon, -30 OB Mod. (Force Knife / Broadsword)																					
121-123	17D	22D	29D	31D	24D	28E	31E	34E	27D	30D	33E	36E	30E	32E	34G	38H	30E	33F	36H	39H	121-123
124-126	18D	23D	30E	32E	25E	30E	33E	36F	28D	32D	35E	38E	32E	34E	36H	40H	32E	35F	38H	41H	124-126
127-129	19D	24D	31E	33E	26E	31E	35F	38F	29D	34E	37E	40F	33F	36F	38H	42H	34E	37F	41H	44H	127-129
130-132	20D	25E	32E	34E	27E	32F	37F	40F	30E	35E	38F	42F	34F	38F	40H	44H	36E	39F	44H	47I	130-132
133-135	21D	26E	33E	35F	28F	33F	38F	42F	31E	36E	41F	44F	35F	40G	42H	46H	38F	41F	47I	50I	133-135
Maximum Result for MARK 4 Weapon, -15 OB Mod. (2 Handed Sword)																					
136-138	22E	27E	34F	36F	29F	34F	39F	43G	32E	37E	43F	46F	36F	42G	44I	48I	40F	44F	51I	54I	136-138
139-141	23E	28E	35F	37F	30F	35F	40F	44G	33E	38E	45F	48F	37F	44G	47I	51I	42F	47F	55I	58I	139-141
142-144	24E	29F	36F	38F	31F	36F	41G	45G	34E	39F	46F	50F	38G	46G	50I	54I	44F	50G	59I	62I	142-144
145-147	25E	30F	37F	39F	32F	37G	42G	46G	35F	40F	47F	52G	39G	48G	53I	57J	47F	53G	63I	66J	145-147
148-150	26E	31F	38G	40G	33G	38G	43G	47G	36F	41F	48G	54G	40G	50H	56J	60J	50G	56G	67J	70J	148-150
Maximum Result for MARK 5 Weapon (Power Sword)																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

01-0X = Failure/Fumble (Consult *Master Weapons Chart*, pp 65-67 for actual failure/fumble range).

For Power Swords and Force Kinives — If Failure is rolled, roll 1D10: 01-05: charge depleted; 06-08: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 9-10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

For Other Melee Weapons — Weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

Note: Against ***Rolemaster*** ATs use the normal ***Arms Law*** Tables.

Note: Critical type is determined by the type of Weapon (see pg 66).

F = 'E' Slash and 'A' Heat for Power Swords and Force Knives; 'E' critical for other weapons.
G = 'E' Slash and 'B' Heat for Power Swords and Force Knives; 'E' critical for other weapons.
H = 'E' Slash and 'C' Heat for Power Swords and Force Knives; 'E' critical for other weapons.
I = 'E' Slash and 'D' Heat for Power Swords and Force Knives; 'E' critical for other weapons.
J = 'E' Slash and 'E' Heat for Power Swords and Force Knives; 'E' critical for other weapons.

16.2 MARTIAL ARTS ATTACK TABLE: STRIKING

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-02	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-02
03-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	03-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34-36
37-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37-39
40-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	40-42
43-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	43-45
46-48	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	1	2	2	46-48
49-51	0	0	0	0	0	1	1	1	0	0	0	1	0	1	1A	2	1	1	2	3	49-51
52-54	0	0	0	1	0	1	1	2	0	0	1	1	1	1	2A	2	1	2	3	3	52-54
55-57	0	0	1	1	1	1	2	2	0	0	1	2	1	2	2A	3	2	2	4	4A	55-57
58-60	0	0	1	2	1	2	2	3	0	0	2	2	2	2	3A	4A	2	3	4A	5A	58-60
61-63	0	0	1	2	1	2	3	4	0	1	2	3	2	3	4A	4A	3	4	5A	5A	61-63
64-66	0	0	2	3	2	3	3	4	0	1	3	3	3	3A	4A	5A	3	4A	6A	6A	64-66
67-69	0	1	2	3	2	3	4	5	0	1	3	4	3A	4A	5A	6A	4	5A	6A	7A	67-69
70-72	0	1	3	4	3	4	5	5A	1	2	4	4	4A	4A	5A	6A	5A	5A	7A	7A	70-72
73-75	0	1	3	4	3	4	5	6A	1	2	4	5A	4A	5A	6A	7A	5A	6A	8A	8A	73-75
76-78	0	2	4	5	4	5	6A	7A	1	3	5	5A	5A	5A	7A	8A	6A	7A	8A	9A	76-78
79-81	1	2	4	5	4	5A	6A	7A	2	3	5A	6A	5A	6A	7B	8A	6A	7A	9A	9A	79-81
82-84	1	3	5	6A	5A	6A	7A	8A	2	4	6A	7A	6A	7A	8B	9A	7A	8A	9A	10A	82-84
85-87	1	3	5	6A	5A	6A	7A	9A	3	4	6A	7A	6A	7A	9B	10A	7A	9A	10A	11A	85-87
88-90	2	4	5A	7A	6A	7A	8A	9A	3	5A	7A	8A	7A	8A	9B	10A	8A	9A	11A	11A	88-90
91-93	2	4	6A	7A	6A	7A	9A	10A	4	5A	7A	8A	7B	8B	10B	11B	9A	10B	11B	12B	91-93
94-96	2	5A	6A	8A	7A	8A	9A	10A	4	6A	8A	9A	8B	9B	10B	12B	9A	10B	12B	13B	94-96
97-99	3	5A	7A	8A	7A	8A	10A	11A	5A	6A	8A	9A	8B	9B	11C	12B	10A	11B	13B	13B	97-99
100-102	3	5A	7A	9A	8A	9A	10A	12A	5A	7A	9A	10A	9B	10B	12C	13B	10A	12B	13B	14B	100-102
103-105	4A	6A	8A	10B	8B	9B	11B	12B	6A	7A	9B	10B	9B	10B	12C	14B	11B	12B	14B	15B	103-105
Maximum Results For Rank 1 Attacks																					
106-108	4A	6A	8A	10B	9B	10B	11B	13B	6A	8A	10B	11B	10C	11C	13C	14C	11B	13C	15C	15C	106-108
109-111	4A	7A	9A	11B	9B	10B	12B	13B	7A	8A	10B	11B	10C	11C	13C	15C	12B	13C	15C	16C	109-111
112-114	5A	7A	9A	11B	10B	11B	13B	14B	7A	9A	11B	12B	11C	12C	14C	16C	13B	14C	16C	17C	112-114
115-117	5A	8B	10B	12C	10C	11C	13C	15C	7B	9B	11C	13C	11C	13C	15C	16C	13C	15C	16C	17C	115-117
118-120	6A	8B	10B	12C	11C	12C	14C	15C	8B	10B	12C	13C	12C	13C	15C	17C	14C	15C	17C	18C	118-120
Maximum Results For Rank 2 Attacks																					
121-123	6A	9B	10B	13C	11C	12C	14C	16C	8B	10B	12C	14C	12D	14D	16D	18C	14C	16D	18D	19D	121-123
124-126	6A	9C	11C	13C	12C	13C	15C	17C	9C	11C	13C	14C	13D	14D	17D	18D	15C	17D	18D	19D	124-126
127-129	7B	9C	11C	14D	12D	13D	15D	17D	9C	11C	13D	15D	13D	15D	17D	19D	15D	17D	19D	20D	127-129
130-132	7B	10C	12C	14D	13D	14D	16D	18D	10C	12C	14D	15D	14D	15D	18D	20D	16D	18D	20D	21D	130-132
133-135	8C	10D	12D	15D	13D	14D	17D	18D	10D	12D	14D	16D	14D	16D	18E	20D	17D	18D	20D	21D	133-135
Maximum Results For Rank 3 Attacks																					
136-138	8C	11D	13D	15D	14D	15D	17D	19D	11D	13D	15D	16D	15E	16E	19E	21E	17D	19E	21E	22E	136-138
139-141	8D	11D	13D	16E	14E	15E	18E	20E	11D	13D	15E	17E	15E	17E	20E	22E	18E	20E	22E	23E	139-141
142-144	9D	12E	14E	16E	15E	16E	18E	20E	12E	14E	16E	17E	16E	17E	20E	22E	18E	20E	22E	23E	142-144
145-147	9E	12E	14E	17E	15E	16E	19E	21E	12E	14E	16E	18E	16E	18E	21E	23E	19E	21E	23E	24E	145-147
148-150	10E	13E	15E	18E	16E	17E	20E	22E	13E	15E	17E	19E	17E	19E	22E	24E	20E	22E	24E	25E	148-150
Maximum Results For Rank 4 Attacks																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All critical results are rolled on the *Martial Arts Striking Critical Table.*
Note: Bare hands attacks by non-martial artists are Rank 1 attacks.
01-02 = Failure. Attack lost, no effect.

16.3 MARTIAL ARTS ATTACK TABLE: SWEEPS & THROWS

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-02	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-02
03-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	03-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34-36
37-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37-39
40-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40-42
43-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43-45
46-48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46-48
49-51	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49-51
52-54	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52-54
55-57	1A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55-57
58-60	1A	1A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58-60
61-63	1A	1A	1A	1	1A	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	61-63
64-66	1A	1A	1A	1A	1A	1A	1	0	1	1	0	0	1	0	0	0	0	0	0	0	64-66
67-69	1A	1A	1A	1A	1A	1A	1	1	1A	1	0	0	1A	1	0	0	0	0	0	0	67-69
70-72	1A	1A	1A	2A	2A	1A	1A	1	1A	1A	1	0	1A	1	0	0	0	0	0	0	70-72
73-75	1A	2A	2A	2A	2A	2A	1A	1A	1A	1A	1	1	2A	1A	1	0	0	0	0	0	73-75
76-78	1A	2A	2A	2A	2A	2A	2A	2A	1A	1A	1A	1	2A	2A	1	1	0	0	0	0	76-78
79-81	1A	2A	2A	2A	2A	2A	2A	2A	1A	2A	2A	1A	2A	2A	1A	1	0	0	0	0	79-81
82-84	2A	2A	2A	3A	3A	2A	2A	2A	1A	2A	2A	2A	3A	2A	2A	1A	0	0	0	0	82-84
85-87	2A	2A	3A	3A	3A	3A	3A	3A	2A	2A	2A	2A	3A	3A	2A	2A	0	0	0	0	85-87
88-90	2A	2A	3A	3A	3A	3A	3A	3A	2A	2A	3A	3A	3A	3A	3A	2A	1	0	1	0	88-90
91-93	2B	3B	3B	3B	3B	3B	3A	3A	2B	2A	3A	3A	4B	3A	3A	3A	1	1	1A	0	91-93
94-96	2B	3B	3B	4B	3B	3B	3A	4A	2B	3A	3A	3A	4B	4A	3A	3A	1A	1	2A	1	94-96
97-99	2B	3B	4B	4B	4B	4B	4A	4A	2B	3A	4A	4A	4B	4A	4A	4A	2A	1A	2A	1	97-99
100-102	2B	3B	4B	4B	4B	4B	4A	4A	2B	3A	4A	4A	5B	4A	4A	4A	2A	2A	3A	2A	100-102
103-105	2B	3B	4B	5B	4B	4B	4B	5B	2B	3B	4B	5B	5B	5B	5B	5B	3A	2A	3A	2A	103-105
Maximum Results For Rank 1 Attacks																					
106-108	2C	3C	4C	5C	4C	4C	5B	5B	3C	4B	5B	5B	5C	5B	5B	5B	3A	3A	4A	3A	106-108
109-111	2C	3C	4C	5C	5C	4C	5B	5B	3C	4B	5B	5B	5C	5B	5B	6B	3A	3A	4A	4A	109-111
112-114	2C	4C	5C	5C	5C	5C	5B	6B	3C	4B	5B	6B	6C	6B	6B	6B	4A	4A	5A	4A	112-114
115-117	3C	4C	5C	6C	5C	5C	5C	6C	3C	4C	6C	6C	6C	6C	6C	6C	4B	4B	5B	5B	115-117
118-120	3C	4C	5C	6C	5C	5C	6C	6C	3C	4C	6C	7C	6C	6C	7C	7C	5B	5B	6B	5B	118-120
Maximum Results For Rank 2 Attacks																					
121-123	3D	4D	5D	6D	5D	5D	6C	7C	3D	5C	6C	7C	7D	7C	7C	7C	5B	5B	7B	6B	121-123
124-126	3D	4D	6D	6D	6D	6D	6C	7C	3D	5C	7C	7C	7D	7C	7C	8C	5C	6C	7C	7C	124-126
127-129	3D	4D	6D	7D	6D	6D	7D	7D	4D	5D	7D	8D	7D	7D	8D	8D	6C	6C	8C	7C	127-129
130-132	3D	5D	6D	7D	6D	6D	7D	8D	4D	5D	7D	8D	8D	8D	8D	9D	6C	7C	8C	8C	130-132
133-135	3D	5D	6D	7D	6D	6D	7D	8D	4D	5D	8D	9D	8D	8D	9D	9D	7D	7D	9D	8D	133-135
Maximum Results For Rank 3 Attacks																					
136-138	3E	5E	7E	7E	7E	7E	7D	8D	4E	6D	8D	9D	8E	8D	9D	10D	7D	8D	9D	9D	136-138
139-141	3E	5E	7E	8E	7E	7E	8E	9E	4E	6E	8E	9E	9E	9E	9E	10E	7D	8D	10D	10D	139-141
142-144	3E	5E	7E	8E	7E	7E	8E	9E	4E	6E	9E	10E	9E	9E	10E	11E	8E	9E	10E	10E	142-144
145-147	3E	5E	7E	8E	7E	7E	8E	9E	4E	6E	9E	10E	9E	9E	10E	11E	8E	9E	11E	11E	145-147
148-150	4E	6E	8E	9E	8E	8E	9E	10E	5E	7E	10E	11E	10E	10E	11E	12E	9E	10E	12E	12E	148-150
Maximum Results For Rank 4 Attacks																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All critical results are rolled on the *Martial Arts Sweeps and Throws Critical Table.*

Note: Bare hands attacks by non-martial artists are Rank 1 attacks.

Note: Humanoid type creatures attempting to subdue (without major injury) other humanoid types may use this table or the *Envelop/Entangle Attck Table* (both with a maximum result of 105).

01-02 = Failure. Attack lost, no effect.

16.4 ENTANGLE / ENVELOP ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-0X	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-0X
0X-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0X-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34-36
37-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37-39
40-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40-42
43-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43-45
46-48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46-48
49-51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49-51
52-54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52-54
55-57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55-57
58-60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58-60
61-63	1A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61-63
64-66	1A	1	0	0	1A	1	0	0	1A	1	0	0	1	1	0	0	0	0	0	0	64-66
67-69	1A	1A	1	1	1A	1A	0	0	1A	1	0	0	1	1	0	0	0	0	0	0	67-69
70-72	1A	1A	1	1	1A	1A	1	1	1A	1A	1	1	2A	1A	1	0	0	0	0	0	70-72
73-75	1A	1A	1A	1	2A	1A	1	1	1A	1A	1	1	2A	2A	1	0	0	0	1	0	73-75
76-78	1A	1A	2A	2A	2A	2A	1A	1	1A	1A	1	1	2A	2A	1	1	0	0	1	0	76-78
79-81	1A	2A	2A	2A	2A	2A	2A	2A	1A	2A	1A	2	2A	2A	1	1	0	0	1	0	79-81
82-84	1A	2A	2A	3A	2A	2A	2A	2A	2A	2A	2A	2A	3A	3A	2	1	0	0	2A	1	82-84
85-87	1A	2A	3A	3A	3A	3A	2A	3A	2A	2A	2A	3A	3A	3A	2A	2	0	0	2A	1	85-87
88-90	1A	2A	3A	3A	3A	3A	3A	3A	2A	2A	3A	3A	3A	3A	3A	2	1A	1	3A	2	88-90
Maximum Results For MARK 1 Weapon																					
91-93	2B	2A	3A	4A	3A	3A	3A	4A	2A	3A	3A	4A	4A	4A	3A	3	1A	1	3A	2	91-93
94-96	2B	3A	4A	4A	4A	4A	4A	4A	2A	3A	4A	4A	4A	4A	4A	4	1A	2A	4A	3	94-96
97-99	2B	3A	4A	5A	4A	4A	4A	5A	2A	3A	4A	5A	4A	5A	4A	4A	2A	2A	5A	4	97-99
100-102	2B	3A	4A	5A	4A	4A	4A	5A	3A	3A	4A	5A	5A	5A	5A	5A	2A	3A	5A	4	100-102
103-105	2B	3B	5B	5B	4B	5B	5B	6B	3B	4B	5B	6A	5B	5B	5A	5A	3A	4A	6A	5A	103-105
Maximum Results For MARK 2 Weapon and Small Attacks																					
106-108	2C	4C	5B	6B	5B	5B	5B	6B	3B	4B	5B	6A	6B	6B	6A	6A	3A	4A	6A	6A	106-108
109-111	2C	4B	5B	6B	5B	5B	6B	7B	3B	4B	6B	7A	6B	6B	6A	7A	4A	5A	7A	6A	109-111
112-114	2C	4B	6B	7B	5B	6B	6B	7B	3B	4B	6B	7A	6B	7B	7A	7A	4A	5A	8A	7A	112-114
115-117	2C	4C	6C	7C	5C	6C	6C	7C	4C	5C	7C	8B	7C	7C	7B	8B	5B	6A	8B	8A	115-117
118-120	2C	4C	6C	7C	6C	6C	7C	8C	4C	5C	7C	8B	7C	7C	8B	8B	5B	7B	9B	8A	118-120
Maximum Results For MARK 3 Weapon and Medium Attacks																					
121-123	3D	5C	7C	8C	6C	7C	7C	8C	4C	5C	8C	9B	7C	8C	8B	9B	6B	7B	9B	9A	121-123
124-126	3D	5C	7C	8C	6C	7C	7C	9C	4C	5C	8C	9C	8C	8C	9C	10C	6C	8C	10C	9A	124-126
127-129	3D	5D	7D	9D	7D	7D	8D	9D	4D	6D	8D	10C	8D	9D	9C	10C	7C	8C	10C	10B	127-129
130-132	3D	5D	8D	9D	7D	8D	8D	10D	4D	6D	9D	10C	8D	9D	10C	11C	7C	9C	11C	11B	130-132
133-135	3D	5D	8D	9D	7D	8D	9D	10D	5D	6D	9D	11D	9D	9D	10D	11D	8D	10D	12D	11C	133-135
Maximum Results For MARK 4 Weapon and Large Attacks																					
136-138	3E	6D	8D	10D	7D	8D	9D	11D	5D	67D	10D	11D	9D	10D	11D	11D	8D	10D	12D	12C	136-138
139-141	3E	6E	9E	10E	8E	9E	9E	11E	5E	7E	10E	12E	9E	10E	11D	13D	9D	11D	13D	13D	139-141
142-144	3E	6E	9E	11E	8E	9E	10E	12E	5E	7E	11E	12E	10E	11E	12E	13E	9E	11E	13E	13D	142-144
145-147	3E	6E	9E	11E	8E	9E	10E	12E	5E	7E	11E	13E	10E	11E	12E	14E	10E	12E	14E	14E	145-147
148-150	4E	7E	10E	12F	9E	10E	11E	13F	6E	8E	12E	14F	11E	12E	13E	14F	11E	13E	15F	15F	148-150
Maximum Results For MARK 5 Weapon and Huge Attacks																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All Criticals are *Grappling*

Note: An F-severity critical result indicates an E critical roll and a C critical roll

01-0X = Failure (Consult *Master Weapons Chart*, pp65-67, for actual failure range). If Failure is rolled, roll 1D10: 01-05: weapon malfunction, roll on *Weapon Malfunction Chart* (pg 63); 6-10: weapon fumble, roll on *Weapon Fumble Table* (pp 95-96).

16.5 FALL / CRUSH ATTACK TABLE

	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
01-02	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	01-02
03-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	03-30
31-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	31-33
34-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2A	34-36
37-39	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2A	0	1	3A	3A	37-39
40-42	0	0	0	0	0	0	1	2	0	0	0	1	0	1	2A	3A	1	2	4A	4A	40-42
43-45	0	0	0	1	0	1	2	3	0	0	1	2	1	2A	3A	4A	2	3A	5A	6A	43-45
46-48	0	0	1	1	1	1	3	4	0	0	1	3	1A	3A	4A	5A	3	4A	7A	7A	46-48
49-51	0	0	1	2	1	2	4	5A	0	0	2	4	2A	4A	5A	7A	4A	5A	8A	8A	49-51
52-54	0	0	2	3	2	3	5	6A	0	1	3	5A	3A	5A	6A	8A	5A	6A	9A	9A	52-54
55-57	0	0	3	4	3	4	6A	7A	0	1	4	6A	4A	6A	7A	9A	6A	8A	10A	11A	55-57
58-60	0	1	4	5	4	5A	7A	9A	0	2	5A	7A	5A	7A	8A	10A	7A	9A	11A	12A	58-60
61-63	0	1	5	6A	5A	6A	8A	10A	1	3	6A	8A	6A	8A	10A	11A	8A	10A	13A	13A	61-63
64-66	0	2	6	7A	6A	7A	9A	11A	1	4	7A	9A	7A	9A	11A	13A	9A	11A	14A	14A	64-66
67-69	0	3	6A	8A	7A	8A	10A	12A	2	5A	8A	10A	8A	10A	12A	14A	10A	12A	15A	16A	67-69
70-72	1	4	7A	9A	8A	9A	11A	13A	3	6A	9A	11A	8A	11A	13A	15A	11A	14A	16A	17A	70-72
73-75	1	5A	8A	10A	8A	10A	12A	14A	4	7A	10A	12A	9A	12A	14A	16A	12A	15A	17A	18A	73-75
76-78	2	5A	9A	11A	9A	11A	13A	16A	5A	8A	11A	13A	10A	13A	15A	17B	14A	16A	19B	19B	76-78
79-81	3	6A	10A	12A	10A	12A	14A	17A	6A	9A	12A	14A	11A	14A	16B	19B	15A	17A	20B	21B	79-81
82-84	3A	7A	11A	13A	11A	13A	15A	18B	7A	10A	13A	15B	12A	15B	18B	20B	16B	18B	21B	22B	82-84
85-87	4A	8A	12A	14A	12A	14A	16A	19B	8A	11A	14A	16B	13A	16B	19B	21B	17B	20B	22B	23C	85-87
88-90	5A	9A	12A	15A	13A	15A	17A	20B	9A	12A	15A	17B	14B	17B	20B	22C	18B	21B	23C	24C	88-90
91-93	6A	9A	13A	16A	14A	16A	18B	21B	9A	13A	16B	18C	15B	18B	21C	24C	19B	22B	25C	26C	91-93
94-96	6A	10A	14A	17B	15A	17B	20B	23C	10A	14A	17B	20C	16B	19B	22C	25C	20B	23C	26C	27C	94-96
97-99	7A	11A	15A	18B	16B	17B	21B	24C	11A	15A	17B	21C	16B	20C	23C	26C	21C	24C	27C	28C	97-99
100-102	8A	12A	16B	19B	16B	18B	22B	25C	12A	16A	18B	22C	17B	21C	24C	27C	22C	25C	28C	29C	100-102
103-105	9A	13A	17B	20B	17B	19B	23B	26C	13A	16B	19C	23C	18C	22C	25C	28C	23C	27C	29C	31C	103-105
Maximum Results For Falls of 1'-10' and Small Attacks																					
106-108	9A	13B	18B	21C	18B	20B	24C	27C	14A	17B	20C	24D	18C	23C	27D	30D	24C	28D	31D	32D	106-108
109-111	10A	14B	18B	22C	19B	21B	25C	28D	15A	18B	21C	25D	20C	24C	28D	31D	25C	29D	32D	33D	109-111
112-114	11A	15B	19B	23C	20B	22C	26C	30D	16B	19B	22C	26D	21C	25C	29D	32D	27D	30D	33D	34D	112-114
115-117	11B	16B	20C	24C	21C	23C	27C	31D	17B	20B	23D	27D	22C	26C	30D	33D	28D	31D	34D	36D	115-117
118-120	12B	17B	21C	25D	22C	24C	28C	32D	18B	21B	24D	28D	23D	27D	31D	34D	29D	33D	35D	37D	118-120
Maximum Results For Falls of 11'-50' and Medium Attacks																					
121-123	13B	17C	22C	26D	23C	25C	29C	33D	18B	22C	25D	29D	24D	28D	32D	36D	30D	34D	37D	38E	121-123
124-126	14B	18C	23C	27D	23C	26C	30C	34D	19B	23C	26D	30D	24D	29D	33D	37E	31D	35D	38E	39E	124-126
127-129	14B	19C	24C	28D	24C	27C	31C	35D	20C	24C	27D	31E	25D	30D	35E	38E	32D	36E	39E	41E	127-129
130-132	15C	20C	24C	29D	25C	28D	32D	37E	21C	25C	28D	32E	26D	31D	36E	39E	33E	37E	40E	42E	130-132
133-135	16C	21C	25D	30E	26D	29D	33D	38E	22C	26C	29E	33E	27E	32E	37E	40E	34E	39E	41E	43E	133-135
Maximum Results For Falls of 51'-100' and Large Attacks																					
136-138	17C	21D	26D	31E	27D	30D	34D	39E	23C	27D	30E	34E	28E	33E	38E	42E	35E	40E	43E	44E	136-138
139-141	17D	22D	27D	32E	28D	31D	35D	40E	24D	28D	31E	35E	29E	34E	39E	43E	36E	41E	44E	46E	139-141
142-144	18D	23D	28E	33E	29E	32E	36E	41E	25D	29D	32E	36E	30E	35E	40E	44E	37E	42E	45E	47E	142-144
145-147	19E	24E	29E	34E	30E	33E	37E	42E	26E	30E	33E	37F	31E	36E	41E	45E	38E	43E	46E	48E	145-147
148-150	20F	25F	30F	35F	31F	34F	39F	44F	27F	31F	34F	39F	32F	38F	43F	47F	40F	45F	48F	50F	148-150
Maximum Results For Falls of Over 100' and Huge Attacks																					
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Note: All criticals are *Crush*.
Note: For falls, add 10 to the roll for each 3 meters fallen (other factors may modify this).
Note: An F-severity critical result indicates an E critical roll and a C critical roll.

17.1 PUNCTURE CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Zip	Glancing blow. No extra damage. +0.	+1 hit	+2 hits	+3 hits
06-10	+1 hit	+2 hits	+3 hits	+4 hits	Unbalance foe with a nice grazing strike. You gain initiative +5 hits.
11-15	You receive initiative for next round. +1 hit	Glancing low to foe's side. +3 hits. You receive initiative next round.	Blow to foe's side. +5 hits. You receive initiative next round.	+2 hits Foe must parry for next round.	+3 hits Foe must parry for next round.
16-20	Foe must parry next round. +1 hit.	Blow to side. +2 hits. Foe must parry next round at -10.	Blow across side. Foe must parry next round at -20. +3 hits.	Minor side wound. Foe fights at -10. You have initiative next rnd.	Stun foe for 1 round. Add +20 to your next attack.
21-35	Foe must parry next round. +2 hits. Add +10 to next attack.	Foe must parry next round at -20. +2 hits.	You wound foe along side of chest. Foe is stunned 1 round and takes 1 hit per round.	You wound foe along side of hip. Foe is stunned 1 round and takes 2 hits per round.	Foe receives minor side wound. +2 hits. Foe is at -10. Foe takes 2 hits per round.
36-45	Minor calf wound. Foe receives 1 hit per round.	Minor calf wound. Foe takes 1 hit per round. +2 hits.	Minor calf wound. Foe takes 2 hits per round.	Minor thigh wound. Foe takes 3 hits per round.	Thigh strike. If foe has leg armor, +3 hits. If foe has no armor, +2 hits and 3 hits per round.
46-50	Strike along foe's back. +2 hits. Foe must now parry next round at -30.	Strike along foe's back. Foe is stunned for 1 round and takes 1 hit per round.	Strike across foe's back stuns foe for 2 rounds. Foe takes 1 hit per round.	Strike to foe's lower back. Foe is stunned and unable to parry next round. +6 hits.	Strike to foe's lower back. Foe takes 3 hits per round. +5 hits. Foe is stunned and unable to parry during next round.
51-55	Strike to foe's chest. Foe must parry next round at -25. Foe takes 2 hits per round.	Minor chest wound. Foe takes 2 hits per round. +3 hits. Foe must parry for next 2 rnds.	Minor chest wound. Foe takes 2 hits per round. +3 hits. Foe is stunned for 2 rounds.	Strike to chest. +5 hits. Foe takes 3 hits per round and fights at -15. Foe must parry next round.	Chest wound. Foe takes 4 hits per round. +5 hits. Foe fights at -10. Foe is stunned and unable to parry next round.
56-60	Minor thigh wound. Foe takes 2 hits per round. +2 hits. Foe is stunned next round.	Minor thigh wound. Foe takes 2 hits per rounds. +3 hits. Foe is stunned and unable to parry next round.	Minor thigh wound. +5 hits. Foe takes 2 hits per round and is at -10. Foe is stunned for 2 rounds.	Strike to thigh. Foe takes 3 hits per round. Foe is stunned and unable to parry for the next round. +3 hits.	Thigh wound. Foe takes 5 hits per round. +6 hits. Foe is stunned and unable to parry next round.
61-65	Minor forearm wound. +2 hits. Foe takes 2 hits per round. Foe is at -10.	Minor forearm wound. Foe is stunned during next round. +2 hits. Foe is at -10 and takes 2 hits per round.	Forearm wound. Foe takes 2 hits per round and is at -10. +3 hits. Foe is stunned for 2 rounds.	Forearm wound. Foe takes 3 hits per round and is at -10. +3 hits. Foe is stunned for 2 rounds.	Forearm wound. Foe takes 3 hits per round and is at -15. +5 hits. Foe is stunned for 2 rounds.
66	Strike through foe's non-weapon shoulder. Arm is useless. +10 to your next attack. Foe is stunned for 3 rnds.	Strike shatters elbow in foe's weapon arm. +3 hits. Arm is useless. Foe is stunned 4 rnds and cannot parry for 2 rnds.	Strike shatters foe's knee. Foe is knocked down, is at -90, and stays down for 3 rounds. Foe is unable to parry 2 rounds.	Strike to side of head. Foe is knocked out for 6 hours. +10 hits. If foe has no helmet, you kill him.	Strike through both of foe's lungs. Foe drops and passes out. Foe dies in 6 rounds. Add +10 to your next attack.
67-70	Strike along foe's neck. +5 hits. Foe is stunned for 3 rounds and cannot parry next round.	Strike to foe's neck area. Foe takes 3 hits per round and is at -5. Foe is stunned for 2 rounds.	Strike along foe's neck. Foe is stunned for 4 rounds and cannot parry for 2 rounds. Add +15 to your next attack.	Strike foe in shoulder. +3 hits. Foe is stunned and unable to parry for 2 rounds. Foe is at -20.	Strike foe's shoulder. Sever muscle and tendons. Arm is useless. Foe takes 3 hits per round. Foe is stunned for 6 rounds.
71-75	Strike lower leg. Tear tendons. Foe is at -25. +3 hits. Foe is stunned and unable to parry next round.	Strike to foe's calf. Slash muscle. Foe is at -40. +3 hits. Foe is stunned and unable to parry for 2 rounds.	Strike to lower leg. Foe is stunned and unable to parry for 2 rounds. +5 hits. Foe is at -50. Slash muscle and tendons.	Strike to lower leg. Foe is at -50. Slash muscle and cartilage. +6 hits. Foe is stunned and unable to parry for 2 rounds.	Strike through lower leg. Foe is stunned and unable to parry for 3 rounds. Sever muscle. Foe is at -75.
76-80	Strike to foe's upper arm. +3 hits. Foe takes 3 hits per round and is at -25. Foe is stunned for 2 rounds.	Strike through muscle in foe's non-weapon arm. Foe is at -30 and takes 3 hits per round. Foe is stunned for 3 rounds.	Strike foe in shield arm. Tear muscle and tendons. Foe takes 3 hits per round, fights at -25. Foe is stunned 6 rounds.	Strike foe in non-weapon arm. Arm is useless. Foe is stunned for 6 rounds. Foe takes 3 hits per round. +12 hits.	Strike foe in weapon arm, bone is broken. Foe is stunned and unable to parry for 3 rounds. +10 hits.
81-85	Side wound. Foe takes 5 hits per round and is stunned for 6 rounds. Add +20 to your next attack.	Side wound. +6 hits. Foe takes 5 hits per round. Foe is at -25. Foe is stunned and unable to parry for 3 rounds.	Side wound. +6 hits. Foe takes 5 hits per round. Foe is at -25. Foe is stunned and unable to parry for 3 rounds.	Major abdomenal wound. Foe takes 6 hits per round. +10 hits. Foe is stunned and unable to parry for 3 rounds. Foe is at -20.	Strike through foe's back severs a vein. Foe is stunned and unable to parry for 12 rounds — then he dies.
86-90	Strike foe in back. Foe is at -20 and takes 3 hits per round. Foe is stunned and unable to parry 2 rounds.	Strike to back of head. If foe has no helmet, he dies. If foe has a helmet, +6 hits and foe is down for 2 rounds.	Strike to back of head. If foe has no helmet, he dies. If foe has a helmet, +6 hits and foe is down for 2 rounds.	Strike through foe's kidneys. Foe drops. +9 hits. Foe dies after 6 rounds of very intense agony. Sad.	Strike through leg severs an artery. Foe drops, lapses into unconsciousness, and dies after 12 rounds.
91-95	Rip off foe's ear. +3 hits. Foe takes 2 hits per round, hears at -50. Foe is stunned and not able to parry for 2 rounds.	Strike through foe's hip. Foe takes 3 hits per round. +5 hits. Foe is stunned next round. Foe is at -25.	Strike through foe's chest, severs a vein. Foe drops immediately and dies in 9 rounds due to shock and blood loss.	Strike through foe's side destroys a variety of organs. Foe fights normally for 6 rounds then dies.	Sever artery in foe's arm. Foe is stunned for 12 rounds and then dies.
96-99	Strike foe's nose. There is a permanent scar. Foe takes 3 hits/rnd. Foe is stunned and unable to parry 3 rnds.	Strike through foe's cheek. Foe drops and dies after 9 rounds of incapacity. Add +20 to your next attack.	Strike through foe's neck breaks backbone and severs spine. Foe is paralyzed from the neck down — permanently.	Nail sucker in lower back. Internal bleeding and shock kill foe in 6 rounds. Foe is down and out.	Shot through heart sends foe reeling back 10 feet to a spot suitable for dying. Weapon is stuck in reeling foe.
100	Strike through neck. Sever vein and artery. Foe cannot breathe. Foe drops and dies of a massive heart failure.	Strike through foe's eye. Foe dies instantly. Add +10 to all friendly attacks within 30 feet next round.	Shot through both ears proves effective. Foe dies instantly. Add +20 to your next 6 round. Pretty shot.	Strike through brain makes life difficult for foe. You have a half round left to act. Add +20 to your next attack.	Strike through foe's eye. Foe dies instantly. Add +25 to your next attack. Carry on.

17.2 SLASH CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Zip.	Weak strike yields no extra damage. +0	+1 hit	+ 2 hits	+3 hits
06-10	+1 hit.	+2 hits	+3 hits	+4 hits	Unbalance foe. +5 hits. You receive initiative next round.
11-15	You receive initiative next round. +1 hit.	Glancing blow to foe's side. +3 hits. You receive initiative next round.	Blow to foe's side yields +6 hits. You receive initiative next round.	+3 hits. Foe must parry for next round of action.	+4 hits. Foe must parry next round of action.
16-20	Foe must parry next round. +1 hit.	Blow to side. +2 hits. Foe must parry next round at -10.	Blow to side. +4 hits. Foe must parry next round -20.	Minor side wound. Foe fights at -10. +2 hits. You receive initiative next round.	Stun foe for 1 round. Foe may not parry. Add +10 to your next swing.
21-35	Foe must parry next round. +2 hits. Add +10 to next swing.	Foe must parry next round at -20. +2 hits.	You break foe's rib. 3 extra hits. Foe is stunned next round.	Strike to side. Foe is stunned for next round and cannot parry. +3 hits.	Foe receives minor side wound, fights at -10 and takes 1 hit per round. +3 hits.
36-45	Minor calf wound. Foe receives 1 hit per round.	Minor calf wound. Foe takes 1 hit per round. +2 hits.	You slash foe's leg. Foe takes 2 hits per round. +2 hits.	You slash foe's upper leg and deliver 3 extra hits. Foe takes 2 hits a round.	Blow to foe's upper leg. If foe has leg armor +5 hits. If foe has no armor, +3 hits and +3 hits per rnd.
46-50	Blow to foe's back. +2 hits. Foe must parry next round at -30.	Blow to foe's back. Foe must parry next round at -30. +4 hits.	Blow to foe's back stun foe 1 round. Foe may not parry. +3 hits and foe takes 1 hit/rnd.	Strike foe's lower back. Foe may not parry and is out next round. +3 hits. Foe takes 2 hits per round.	Strike to foe's lower back. Foe may not parry and is out next round. +4 hits. Foe takes 3 hits per round.
51-55	Blow to foe's chest. Foe must parry next round -25. Wound gives 1 hit per round. +2 hits.	Minor chest wound. Foe takes 1 hit/rnd and must parry next 2 rnds. +3 hits. Foe fights -5.	Minor chest wound. +4 hits. Foe takes 2 hits per round and fights at -10. Foe must parry next rnd.	Medium chest wound. +5 hits. Foe takes 3 hits per round, fights at -15. and must parry next round.	Chest wound. Foe takes 4 hits per round, is at -10, and is stunned 2 rounds. +6 hits.
56-60	Minor thigh wound. Foe takes 2 hits per round and must parry next round. +3 hits.	Minor thigh wound. Foe takes 2 hits per round. +4 hits. Foe must parry next two rounds.	Minor thigh wound. Foe takes 2 hits per round. +5 hits. Foe is stunned next round.	Medium thigh wound. +6 hits. Foe takes 2 hits per round and is stunned 2 rounds.	Thigh wound. Foe is stunned for 2 rounds. +8 hits. Foe takes 5 hits a round.
61-65	Minor forearm wound. +3 hits. Foe takes 2 hits per round and is at -10.	Minor forearm wound. Foe is stunned next rnd, takes 2 hits per rnd, and is at -10. +4 hits.	Medium forearm wound. +4 hits. Foe takes 3 hits per round, is at -10, and is stunned next rnd.	Medium forearm wound. +4 hits. Foe takes 3 hits per round, is at -10, and is stunned next 2 rounds.	Forearm wound. Foe is stunned for 2 rounds. +6 hits. Foe takes 3 hits per round and is at -15.
66	You shatter shoulder in foe's non-weapon arm. Arm is useless. +10 next swing. Foe is stunned 3 rounds. +9 hits. Your initiative.	Shatter elbow in foe's weapon arm. +8 hits. Foe is stunned 4 rounds and cannot parry during first 2 rounds.	You shatter foe's knee. Foe is knocked down. +6 hits. Foe at -90 and is down for 3 rounds. (and cannot parry).	You knock foe out for 6 hours with a strike to side of head. +15 hits. If foe has no helmet, you kill him instantly.	Sever foe's weapon arm. +12 hits. Foe expires in 12 rounds, drops immediately. Add +10 to your next swing.
67-70	Slash foe's neck. +6 hits. Foe is stunned for 3 rounds and cannot parry during next round.	Blow to foe's neck area. Foe takes 3 hits per round and fights at -5. Stun foe 2 rounds. +7 hits.	Slash foe's neck. Foe is stunned 4 rounds and cannot parry during next 2 rounds. +8 hits. +10 next round.	Slash muscle in foe's shoulder area. +5 hits. Foe is stunned 3 rounds, and is at -20. Add +10 to your next swing.	Slash tendons and crush the bone in foe's shield shoulder. Arm useless and foe takes 2 hits per round. Stun foe 4 rounds.
71-75	Slash tendons in foe's lower leg. Foe at -30 and takes 2 hits per round. +4 hits. Stun foe 2 rounds. Poor sucker.	Slash muscle in foe's calf. Foe is stunned for 3 rounds and cannot parry during next round. +6 hits. Foe at -40.	Slash muscle and tendons in foe's lower leg. Foe is stunned for 2 rounds and cannot parry. +7 hits. Foe at -45.	Slash muscle and sever tendons in foe's lower leg. Foe is stunned for 3 rounds and cannot parry for next 2 rounds. Foe is at -50.	Slash foe's lower leg and sever muscle and tendons. Foe at -70. +8 hits. Stun foe 6 rounds.
76-80	Slash foe's upper arm. +5 hits. Foe takes 3 hits per round and is at -25. Foe is stunned and unable to parry 2 rounds.	Slash muscle in foe's non-weapon arm. Foe is at -30 and takes 3 hits per round. Foe is stunned and unable to parry for 2 rounds. +6 hits.	Slash muscle and tendons in foe's non-weapon arm. +9 hits. Foe takes 4 hits per round and arm is useless. Foe is stunned 6 rounds.	Slash muscle and tendons in foe's weapon arm. Arm is useless and foe is stunned 4 rounds. Foe cannot parry next 2 rounds. +10 hits.	Slash tendons and break bone in foe's non-weapon arm. Arm is useless. +12 hits. Foe is stunned and unable to parry for next 3 rounds.
81-85	Slash foe in side. +6 hits and a major wound. Foe takes 6 hits/rnd, stunned 5 rnds. Add +20 to your next swing.	Slash foe in side. +7 hits and a major wound. Foe takes 6 hits per round. Foe is stunned and cannot parry for next 2 rounds.	Strike to foe's side. +8 hits. Foe takes 4 hits per round and is at -20. Foe is stunned and cannot parry for next 2 rounds.	Major abdomenal wound. +10 hits. Foe takes 8 hits per round, is stunned for 4 rnds, and is unable to parry for next 2 rnds. Foe at -10.	Sever opponent's hand. +5 hits. Foe is stunned and unable to parry for next 12 rounds. Foe then dies.
86-90	Slash foe in back. +8 hits. Foe is stunned and cannot parry for 2 rounds. Wound yields 2 hits a round. Foe at -10.	Stricke to back knocks foe down. Foe is stunned and unable to parry for 3 rounds. +10 hits. Foe takes 3 hits a rnd.	Blast to back breaks bone and knocks foe down. +9 hits and foe at -10. Foe is stunned and unable to parry for 4 rounds.	Sever opponent's hand. +6 hits. Foe is stunned for 6 rounds, unable to parry. Foe then drops and dies 6 rounds later.	Sever foe's leg. +15 hits. Foe drops and lapses into unconsciousness. Foe dies in 9 rounds. Add +10 to your next swing.
91-95	Cut off foe's ear. +3 hits. Foe takes 3 hits per round and hears at -50. Foe is stunned 3 rounds and unable to parry next round.	Strike to foe's hip. +7 hits and foe is stunned 3 rounds. Foe cannot parry next round and fights -20. Add +10 to your next swing.	Sever foe's leg. Foe drops immediately and dies in 6 rounds due to shock and blood loss. +20 hits.	Sever foe's weapon arm. Foe is stunned and unable to parry for next 9 rounds. Foe then dies. +15 hits.	Sever foe's spine. +20 hits. Foe collapses in a second, and is paralyzed from the neck down permanently.
96-99	Slash foe's nose. Minor wound. +2 hits and a permanent scar. Foe takes 2 hits a round and is at -30. Foe stunned 6 rounds.	Strike to foe's head and neck breaks skull and causes massive brain damage. Foe drops and dies in 6 rounds. +20 hits.	Sever foe's non-weapon arm. Foe is stunned, unable to parry for next +18 hits.	Slash foe's side. +20 hits. Foe dies in 3 rounds due to massive internal organ damage. Foe is down and unconscious immediately.	Strike to foe's head destroys brain and makes life difficult for the poor fool. Foe expires in a heap — immediately.
100	Neck strike severs carotid artery and jugular vein. Foe's neck is broken. Foe dies in 1 round of intense agony.	Disembowel foe, killing him instantly.	Destroy foe's eyes. +5 hits and foe is stunned and unable to parry for next 30 rounds.	Impale adversary in heart. +12 hits. Foe dies instantly. Heart is destroyed.	Strike to foe's groin area. +10 hits. All vitals are destroyed immediately. Foe is stunned and unable to parry for 12 rounds.

17.3 SHRAPNEL / AUTOMATIC CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	A grazing shot; no extra hits. Your gun just jammed . . . sorry.	You shoot off a piece of foe's equipment. +0 hits.	Hit foe's weapon, destroying it and breaking one of foe's fingers. +2 hits.	Foe is staggered by your effort. He is stunned next rnd. +6 hits.	Foe urinates in fear. +7 hits.
06-10	Just a nick . . . for +1 hit.	+2 hits.	Foe stunned next rnd. +3 hits.	Foe, impressed with your hail of fire, is stunned for 2 rnds. +7 hits.	You have initiative for the next 3 rnds. +10 hits
11-15	+3 hit.	You have initiative next rnd as foe checks for damage. +4 hits.	Hit foe's side in poorly aimed fire. +9 hits. You have the initiative.	Solid hit to shoulder blade. Foe is stunned for 4 rnds and is unable to parry for 2 rnds. He takes 2 hits/rnd. +9 hits.	Foe fumbles weapon and is unable to parry when he is stunned next rnds. +12 hits.
16-20	Foe may not attack next rnd. +4 hits.	Slash foe's side. He must parry next rnd. +5 hits.	Blows to the sides cause foe to parry for 2 rnds. +9 hits.	Foe takes 3 side strikes. He is stunned for 6 rnds and bleeds, taking 4 hits/rnd. +11 hits. Add 10 to your next action.	Grazing head strikes stun foe for 3 rnds. He takes 2 hits/rnd. +13 hits. Add 25 to next attack.
21-35	You gain initiative next rnd +4 hits.	Foe must parry next rnd at -40 as the metal is too close for comfort. +6 hits.	You shatter one of foe's ribs. Foe is stunned for 2 rnds, takes 2 hits/rnd, and is knocked on his back. +11 hits.	Foe hit in hip and along both sides. He is stunned and unable to parry for 4 rnds, is at -45, and takes 2 hits/rnd. +13 hits.	Several ribs shatter in glancing blows. Foe takes 2 hits/rnd and is stunned for 2 rnds with no parry. +15 hits.
36-45	Blow to foot. Foe receives 1 hit per rnd unless armored. +5 hits.	Strikes to calf and hand give +7 hits. Foe is at -10.	Strike foe's knee and calf. Foe receives 4 hits/rnd and foe is at -40. +12 hits.	Foe doubles over with hits to the shin, thigh, and groin. He receives 5 hits/rnd, is prone for 4 rnds and permanently sterile. +15 hits.	Arm and leg strike. If armored, foe takes +12 hits, If not, he takes +17 hits and is bleeding at 4 hits/rnd, is at -40 and stunned for 10 rnd.
46-50	Glancing shots to back of foe's neck. Foe must parry next rnd at -30. +5 hits.	Strike to the back and upper arm. Foe is stunned and unable to parry for 2 rnds. Foe receives 2 hits/rnd and +8 Hits.	Strike across foe's back and buttocks — ouch. He takes 2 hits/rnd and is stunned for 3 rnds. +13 hits.	Strikes to lower back paralyze foe's legs. He is down (at -80 to all action) and taking 4 hits/rnd.	Multiple back blows send foe flying 10 feet. Unable to parry, foe is stunned for 12 rnds. He takes 6 hits/rnd and is at -70. +19 hits.
51-55	Two strikes to foe's collar area. He is knocked back parrying at -20 next rnd. Foe receives 2 hits/rnd and +6 hits.	Foe hit in side and upper arm +10 hits. He is stunned for 3 rnds and takes 5 hits/rnd.	Foe staggers and parries for 3 rnds after receiving minor wounds to the chest and groin. Foe receives 3 hits/rnd and +15 hits.	Major wounds to foe's chest. He and is stunned and unable to parry for 3 rnds. He takes 5 hits/rnd. +19 hits.	Foe knocked back with chest strikes. Aorta damage causes 20 hits/rnd. Lung lacerations will suffocate foe in 4 rnds. He is prone, meanwhile. +21 hits.
56-60	Two shots to foe's leg. If armored, +4 hits. If not, +10 hits. Foe is stunned for next 3 rnds.	Two strikes to the thigh and one to the forearm sadden foe. Foe receives 4 hits/rnd and +11 hits. Foe is stunned 3 rnds and unable to parry. He is at -50.	Foe stunned for 5 rnds by strikes to the calf and thigh of both legs. He is down and taking 5 hits/rnd and is at -50. +16 hits.	You lacerate foe's thigh and shatter a hip joint. He is in a week long coma taking 5 hits/rnd. +22 hits.	Both thighs and groin very severely slashed. Foe takes 10 hits/rnd, is down and stunned for 20 rnds. +23 hits. Embarrassing.
61-65	Hit along wrist. Foe receives 2 hits/rnd. Foe is stunned next rnd. +10 hits.	Blows along forearm and opposite shoulder. Arms less than useless. Foe receives 4 hits/rnd and 12 hits.	Foe drops possessions after being struck in the arms. Foe takes +17 hits, stunned 5 rnds, -25 on actions, and bleeds. Receives 6 hits/rnd. Give up.	Foe loses hand, and arm is severely mangled. He is unable to parry for 5 rnds and is stunned for 20 rnds. Receives 6 hits/rnd. +24 hits.	You deliver ugly wounds to foe's arms and shoulders. Limbs are useless. Foe is at -60, stunned, and unable to parry for 5 rnds. +25 hits.
66	Strikes to shoulder/collar area. Foe is stunned for 5 rnds and arm is useless. Activity at -30 and foe receives 4 hits per rnd. +55 hits.	Elbow shattered with forearm left dangling. Foe receives 6 hits/rnd as foe sees this and passes out.. +20 hits.	You cut foe down at the knees. Foe is immobilized and at -100. Receives 10 hits/rnd and foe is stunned for 12 rnds.	The side of foe's head springs 3 leaks. Too late to call a plumber; he's dead. Very gory.	You expose foe's chest cavity appropriate for pre med anatomy course. He is dead. +15 to your next action.
67-70	Blow along neck, upper chest and arm. Foe knocked down stunned for 4 rnds. Foe receives 4 hits/rnd. +17 hits.	Neck and arm strikes cause 6 hits/rnd and +14 hits. Foe at -20 and stunned for 5 rnds.	Multiple strikes along the upper body Foe is stunned for 8 rnds and cannot parry for 4 rnds. Receives 2 hits/rnd and +20 hits.	Shoulder smashed. Foe spins back 10 feet. He is stunned and unable to parry for 7 rnds. Arm is useless. Receives 6 hits/rnd. +26 hits.	Muscles and tendons in foe's arm and leg are torn beyond recognition. He takes 12 hits/rnd and is down for 20 rnds. +28 hits.
71-75	Tendons in both legs are slashed. Foe is at -50 and is taking 4 hits/rnd. He is out for 2 rnds and stunned for 5 more. Too bad	Foe's leg riddled. He is at -50 with 4 hits/rnd and also stunned for 5 rnds. +17 hits.	Leg muscles and tendons slashed by strikes to calf and thigh. Foe stunned and unable to parry for 8 rnds, takes 5 hits/rnd, and is at -75. +25 hits.	Hits in the shin, knee, hip, and side, down foe in a convulsive heap. He is down for 24 rnds and at -90. He takes 8 hits/rnd. +27 hits.	Foe loses both legs to your razing assault. He is in shock, taking 14 hits/rnd, and will die anyway in 6 rnds. +30 hits.
76-80	Foe's left side and arm are perforated. Foe is at -40, stunned and unable to parry for 6 rnds. Foe takes 3 hits/rnd and +18 hits.	Foe's left arm takes multiple lacerations. Receives 3 hits/rnd and operates at -40. Foe is stunned next rnd and cannot parry. +18 hits.	Blows to both arms and chest break several indigenous bones. Foe is stunned for 12 rnds, takes 8 hits/rnd, and is unable to parry. +27 hits.	Strike destroys foe's weapon and neatly separates his arm from his bod. Foe is in shock and prone taking 8 hits/rnd. +30 hits.	Bone splintered form one shoulder to the other. Additional thigh wound. Foe is prone taking 14 hits/rnd and equipment is destroyed. +32 hits.
81-85	Foe pummeled in the side and hip. Immobilized until aided. He takes 6 hits/rnd and +20 hits.	Strikes to the side and leg. Foe experiences 9 Hits/rnd for bleeding. Stunned and unable to parry for 5 rnds before passing out from shock. +21 hits.	Several side and back wounds cause foe to parry in a stunned state for the next 13 rnds. Foe takes 9 hits/rnd and +28 hits.	Severe blows to foe's side and abdomen. Foe is stunned and unable to parry for 5 rnds. He is taking 10 hits/rnd and is at -95. +32 hits.	Witless loser charges you as you sever his spine, hand, and lacerate the side of this head. He falls in a heap, quite lifeless.
86-90	Hit foe's back and upper leg. He is bloody and knocked 10 feet away. Foe unable to parry for 5 rnds. 6 hits per rnd, and +18 hits.	Strikes blow away ear and pierce hip. Foe at -30, cannot parry for 2 rnds, stunned for 6 rnds, and takes 8 hits/rnd. +27 hits.	Foe knocked down. Strikes kill an unarmored foe. Otherwise, he is stunned, unable to parry for 12 rnds, receiving 9 hits/rnd. +30 hits.	Sent spinning, foe is struck in the spine, the kidneys, and he loses a hand. This one is history in one rnd. +33 hits.	Disemboweling stream of metal pummels foe's leg, abdomen, and chest. He lapses into unconsciousness before dying in 4 rnds. +35 hits.
91-95	Foe loses one ear, and nose is lacerated. Hearing at -50. Stunned for 10 rnds if armored or out 3 hours if not. Foe receives 5 hits/rnd and +23 hits.	Impacts to middle and upper back, and back of head. If unarmored, foe dies; otherwise, he is stunned for 10 rnds. Takes 8 hits per rnd and +25 hits.	Foe makes an excellent ventilator with holes in the leg, side, and chest. He expires in 1 rnd. +32 hits.	Several strikes take out the liver spleen, and intestines Poor slob fights for one messy rnd then drops. +34 hits.	Spinal shot induces a bizarre twist. Arteries in chest and arm also severed. Foe is paralyzed and dies in 3 rnds. +40 hits.
96-99	Malicious blow to foe's face. He loses nose cheekbone and a part of his skull. Foe is in coma until revived. Receives 4 hits/rnd and +25 hits.	Foe brutalized in strikes to the side, cheek, neck, and brain. Foe dies in 2 prone rnds. Add 10 to your next attack. +35 hits.	Foe knocked back 15 feet without an arm, and with gashes in the neck. He is paralyzed by a broken spine and dies in 8 rnds. +35 hits.	A classic example of unanesthetized surgery. You remove a plethora of vital organs. A bit sloppy. Foe is out and dies in 3 rnds. +35 hits.	A Steady stream nails the sucker in brain, neck, heart, abdomen, and groin. Your allies within 50 feet add +10 to their next attacks. You are out of ammunition.
100	Hip is destroyed. More importantly, the head is messily separated from the shoulders. Bye.	Poor sucker is without the lower half of his body and has a hole where his eye was to boot. It was quick.	Foe takes strikes to the chest, and face. Lungs fill with blood, making breathing difficult. Poor fool expires in 3 messy rnds.	Foe hit in the heart and brain for a prompt demise. Good shot. Add +20 to your next attack	Foe bursts into a bloody pulp. Yuck.

17.4 IMPACT CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Nary a whisper. +0 hits.	Great luck escapes you. No additional damage. +0.	+1hit	+2 hits	+3 hits
06-10	+1 hit	+2 hits	+3 hits	+4 hits	Blast stuns foe for 1 round. +3 hits.
11-15	Foe loses initiative for 1 round. +2 hits.	Foe is spun about. +4 hits. Foe loses initiative 1 round.	Foe is unbalanced. +3 hits and foe must parry 1 round.	Foe is unbalanced. +4 hits and foe must parry 1 round.	Blast stuns foe for 1 round. +4 hits.
16-20	Foe is spun about. +3 hits. Foe loses initiative 1 round.	Blast unbalances foe. +2 hits and foe must parry 1 round.	Foe is unbalanced. +4 hits and foe must parry 1 round.	Foe is unbalanced. +6 hits and foe must parry 1 round.	Blast stuns foe for 1 round. +9 hits.
21-35	Foe is unbalanced. +5 hits. Foe loses 2 rounds of initiative.	Blow unbalances foe. +5 hits and foe must parry 1 round.	Foe is unbalanced. +8 hits and foe must parry 1 round.	Foe is unbalanced. +10 hits and foe must parry 1 round.	Foe reels from blast. +15 hits and foe is stunned for 1 round.
36-45	Foe is unbalanced. +8 hits. Foe loses 2 rounds of initiative.	Blow unbalances foe. +9 hits and foe must parry next round.	Foe is unbalanced. +10 hits and foe is stunned for 1 round	Foe is unbalanced and must parry for 2 rounds. +12 hits.	Foe is spun about and reels backwards 10 feet. +20 hits. Foe is stunned 2 rounds.
46-50	Blow unbalances foe. +10 hits. Foe loses 3 rounds of initiative. Getting better.	Blow unbalances foe. +10 hits and foe is stunned next round.	Foe is unbalanced and must parry for 2 rounds. +12 hits. Add +5 to your next action.	Foe is spun about. +20 hits. Foe is stunned 2 rounds.	Foe is staggered. +20 hits and foe is stunned and unable to parry 1 round.
51-55	Foe is unbalanced. +10 hits. Foe is stunned for 1 round. Grazing blast.	Blow unbalances foe. +12 hits and foe is stunned next round.	Foe is knocked back 5 feet and must parry for the next 2 rounds. +15 hits.	Foe is knocked back 5 feet and must parry for the next 2 rounds. Add +5 to your next action.	Foe is staggered. +20 hits. Foe is stunned 2 rounds and unable to parry next round.
56-60	Foe is unbalanced. +10 hits. Foe is stunned next round.	Foe is spun about. +10 hits and foe is stunned for 2 rounds.	Foe is spun about +12 hits and foe is stunned for 2 rounds.	Foe is staggered. +10 hits. Foe is stunned and unable to parry for 1 round.	Foe is knocked down, +20 hits. Foe is out of action for 2 rounds.
61-65	Foe is unbalanced. +12 hits. Foe is stunned during next round.	Foe is staggered. Poor fool is stunned and unable to parry next round. +10 hits.	Foe is stunned and unable to parry next round. +10 hits. Add 5 to your next action.	Foe is staggered. +10 hits. Foe is stunned 2 rounds and unable to parry for next round.	Foe is knocked down. +20 hits. Foe is out of action for 3 rounds.
66	Blast breaks foe's non-weapon shoulder. Arm is useless. +20 hits. Foe must parry for 1 round. +7 hits.	Blow shatters foe's weapon shoulder. +15 hits. Arm is useless. Foe is stunned for 1 round.	Blow breaks both of foe's arms. Foe is knocked down, is at -90, and is stunned for 3 rounds.	Blow to foe's head. If foe has no helmet you kill him. If foe has a helmet he is out for 3 hours.	Blast shatters skull into thousands of lost particles. Foe dies instantly. Direct hit. Fine punch.
67-70	Blow to foe's back. Foe is stunned and unable to parry for 1 round. +7 hits.	Blow to foe's back. Foe is stunned and unable to parry next round. +12 hits.	Blow to foe's back. Foe is stunned for 2 rounds and unable to parry next round.	Foe is knocked down. +15 hits. Foe is out of action for 2 rounds. Add +5 to your next act.	Blast to foe's non-weapon arm. Foe is stunned 1 round. Foe has a shattered shoulder.
71-75	Blow unbalances foe. +10 hits and foe is stunned for 2 rounds. Strong grazing blast.	Blow stuns foe for 2 rounds. +20 hits. Foe is unable to parry next round.	Foe is knocked down. +10 hits. Foe is out of action for 2 rounds. Add 5 to your next act.	Foe now has a broken non-weapon arm. +10 hits. Foe loses use of arm, is stunned 1 round.	Blast to foe's chest breaks ribs and stuns foe for 6 rounds. +20 hits. Foe at -25.
76-80	Blow stuns foe for 2 rounds. +15 hits. Foe is unable to parry for 1 round.	Foe is knocked down. +10 hits. Foe is out of action for 2 rnds. Add +5 to your next act.	Blow breaks foe's collar bone. Foe is at -25. Break is minor. +15 hits. Foe is stunned 1 round.	Blow breaks foe's weapon arm. +10 hits. Arm is useless. Foe is stunned for 1 round.	Blistering blast to foe's shoulder area breaks collar bone and both shoulders. Foe's arms are useless. +25 hits.
81-85	Blow to foe's back +10 hits. Foe has broken ribs and torn cartilage, fights -25.	Blow to foe's back tears cartilage, breaks ribs. +10 hits. Foe is stunned for 2 rounds and fights at -25.	Foe has broken thigh. +15 hits. Foe fights at -40 and is stunned for 3 rounds.	Blow breaks both of foe's arms and knocks foe down. +20 hits. Foe is down for 3 rounds, has 2 useless arms.	Blast to side crushes a variety of organs. Foe dies of internal bleeding after 6 rounds of inactivity. +30 hits.
86-90	Blow knocks foe down. +10 hits. Foe is down for 3 rounds an is unable to parry.	Strike to foe's calf. +20 hits. Foe fights at -50 due to broken bone and torn tendons. Foe is stunned 3 rounds.	Blow breaks foe's hip. +20 hits. Foe fights at -60 and is stunned and unable to parry for 2 rounds.	Strike to foe's abdomen. +20 hits. If area not armored, foe dies in 6 rounds due to organ loss. If armored, foe stunned 12 rounds.	Blast crushes bone in foe's lower body. Foe finds life hard and dies in 3 rounds. +50 hits.
91-95	Blow breaks foe's hip. Foe fights at -50. +20 hits. Foe is stunned and unable to parry for 3 rounds.	Blow to upper head area. If foe has no helmet, he is dead. Otherwise, foe is in a coma for 2 weeks. +25 hits.	Blow shatters foe's knee. Foe is hobbled and is at -75. +20 hits. Foe is stunned and unable to parry for 9 rounds.	Blow shatters foe's jaw. Foe's brain is destroyed. +50 hits. Foe dies after 3 rounds of inactivity.	Blast drives bone through foe's lungs. Foe drops and dies after 6 rounds of intense agony. Sad. +30 hits.
96-99	Blast to foe's head. +20 hits. If foe has no helmet, he is knocked out and in a coma for 1 month. If foe has helmet he is knocked out for 1 day.	Blast to foe's collar area severs windpipe. Foe cannot breath or fight. +25 hits. Foe dies in 12 long rounds.	Blast to foe's chest. Foe dies immediately after sudden brain shock. +50 hits.	Blow to foe's side. +25 hits. Bone is driven into foe's kidneys and foe dies of shock in 1 round.	Blast crushes skull. Foe dies immediately. Add +20 to your next action.
100	Head strike. +25 hits. If foe has helm, it is broken and foe is knocked down an out for 1 day. If no helm, foe dies due to the skull fracture in 3 rounds.	Blow to back of neck paralyzes foe from the shoulders down. +30 hits. Foe is unhappy.	Blast to foe's head crushes skull. Foe dies immediately. Add +10 to your next action.	Chest disruption. Foe's lungs and heart explode. Foe dies instantly. Add +25 to your next action.	Blast annihilates foe's entire skeleton. Foe is reduced to a gelatinous pulp. Try a spatula.

17.5 HEAT CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Hot air. +0 hits.	Hot draft. +0 hits.	+1 hit.	+2 hits.	+3 hits.
06-10	+1 hit.	+2 hits.	+3 hits.	+4 hits.	Foe loses initiative for 1 rnd. +4 hits.
11-15	Foe loses initiative for 1 rnd. Hard, hot breeze. +2 hits.	Foe loses 1 rnd of initiative. +2 hits. Strong heat; little effect.	Foe loses 1 rnd of initiative while he recovers his balance. +3 hits.	Foe loses initiative for 1 round. Not quite singeing. +4 hits.	Foe feels heat, loses 1 rnd initiative; if he has no armor, 2 rnds. +5 hits.
16-20	Foe loses initiative for 1 rnd. The nearby fire gives 3 more hits. Good blast, weak fire.	Blast unbalances foe. Foe loses initiative for 2 rounds.	Foe loses initiative for 2 rounds. +5 hits.	Foe is unbalanced and must parry for 1 round. +6 hits.	Hot, unbalancing blast. Foe must parry for 1 round. +7 hits.
21-35	Blast unbalances foe. He loses initiative for 2 rnds. +4 hits.	Foe loses initiative for 2 rnds. Bothersome smoke. +6 hits.	Light burns. Foe must parry for 1 rnd. 1 hit per rnd. +7 hits.	Minor burns. Foe must parry for 2 rnds. 1 hit per rnd. +8 hits.	Minor burns. Foe must parry for 2 rnds. 2 hits per rnd. +9 hits.
36-45	Foe must parry for 1 round. +6 hits.	Light burns. Foe must parry for 1 round. +7 hits. Foe takes 1 hit per round.	Minor burns force foe to parry for 2 rounds. +8 hits and 1 hit per round.	Blast stuns foe for 1 round. +9 hits. Foe takes 2 hits per round due to pain and suffering.	Blast stuns foe for 1 round. +10 hits. Foe take 3 more hits per round. If he is wearing a cloak, it is destroyed.
46-50	Light burns. Foe must parry for 1 round. +7 hits, and foe takes 1 hit per round.	Minor burns. Foe must parry for 2 rounds. +8 hits. Foe takes 1 hit per round.	Fire stuns foe for one round. +9 hits. Foe takes 2 hits per round. Minor burns.	Fire stuns foe for 1 round. +10 hits. 3 hits/rnd. If foe is using a non-metal bow, it is destroyed.	Fire stuns foe for 2 rounds. +12 hits and 3 hits per round. If foe is using a wooden weapon, it is destroyed.
51-55	Blast unbalances foe. +8 hits. Foe must parry for two rnds and takes 1 hit per rnd.	Blast stuns foe for 1 round. +8 hits. Foe takes 2 hits per round. Wide shot, strong fire.	Blast stuns foe for 2 rnds. +9 hits. If foe has leg armor, he takes 1 hit per rnd. If not, 3 hits per rnd.	Blast stuns foe 2 rnds. If foe has a helmet, he takes 8 hits and 2 per rnd. If not, 11 hits and 4 per rnd.	Foe reels back 3 feet. Stunned and unable to parry for 1 rnd. Takes 3 hits per rnd from hot blast. +13 hits.
56-60	Foe is stunned for 1 round. +9 hits. Foe loses initiative for 2 rounds and takes 2 hits per round.	Foe is stunned for 2 rounds. If foe is in metal armor and has leg armor, +8 hits. If not, +9 hits and 3 hits per round.	Blast stuns foe for 2 rounds. +10 hits. Foe takes 2 hits per round. All other cloth covering on foe's back is destroyed.	Foe's clothing ignites; stunned and unable to parry for 1 rnd, takes +9 hits/rnd while aflame (2 rnds to extinguish fire). +12 hits.	Fire stuns foe 2 rounds; +15 hits. Foe cannot parry for 1 rnd. He fights at -10 and burns deliver 3 hits per round.
61-65	Foe is stunned for 2 rnds. If he has leg armor, he takes +7 hits and one hit per rnd. If not, he takes +10 hits and 3 per rnd.	Foe is stunned and unable to parry for 1 round. +9 hits, and 2 hits per round. Foe fights at -5 (leg burns).	Foe is stunned and unable to parry for 1 round. +10 hits, foe takes 3 hits per round and fights at -10. Upper leg burns.	Foe is stunned 2 rnds and unable to parry for 1. If foe has leg armor, he takes +10 hits and 4 hits per rnd. If not, +13 hits and 6 hits per rnd.	Searing blast burns foe's legs. Foe is stunned and unable to parry for 2 rounds. He takes 4 hits per round and fights at -10. +15 hits.
66	Blast causes foe to drop what he is holding. Stunned and unable to parry for 2 rnds and is at -15 (chest burns). +9 hits.	Foe is stunned 2 rounds. If foe wears organic armor, it is now useless. +10 hits. Foe takes 4 hits per rnd from chest blast.	Chest blast knocks foe down. If arm armor, he takes 2 hits/ rnd. If not, his weapon arm is useless and he takes 4 hits/rnd. +12 hits.	Neck blast. If foe has neck armor, he takes 3 hits/rnd and fights at -10. If not, foe is unconscious and takes 10 hits per round.	Head strike. If foe has a helmet, he is knocked out and takes 5 hits per rnd. If not, foe is killed instantly, his head fully vaporized. Fine aim.
67-70	Back blast. Foe is stunned for 2 rounds. Foe takes 2 hits per round and fights at -5. +8 hits.	Back blast. Foe is stunned for 2 rounds and unable to parry for 1 rnd. Foe takes 2 hits per rnd and fights at -10. +7 hits.	Back blast. Foe is stunned for 2 rounds and unable to parry for 1 round. Foe takes 2 hits per round and fights at -15.	Back blast. Foe is knocked down. +15 hits. Foe is out of action for 1 rnd. Foe takes 3 hits/rnd. Organic material on his back is destroyed.	Blast to foe's non-weapon arm. If foe has arm armor, he takes 4 hits/rnd and fights at -15. If no armor, foe takes 5 hits/rnd and loses use of arm.
71-75	Hot smoke blinds foe. Foe is stunned and unable to parry for 1 round. +12 hits.	Chest blast. Foe is stunned for 2 rounds and unable to parry for 1 rnd. Foe fights at -15. Add +10 to your next swing. +9 hits.	Chest blast. Foe is stunned for 3 rounds. If foe has organic chest armor, it is destroyed. If no chest armor, foe takes 6 hits per round and fights at -25.	Blast to foe's non-weapon arm. Any organic material in or on his arms is destroyed. He is stunned 6 rnds, loses use of arm, and fights at -50.	Chest blast. If foe has chest armor, it is destroyed. Foe takes +12 hits and is stunned 3 rounds. Otherwise, foe is knocked down, takes 6 hits/rnd and fights at -60.
76-80	Blast stuns foe for 2 rnds. Foe cannot parry for 1 round. +10 hits. Side wound. Foe takes 2 hits per round.	Arm strike. Burns stuns foe for 2 rnds. Foe takes 2 hits per rnd. All cloth on foe's weapon arm is burned off and foe drops whatever he is holding.	Blast to foe's non-weapon arm. He is stunned 6 rnds, loses use of arm, and fights at -50. Any organic material in or on his hands is destroyed.	Foes loses weapon hand. Severe burns. Any item in hand possibly damaged. Foe is stunned and unable to parry for 3 rounds, and takes 5 hits per round.	Blast to foe's non-weapon arm. If foe has arm armor, it is destroyed, foe loses his hand, and is stunned for 6 rounds. If not, foe loses arm and is knocked out. +20 hits.
81-85	Back blast. Foe is stunned for 2 rounds and is at -20. Burns deliver 2 hits per round. +8 hits.	Back blast. Foe is knocked down, stunned 1 rnd, and takes 2 hits/rnd. All organic material on foe's back is destroyed.	Leg blast. If foe has leg armor, he takes 2 hits/rnd and is at -20. If not, massive tissue damage; foe's leg is useless, and foe is at -80.	Blast burns both of foe's arms and all of upper chest. Foe loses use of arms and is stunned 9 rounds. +15 hits.	Foe inhales flame and gets parched throat and lungs. Foe expires in 12 painful rounds. +20 hits.
86-90	Blast knocks foe down. Fire destroys any of Foe's organic foot and calf covering. +10 hits.	Leg strike. Any organic leg covering catches fire and delivers 6 hits per rnd until extinguished (takes 1 rnd). Foe is stunned for 3 rnds. +10 hits.	Lower leg burns. Foe loses foot, but wound is cauterized. Foe is stunned and unable to parry for 6 rounds, takes 3 hits per round, and fights at -85. +15 hits.	Abdomen strike. If foe has abdomenal armor, it is destroyed, foe is knocked out, and takes 2 hits/rnd. If not, foe dies in 12 inactive rnds due to organ damage.	Foe's lower body is engulfed in flames. Foe dies in 9 rounds as a result of organ and tissue loss. +20 hits.
91-95	Fire burns foe in hip area. Foe is stunned and unable to parry for 2 rounds. Foe fights at -30. +12 hits.	Head strike. Foe is blinded and fights at -95 for 6 rnds. If foe has no helmet, 8 hits/rnd and loses 50% of head hair. Any organic helmet is destroyed.	Upper leg burns. Foe loses use of leg due to tissue loss, is stunned and unable to parry for 6 rounds, takes 4 hits per round and fights at -90. +18 hits.	Head strike. If foe has a full helmet, his eyes are destroyed and he is in a coma for 2 days. If not, foe dies in 6 rounds due to massive shock and brain damage. +20 hits.	Chest strike. All organic material on foe's body is destroyed. Foe dies of shock and nerve damage in 6 rounds. +25 hits.
96-99	Blast to foe's neck area. If foe has neck armor, he is stunned and unable to parry for 3 rounds. If not, foe is down and taking 8 hits per rnd.	Neck strike destroys foe's throat. +20 hits. Foe takes 12 hits per round and is inactive for 9 rounds. Foe then dies. Add 10 to your next roll.	Chest strike. If foe has chest armor, it is destroyed and foe dies of burns in 9 rnds. If not, foe's chest cavity is a hollow cinder and he dies instantly.	Foe's side is engulfed in flames. Foe dies in 6 rounds due to multiple compound fractures, tissue and organ loss, and boiling blood. +20 hits.	Foe is instantly dehydrated into dust. Add +10 to your next roll.
100	Searing blast to foe's head. If helm, he is knocked out and takes 7 hits/rnd. If not, he is in a 1 month coma and loses 50% of his Presence. +15 hits.	Blast to foe's neck fuses vertebrae and unites skin with clothing. Very unpleasant. Foe is paralyzed permanently. +25 hits.	Foe's head is but a charred stump. Sadly, foe cannot handle the loss and he dies instantly. Add +10 to your next roll.	Heat vaporizes foe's midsection, destroys foe's clothing, armor, and all items he carries. Foe is cut in half and dies. Add +15 to your next roll.	All that remains of foe are charred bits of teeth and bone. Add +20 to your next roll.

17.6 STUN CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	You might have a chance again next round.	Foe shrugs off attack.	Foe is lucky, this time.	+2 hits.	Foe stunned 1 round.
06-10	No extra damage.	+1 hit.	Foe stunned for 1 round. Big deal.	Foe stunned for 1 round, and is at -20 for 2 rounds thereafter.	Blow leaves foe stunned and unable to parry for 3 rounds. Add +10 to your next attack.
11-15	Weak strike gives +1 hit.	Foe operates at -10 for 3 rounds.	Stun foe 2 rounds and he is at -20 for 4 rounds.	Attack leaves foe stunned for 3 rounds.	Malignant damage stuns foe for 5 rounds and puts him at -10 for 2 days.
16-20	Foe stunned next round.	Foe is stunned and must parry at -20 next round. +1 hit.	Moderately discouraging attack stuns foe 3 rounds.	Foe is stunned 5 rounds and loses the use of an arm for 24 rounds. +4 hits.	Foe loses the use of his legs for 3 days. He is stunned for 8 rounds. +6 hits.
21-35	Foe somewhat dazed. He is stunned next round and is at -10 for 2 rounds.	Weak impact sees foe stunned for the next 2 rounds, but little else.	Forceful impact stuns foe 4 rounds, during which he must parry at -10.	Blast paralyzes foe from waist down for 7 rounds. If standing, he falls over and takes 5 hits.	Foe stunned and loses control of neck muscles for 12 rounds. Head flops about at random.
36-45	Stun foe for 2 rounds.	Foe stunned for 3 rounds and must parry at -20 next round.	Glancing strike spins foe. He is stunned and unable to parry for 5 rounds.	Foe stunned for 8 long rounds. Add +20 to your next two attacks against this opponent.	Foe staggers off in a random direction for 16 rounds, not at all sure of what's going on.
46-50	Mild blow stuns foe for 2 rounds and all maneuvers are at -10 for 4 rounds.	Unspectacular strike stuns foe for 4 rounds.	Foe stunned 6 rounds. Lingering disorientation puts him at -10 for 1 hour. +3 hits.	Attack leaves foe stunned and unable to parry for 9 rounds. +6 hits.	Blast stuns foe for 20 rounds and he is unable to parry for 10. Add +20 to your next attack against this opponent.
51-55	Foe stunned for 2 rounds and must parry at -20.	Foe knocked to his knees and stunned 5 rounds. He is at -30 to maneuvers next round.	Stunning blast causes minor cellular disruption. Foe stunned and at -30 for 7 rounds.	Foe gasps for air. He is stunned 10 rounds while parrying at -20.	Foe dazed for 24 rounds. He is incapable of taking any action. Poor fool.
56-60	Your attack stuns foe for 3 rounds. Add +10 to your next attack.	Foe stunned 6 rounds. +3 hits.	Foe stunned for 8 rounds and is at -20 for 12 rounds.	Foe left incapacitated by attack. He is out for 11 rounds.	Blast knocks foe down. he is out for 28 rounds.
61-65	Foe stunned for 4 rounds. He may not parry next round.	Stunning blast immobilizes foe's arms for 7 rounds. He is stunned next round.	Blast overloads foe's neurons momentarily. He is stunned, blinded and unable to parry for 9 rounds. +5 hits.	Foe drops to the ground and is left writhing in spasms. He is stunned and unable to parry for 12 rounds. +7 hits.	Foe falls on his face. He is stunned and unable to parry for 32 rounds. +10 hits.
66	Lucky strike shocks foe. He is stunned for 10 rounds and is unable to parry for 5. +7 hits.	Impact throws foe back 3 meters. He is stunned and unable to parry for 15 rounds. +10 hits.	Forceful attack drops foe for 20 rounds. He is inert and quite helpless. +13 hits.	Foe snaps rigid and falls over, breaking an arm in the process. He is out for 24 rounds and at -40 for 2 days thereafter. +18 hits.	Foe falls, sending himself into a coma for 20 days. When he comes to, he will be at -30 for an additional 20 days. +25 hits.
67-70	Foe drops weapon. He is stunned for 5 rounds.	Foe dazed. He drops his hand-held equipment and stares glassy-eyed for 8 rounds. No activity.	Scrambling burst leaves foe drooling. He is stunned and unable to parry for 10 rounds. A pathetic sight.	Foe collapses into a jiggling, mushy heap after scattering his equipment. He is out for 13 rounds.	Foe falls on top of his own equipment, causing random malfunctions. He is out for 36 rounds.
71-75	Foe unbalanced by your attack, stunned for 6 rounds and may not maneuver for 3. +1 hit.	Foe knocked over and stunned for 9 rounds. Numb legs prevent him from standing again for 10 rounds. +5 hits.	Blast knocks foe down. He is stunned and parries at -50 for 11 rounds. Add +15 to your next attack.	Strike spins foe. He is stunned and at -40 to orientation attempts for 14 rounds.	Control of arms and legs is lost temporarily. Foe drops prone for 40 rounds.
76-80	Shocking blast spins foe. He is stunned for 7 rounds and orientation rolls are at -30 for 10 rounds.	Muscle lock. Foe may not move for 10 rounds. Unlucky, isn't he.	Foe swallows own tongue. He is stunned 12 rounds and is at -40 for 15 rounds.	Strike leaves neurons misfiring for quite some time. Foe is stunned 15 rounds and is at -50 for 20 hours. Sad, but true.	Foe is stunned for 45 rounds and is at -50 for 2 days.
81-85	Foe knocked down. He is stunned for 8 rounds and may not parry for 3. +2 hits.	Foe stunned for 11 rounds and may not parry for 3. Add +10 to your next action.	Staggering blast. Foe stunned and unable to parry for 3 rounds, then falls prone for an additional 10 rounds. +6 hits.	Blast leaves one side of foe's body paralyzed for 16 rnds. He is at -70.	Disrupting strike causes foe's heart to sieze up. He drops. Unless tended to, foe will die in 10 rounds.
86-90	Foe stunned and unable to parry for 9 rounds. Add +15 to your next attack.	Foe knocked onto his back and is immobilized for 12 rounds.	Cruel blow stuns foe 14 rounds. He is at -20 for 5 hours.	Foe drops, motionless, for 17 rounds, though he retains all of his senses. +9 hits.	Foe sent into coma for 30 days, and incapable of subconscious activity. +20 hits.
91-95	Blast disorients foe. He is stunned for 10 rounds and at -25 for one hour.	Impact frazzles foe's brain. He is stunned for 15 rounds and is at -20 for one day.	Confusing blast leaves foe cross-eyed. He is stunned 18 rounds and perceives at -50 for 1 day.	Foe wishes he were somewhere else. He is stunned and unable to parry for 18 brutal rounds.	Motor control sporadic. Foe is stunned and unable to parry for an incredible 25 hours. Very sad.
96-99	Stunning blast knocks foe back 3 meters. He falls and is out for 15 rounds. +4 hits.	Foe rocked by strike. He falls prone for 20 rounds, and takes 1 hit per round.	Foe knocked prone for 24 rounds and then slips into a 10 day coma.	Foe is left a babbling idiot for 3 days after the attack. He is quite incapable of defending himself.	Blow sends foe reeling. He colapses 6 meters away, not to regain consciousness for 30 days.
100	Impact sends foe into spasms. He is stunned for 20 rounds and is at -40 for 3 hours. Foe has whiplash.	Foe knocked out for 24 rounds and is at -50 for 6 hours after he comes around.	Brutal attack leaves foe stunned and unable to parry for 30 rounds. He is then at -40 for 25 hours. +8 hits.	Direct hit leaves foe totally spazed-out. He is stunned and unable to parry for 50 rounds. +15 hits.	Sadly, foe dies next round due to massive nerve failure.

17.7 INTERNAL DISRUPTION CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	A near miss. No extra damage.	Glancing blow. +0 hits.	+1 hit.	+3 hits.	+4 hits.
06-10	+1 hit.	+3 hits.	+4 hits. Add +10 to your next attack.	You may attack before this opponent in the next Fire Phase. +5 hits.	+6 hits. Foe loses his next attack opportunity.
11-15	You may resolve your fire before this opponent's next round. +2 hits.	Soft strike to foe's side. You may fire before this opponent for the next three rnds. +4 hits.	Minor disruption of foe's side. +7 hits. Foe takes 2 hits per round.	+6 hits. Foe is stunned for 2 rounds.	+8 hits. Foe is stunned for 2 rounds.
16-20	Foe is stunned next round, and must parry for the next two rounds. +3 hits.	Blow to foe's side delivers +5 hits. Foe must parry next round at -30.	Blow stuns foe for 3 rounds. +8 hits.	Minor side wound causes foe to take 3 hits per round. He is stunned next round.	Minor disruption gives foe 1 hit per round. He must parry for 3 rounds.
21-35	Foe must parry next three rounds. +4 hits. Add +5 to your next attack.	Foe stunned for the next three rounds. +5 hits, and foe takes 1 hit per round.	Disrupting strike hits foe along side of chest. Foe stunned and unable to parry for 2 rounds. Foe takes 3 hits per round. +9 hits.	Blast to foe's upper leg. +7 hits. He is stunned and unable to parry for 3 rounds.	Attack disrupts foe's side. +9 hits. Foe takes 3 hits per round and is stunned for 4 rounds.
36-45	Burst muscle in foe's lower leg. Foe stunned for one round and receives 1 hit per round. Move at -50.	Disrupt foe's lower leg. Foe moves at -50 and takes 4 hits per round. +6 hits.	Major wound to lower leg. Foe takes 5 hits per round and is knocked to one knee. He is stunned for 4 rounds.	Wound foe's groin. Shocked, he is stunned for 7 rounds and unable to parry for 4 rounds. +8 hits. Add +10 to your next attack.	Blow to leg shatters several bones and shreds muscle. Foe at -70 and takes 4 hits per round. Add +10 to your next attack.
46-50	Minor flesh wound along foe's back. +5 hits. Foe stunned for two rounds.	Disrupting blast along foe's lower back. He is stunned and may not parry for 4 rounds. +7 hits, takes 1 hit per round.	Blast across foe's back tears skin. Foe takes 3 hits per round and is stunned for 5 rounds.	Disruption of foe's lower back paralyzes him from the waist down. He is down and out for 20 rounds. +10 hits.	Minor disruption to foe's lower back. Foe is stunned and unable to parry for 5 rounds. He takes 4 hits per round. +10 hits.
51-55	Minor disrupting strike to foe's chest. Foe is stunned and unable to parry for three rnds and receives 3 hits per round.	Blow to foe's chest drops him to the ground. Foe takes 4 hits per round and is stunned for 5 rounds. +8 hits.	Disruption in upper chest drops foe for 3 rounds. Foe takes 3 hits per round. +10 hits.	Blast in chest collapses foe's lungs and breaks ribs. Foe operates at -50 for 4 rounds then slips into a coma. He dies 6 rnds thereafter. +12 hits.	Foe's chest ruptured. He takes 6 hits per round. In 3 rounds he drops, and after 3 more, he dies.
56-60	Minor thigh disruption. Foe knocked down and stunned for 2 rounds. +5 hits. Foe takes 3 hits per round.	Energy dissipation shreds foe's thigh muscle. Foe takes 4 hits per round. +9 hits. Foe moves at -50.	Pulverizing blast to foe's upper thigh. +11 hits. Foe falls and is stunned for 5 rounds. He takes 5 hits/rnd and moves at - 75.	Blast in upper leg. Foe falls and takes 6 hits per round. He is at -90. Add +10 to your next action.	Major groin injury. Vitals destroyed. Foe stunned for 14 rounds and takes 2 hits per round.
61-65	Blast along forearm. +5 hits. Foe takes 3 hits per round and is at -25.	Blast to foe's forearm. Hand useless. +9 hits. Foe takes 5 hits per round.	Strike rips into foe's forearm. Arm useless. Foe takes 4 hits per rnd and operates at -40. +12 hits.	Forearm destroyed. Foe takes 7 hits per round and is stunned for 5 rounds. He is at -40.	Disrupting strike severs arm above the elbow. Foe takes 5 hits/rnd and is stunned for 8 rnds. He is at -50.
66	Non-weapon shoulder bursts from inside. Arm useless; will fall off if foe takes more than 25% activity; stunned no parry for 6 rnds, +10 hits, 5 hits/rnd.	Elbow in foe's weapon arm disrupted. Joint is destroyed and arm useless. +10 hits. Foe stunned and unable to parry for 10 rounds.	Foe's knee destroyed. He loses lower leg, and takes 5 hits per round. Foe drops and is out for 10 rounds. Afterwards he is at - 70. +25 hits.	Blast to the face destroys foe's eyes, ears, nose and throat. He dies after 4 painful rounds.	Burst destroys lungs. Heart explodes. Foe falls and is inactive for 3 agonizing rounds before dying. +20 hits.
67-70	Break foe's collar bone. +6 hits. Foe is stunned for 4 rounds and may not parry for two rounds. Foe at -20.	Blow to foe's neck. Foe stunned for 6 rounds and may not parry for 3 rounds. Foe operates at -10. +10 hits.	Blow to collar area. Foe is stunned for 12 rounds choking. He operates at -80. +13 hits.	Massive cellular disruption in foe's shoulder. +14 hits. Foe stunned for 6 rounds and operates at -60.	Blast inside shoulder sends arm flying. Foe stunned and unable to parry for 12 rnds, +22 hits, 6 hits/rnd. Add +10 to your next attack.
71-75	Disrupt tendons in lower leg. Foe at -50 and knocked to one knee. Foe stunned for 3 rnds and takes 2 hits per rnd.	Muscles burst in foe's calf. Foe at -50 and receives 5 hits per round. +11 hits.	Foe's calf muscle destroyed, tendons disrupted and bone shattered. Foe is at -50; takes 6 hits/rnd. Add +10 to your next attack.	Blast destroys foe's foot. He is at -50 for 5 rounds before passing out. Foe takes 5 hits per round.	Shuddering blast scraps leg. Bone, muscle and blood vessels burst. Foe knocked down, stunned for 6 rnds. He takes 6 hits/rnd. +24 hits.
76-80	Disrupt foe's bicep. +7 hits, and 3 hits per round. Foe at -30 and stunned for 4 rounds.	Non-weapon arm disrupted. Foe at -40 and takes 6 hits/rnd. He is stunned and unable to parry for 7 rnds. Arm useless.	Non-weapon arm disrupted and useless; muscles destroyed; bone fractured. Stunned for 12 rnds; takes 4 hits/rnd. +14 hits.	Foe's non-weapon arm explodes and is messily removed from his body. Stunned and unable to parry for 18 rnds, 6 hits/rnd. +20 hits.	Foe's weapon arm bursts open. It is destroyed. Foe takes 6 hits per round, and is stunned for 36 rounds. +30 hits.
81-85	Strike foe in the side. Internal bleeding delivers 7 hits per round. Foe stunned 8 rounds. Add +10 to your next attack.	Blow to foe's side. +12 hits. Foe takes 8 hits per round. He is stunned for 12 rounds and operates at -40.	Blow to side of lower abdomen. +15 hits. Internal bleeding causes 6 hits/rnd. Foe fights for 24 rnds then dies due to organ failure.	Variety of foe's abdominal organs explode. He takes 8 hits per round and is at -80 for 4 rounds before expiring. +30 Hits.	Foe's backbone shattered by blast. He falls and dies after 6 quiet rounds due to massive organ failure. +40 hits.
86-90	Disrupting blast along foe's back. Foe takes 4 hits/rnd and is stunned for 5 rnds. +8 hits.	Strike to back of foe's head. The subsequent brain disruption kills foe instantly. +15 hits.	Shot pulps foe's brain. He dies instantly. +25 hits. Add +15 to your next attack.	Shattering blast destroys foe's kidneys and severs spine. +40 hits. Foe drops, then dies next round.	Strike disrupts hip joint. Leg is lost. Foe lapses into unconsciousness, dying in 6 rounds. +30 hits.
91-95	Blow off foe's ear. +9 hits. Foe takes 5 hits per round and hearing is at -50. Foe stunned for 10 rounds.	Blast disrupts hip, destroying the joint, +15 hits, stunned for 10 rnds before passing out. Add +20 to your next attack.	Foe's chest explodes from the inside. Heart destroyed. Foe drops then dies next round. +35 hits.	Disgusting strike guts through opponent. He is disemboweled and dies instantly. Add +20 to your next action.	Foe's arm and side destroyed by disrupting blast. He is stunned and unable to parry for 8 rounds, then dies. +35 hits.
96-99	Disrupting strike to middle of face, stunned and unable to parry for 12 rnds, 5 hits/rnd. Add +5 to your next attack.	Blast blows out side of foe's head. Foe drops and takes 5 hits per round for three rounds before dying.	Blast shatters backbone and exposes upper chest cavity. Foe dies instantly. +45 hits.	Back blow sends foe reeling. Broken in half, foe drops and dies next round.	Internal explosion sends rib fragments flying. Foe drops and dies immediately. Add +20 to all actions for the next 2 rounds.
100	Strike disrupts foe's neck, severing his head from the rest of his body. Foe dies immediately. +20 hits.	Head strike destroys brain. Foe is dead.	Foe's head explodes. He is very dead, permanently.	Head shot destroys brain in a gruesome display. Foe's lifeless, headless body tossed back 3 meters.	Foe's body ripped apart by cruel disrupting blast. He is no more. Good work.

18.1 RADIATION CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	What radiation?	They're only sub-atomic particles.	Nothing worse than a day at the beach.	Target looks a little red, but it's nothing serious.	Target was lucky, this time.
06-10	Warm draft.	Fast neutrons stay clear of target. Lucky.	This could have been really bad.	+3 hits.	+5 hits. It must have been those cool sun glasses.
11-15	The experts say it's nothing to worry about.	Target has little to worry about.	A mild headache is the end result.	+4 hits. These may only be healed by anti-radiation treatment.	+8 hits. These may only be healed by anti-radiation treatment.
16-20	Bright flash reduces target's vision by 50% for 3 rounds.	Zip.	Insignificant damage.	Mild irradiation. Target at -10 until treated.	Radiation sickness. Target loses hair, teeth, and nails within a day. He is at -50 for 5 days, after which he dies.
21-35	Afterglow reddens target a shade.	Walking in front of a neon sign would be more dangerous.	+4 hits; may only be healed by anti-radiation treatment.	Rad build-up will produce a cancer in target within the next 5 years.	Severe exposure drops all of target's temporary stats by 1-10 . Really bad.
36-45	Microbes on target's skin have a rough time of it.	+2 hits.	Mild radiation sickness. Hair falls out in three days, and target is at -30 until treated.	Target's vision blurs. Perception is at -30 until treated. +5 hits.	Sizzling beams raise blisters on target's red-hot skin. He is at -60 until treated and takes 1 hit per round whenever he moves. +10 hits.
46-50	A few cells spontaneously mutate, but quickly die off.	Target may (50% chance) develop tumour within 5 years.	Target has a 10% chance of fainting each minute. He is out for 1-10 hrs and at -20 for 5 days.	Organ damaged. One of target's internal organs will fail in 1-10 hours.	Severe Radiation sickness. Target will die within a day unless treated, and is at -50 while he waits. +12 hits.
51-55	Target will feel queasy (-10) in an hour. It will last for only 4 hours.	Target will feel ill. -15 to actions for 6 hours, beginning in one hour.	Mild radiation sickness. Hair falls out; sores develop in 1-5 days. Target at -30 until treated. 50% chance of a cancer within a year.	Rays weaken target. His temporary Strength stat is reduced by 15 while the temporary Constitution stat falls by 5.	Deadly rays course through target. In ten minutes, he is struck by severe nausea (operates at -60) lasting 1-10 days. Target then dies.
56-60	Target's vision becomes hazy in 30 minutes (perception at -20). It will last until treated.	Telepathic target loses 1-10 PP's. All targets at -10 until treated.	Rad accumulation will produce a cancer within a year.	Waves give target +20 hits that may only be healed by anti-radiation treatment. Target stunned 6 rnds.	Severe burns. Target at -70 until treated. He is stunned for 6 rounds.
61-65	Some tactile sensation will be lost to the target (operates at - 5) until treated. Effect manifests itself after an hour.	Target will have a headache in 10 min which will last for 1-10 hrs during which target will be at -20. It will recur 1 day later.	Telepathic target loses 1-10 PP's and is stunned for 6 rounds. All targets at -15 until treated.	Telepathic target loses Psion casting ability for 1 day. All target's are at -20 until treated.	Telepathic target loses Psion casting ability for 1-10 years. All targets at -50 until treated. +15 Hits.
66	Rays course through body. Target has 50% chance of producing mutated offspring.	Bitter chromosome damage to target's reproductive organs. Offspring have a 75% chance of being mutants.	Hot rays sterilize target. +5 hits. Sad.	Rays sterilize target. Target will die in 10 hours due to organ failure.	Widespread cellular damage gives target +40 hits and sends him into a coma. He will die in 1-10 minutes.
67-70	Minor loss of hand-eye coordination manifested in 2 hours. Static maneuvers at -15. Effect will last for 2 days.	Loss of hand-eye coordination for 5 days. Static maneuvers at -20 during that time.	Target loses hand-eye coordination and is at -40 to all maneuvers until treated.	Beams daze target. He is stunned for 20 rounds and is at -50 for all activities until treated.	Target dazed. He is stunned and unable to parry until treated. +17 hits. These hits may only be healed by anti-radiation treatment.
71-75	A minor skin cancer will develop within a year.	Target has difficulty concentrating. Reduce temporary Reasoning stat by 10 until treated.	Violent electromagnetic radiation raises sores on target's skin. He is at -30 until treated.	Radiation sickness. Hair lost, teeth and fingernails fall out, and sores appear within 1 day. Target at -40; will die in 1-10 days unless treated. Telepaths lose 1-10 PP's. +10 hits.	Target's skin blackened. He takes 4 hits per round and is at -80 until treated. Permanent Quickness and Agility stats are reduced by 2-20 points each.
76-80	Mild burn. Target at -10 for 2 days.	Rays give minor burn. Target takes 4 hits and is at -10 for 2 days.	Lingering radiation sickness. Target at -50 within one day. Hair and teeth begin to fall out. Target will die in 30 days unless treated.	Rad build-up will produce a malignant tumour within 6 months. Target at -40 until treated.	Target blinded and sent into a coma. Severe radiation sickness will kill target within a day unless treated.
81-85	Lingering rad buildup has a 50% chance of producing a cancer within 5 years.	Exposure gives target 7 hits which may only be healed by anti- radiation treatment.	Target receives second degree burns. He is at -30 for 6 days.	Selective rays destroy target's eyes. +15 hits.	Horrible rays reduce all of target's temporary stats by 2-20 and all permanent stats by 1-10. +19 hits.
86-90	Mild burn. Target at -5 for 5 days.	Target irradiated and loses hair in two days. He operates at -20 until treated.	Electromagnetic waves damage a random internal organ. It will cease to function in 1-10 days. Tough.	Severe burns give target 3 hits per round. He is at -30. +17 hits.	A multitude of target's internal organs fail. Target drops and dies in 1-10 rounds. Telepathic targets lose all Psion Power.
91-95	Insidious exposure delivers 4 hits that may only be healed by anti-radiation treatment.	Burns crack target's skin. Target takes 1 hit per round and is at -10 until treated.	Target sees flash. He is blinded for 1-10 days, then at -30 to vision from then on.	Target zapped. He is blinded and stunned for 10 rounds, then operates at -60. He will die in one day unless treated.	Blistering rays fry target. He is sent into a coma and dies in 6 rounds.
96-99	Second degree burn gives target 5 hits.	Bright flash blinds target for 1-10 hours.	Heavy rad dose reduces temporary Constitution stat by 20. Permanent Constitution is lost at the rate of 1 point/hr until treated.	Severe exposure. Target slips into coma and dies in 1-10 hours.	Sizzling burst leaves but a few remains of target's former self. Sad.
100	Flash burns give target 10 hits. Target at -15 for 7 days.	Target at -20 until treated, and will develop a cancer within 6 months.	Target's skin flash-fried. +30 hits. Target knocked out and takes 4 hits per round. He will die in 2-20 hours unless treated.	Target's blood boils. He drops immediately and dies in 6 rounds due to massive internal damage.	Target glows white before vanishing utterly.

18.2 ELECTRICITY CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	A lot of static. +0 hits	Foe's hair stands up. +0 hits	+1 hit	+2 hits	+3 hits
06-10	+1 hit	+2 hits	+3 hits	+4 hits	Foe loses initiative for 1 rnd. +4 hits.
11-15	Foe loses initiative for 1 round. +2 hits.	Foe loses initiative for 1 round; the metal he bears begins to buzz. +2 hits.	Foe hears crackling sound and loses 1 round of precious initiative. +3 hits.	Foe loses initiative for 1 round. The smell of danger is in the air. +4 hits.	If foe has metal armor, he loses 2 rounds of initiative. If not, foe is stunned but 1 round. +5 hits.
16-20	Foe is spun about and loses 1 round of initiative. +3 hits.	Explosion of light causes foe to lost 1 rnd of initiative. +4 hits.	Eruption of smoke forces foe to lose 2 rnds of initiative. +3 hits.	Foe is unbalanced, but the strike is weak. Must parry next rnd. +4 hits.	Glancing strike stuns foe for 1 round. +6 hits.
21-35	Blast unbalances foe. He loses 2 rounds of initiative. +4 hits.	Crackling blast forces foe to lose 2 rnds of initiative. +5 hits.	Strong but glancing blast forces foe to parry next round. +6 hits.	Light burns. Foe must parry for 2 rnds; takes 1 hit per rnd. +5 hits.	Foe gets a minor scorching and is stunned for 2 rounds. +10 hits.
36-45	Light distracts foe, and he must parry for 1 rnd. +5 hits.	Minor burns. Must parry for 1 rnd; takes 1 hit/rnd. +2 hits.	Foe feels the heat and must parry for 2 rounds. +7 hits.	Blast stuns for 1 round. Foe fights at -10 for 2 rounds. +7 hits.	Smoke and light stun foe for 2 rnds. Foe fights at -10 for 2 rnds. +12 hits.
46-50	Minor burns. Foe must parry for 1 round and takes 1 hit per round. +2 hits.	Blast forces foe to parry for 2 rounds. +6 hits.	If foe has metal armor, he is stunned 2 rounds. If not, foe is stunned for 1 round. +7 hits.	Explosion of light and fire stuns foe for 2 rounds. Foe fights at -10 for 2 rounds. +7 hits.	If foe has metal armor, he is stunned and unable to parry for 2 rnds. If not, foe is stunned 2 rnds. +13 hits.
51-55	Sizzling but weak blast stuns foe for 1 round. +6 hits.	Foe is spun about and is stunned for 1 round. A minor burn on foe's leg causes 2 hits per round. +7 hits.	Strike to foe's leg. If foe has leg armor, he is stunned 1 rnd. If not, foe is stunned and unable to parry 1 rnd and takes 3 hits per rnd.	Blast stuns foe for 2 rounds and foe is unable to parry for 1 round. +10 hits.	Hot smoke and light stuns foe for 4 rounds. Foe loses initiative for 6 rounds. +13 hits.
56-60	Foe is unbalanced and is forced to parry next 3 rounds. +7 hits.	Foe is stunned for 2 rounds. If foe has metal armor, he cannot parry for 1 rnd. +8 hits.	Blast stuns foe for 2 rounds. Foe cannot parry for 1 round, leg hit. +9 hits.	Strike to foe's non-weapon arm. If foe has metal armor, he is knocked out for 1 day. +15 hits.	Strike to foe's weapon arm. Foe drops all that is in his weapon hand. Stunned for 2 rnds. 2 hits per rnd.
61-65	Chest strike. If foe has metal armor, he is stunned for 2 rounds. If foe has no armor, he is stunned 3 rounds.	Upper leg strike. Foe is stunned and unable to parry for 1 round. +9 hits.	Foe is stunned and unable to parry for 2 rounds. +10 hits.	If foe has armor over abdomen, he takes 2 hits/rnd, stunned 2 rnds due to minor burns. If not, burns stun foe 6 rnds, 3 hits/rnd.	Leg strike. Foe is knocked down and stunned for 2 rounds. Foe cannot parry for 1 round. +14 hits.
66	Blast of light and smoke stun all within 5 feet of foe for 1 round. Foe is knocked down and stunned for 3 rounds.	Chest strike. Foe is stunned and unable to parry for 3 rnds, takes 3 hits per rnd, and fights at -20. +15 hits.	Chest strike. If foe has metal armor on arms and over chest, it becomes fused and he cannot use arms. If not, foe is knocked out for 6 hours and takes +9 hits.	Neck blast knocks foe out. Foe cannot speak for 2 months and takes +4 hits per round. +20 hits.	Head strike. If foe has a leather helmet, it is destroyed and foe is in a coma for 2 months. If not, foe's brain is fried and he dies instantly. Add +10 to your next roll.
67-70	Back strike. Foe is stunned and unable to parry for 1 round. +7 hits.	Back strike. Foe is stunned for 2 rounds and cannot parry for 1 round. +10 hits.	Back strike. Foe is stunned and unable to parry for 2 rnds. Burns force foe to fight at -10. +11 hits.	Back strike. Foe is knocked down and out of action for 1 rnd. Minor shock. Foe fights at -20. +12 hits.	Back strike. Foe is stunned and unable to parry for 4 rounds. Minor shock. Foe fights at -25. +15 hits.
71-75	Blast stuns foe for 3 rounds, foe fights -5 for 6 rounds. +8 hits.	Strike to foe's non-weapon arm. If foe has arm armor, he is stunned for 4 rnds. If not, foe's arm is useless, foe is stunned and not able to parry for 2 rnds.	Strike to foe's non-weapon arm. If foe has a metal arm armor, he is stunned for 6 rnds and takes +12 hits. If not, foe is knocked down, arm is useless, +13 hits.	Strike to foe's weapon arm. Arm is useless and foe is stunned for 3 rounds. +13 hits.	Shoulder strike shatters bone in foe's weapon arm. Muscle and cartilage damage. Arm is useless, foe is stunned for 6 rounds, and takes 3 hits per round.
76-80	Strike to foe's upper chest stuns foe for 2 rounds. Foe cannot parry for 1 round. +9 hits.	Chest strike. Foe is knocked down and takes 2 hits per round due to bleeding. +11 hits.	Chest strike. If foe has chest armor, he is stunned 6 rnds, 2 hits/rnd, fights at -5. If not, foe is knocked out for 3 days (shock).	Chest strike. If foe has metal chest armor, he is knocked out, +25 hits. If not, foe is stunned and unable to parry for 6 rnds and takes +15 hits.	Chest strike. Foe is knocked out due to shock. Blood loss and nerve damage cost foe 3 hits per round. +18 hits.
81-85	Back blast. Foe is stunned and unable to parry for 2 rounds. +12 hits.	Back blast. Foe is stunned and unable to parry for 3 rounds. Muscle is torn and foe fights at -10. +13 hits.	Thigh strike. Foe takes 2 hits per round. Bones breaks and torn cartilage. Foe is stunned for 4 rounds and fights -40.	Lower back strike. Nerve damage and shock. Foe is stunned for 30 rounds and takes 3 hits per round. +15 hits.	Foe becomes a conductor and strike rearranges his entire nervous system. Foe drops and lies in shock for 12 rounds before dying.
86-90	Blast knocks foe down. If foe has metal leg armor, he loses use of leg due to nerve damage. If not, +15 hits and foe is stunned and unable to parry for 2 rounds.	Leg strike. If foe has leg armor, he is stunned and unable to parry for 6 rnds. If not, foe's leg is broken, it has damaged nerves, and foe is stunned for 6 rounds and fights at -50.	Blast shatters foe's knee and destroys a variety of nerves. Foe fights at -60 and is stunned and unable to parry for 2 rounds.	Abdomen strike. If foe has armor over abdomen, he is stunned for 9 rounds and takes 6 hits per round. If not, foe dies of shock and bleeding in 12 rounds.	Blast crushes pelvis and shatters lower backbone. Foe's spine is burned into a multitude of small parts. Foe is knocked out and dies in 12 rounds.
91-95	Hip strike. If foe has hip armor, foe is stunned 6 rnds; +10 hits. If not, foe is stunned 3 rnds and acts at -50 due to shock and nerve damage.	Head strike. Foe loses nose, he is temporarily blinded for 2 weeks, and is stunned for 9 rnds. Foe is at -95 while blind. If no helm, he is knocked down.	Strike through foe's lower abdomen. Massive shock and bleeding. If abdomen armored, foe is at -75; takes 5 hits per rnd. If not, foe dies in 6 inactive rnds.	Side strike devastates foe's nervous system. Foe falls into a coma and goes into severe shock. Foe is a living vegetable. +30 hits.	Side strike melts foe's lower skeleton and destroys a variety of organs. Foe dies in 9 inactive rounds. +25 hits.
96-99	Neck & shoulder strike. If foe has neck armor, he is stunned and unable to parry for 6 rnds. If not, he is knocked out; loses ability to speak. +10 hits.	Head strike. Blast cracks skull and causes massive shock and brain damage. Foe drops and dies in 9 rounds. +15 hits.	Chest strike destroys foe's heart and lungs. If foe has metal chest armor, it is a fused lump and foe dies in 6 rounds. If not, foe dies instantly.	Chest strike knocks foe back 10 feet. Massive nerve damage. Foe dies of fatal shock in 3 rounds. +20 hits.	Chest strike destroys both of foe's lungs and cuts foe in half. Blast continues to a point 10 feet beyond foe (subtract 20 if it strikes second target).
100	Head strike. Foe's brain falls victim to massive shock and surface burns. Foe drops into unconsciousness, and dies in 6 rounds. +20 hits.	Blast through foe's neck severs head and kills foe instantly. Add +10 to your next attack roll.	Foe's head is no longer available. Smoke and ozone surround the lifeless body. Add 10 to friendly witnesses' rolls for 3 rounds.	Foe s nervous system acts as a superconductor. Foe s sad instant death provides all the witnesses with a fine light show. Add +15 to your next roll.	Foe returns to the dust from which he came. Add +20 to your next roll.

18.3 COLD CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Cool breeze +0 hits	Cold breeze. +0 hits.	+1 hit	+2 hits	+3 hits
06-10	+1 hit	+2 hit	+3 hits	+4 hits	Foe loses initiative for 1 rnd. +4 hits.
11-15	Foe loses initiative for 1 round. Cold wind. +2 hits.	Foe loses initiative for 1 round. Cold chills. +3 hits.	Foe is slightly unbalanced and loses 1 round of initiative. +4 hits.	Light blast. Foe loses initiative for 1 round. +5 hits.	Cold blast. If foe has armor, he loses 1 rnd of initiative. If not, foe takes +6 hits and loses 2 rnds of initiative.
16-20	Foe loses initiative for 1 rnd. Freezing breeze. +3 hits.	Foe loses initiative for 2 rnds. Freezing wing. +4 hits.	Foe loses initiative for 2 rounds. Mild frosting. +5 hits.	Unbalancing blast. Foe must parry for 1 round. +6 hits.	Moderate blast. Foe must parry for 1 round. +7 hits.
21-35	Mild blast. Foe loses initiative for 2 rounds. +4 hits.	Frost laden blast forces foe to lose 2 rounds of initiative. +5 hits.	Moderate blast. Foe must parry for 1 round. +6 hits.	Chilling blast gives foe a frosty "burn". Foe must parry for 1 rnd at -20, takes 1 hit per rnd. +7 hits.	Parched, cold blast. Foe is unbalanced and must parry for 2 rounds at -15. +8 hits.
36-45	Frosty blast. Foe must parry for 1 round. +5 hits.	Freezing blast. Foe must parry for 1 round and loses 3 rounds of vital initiative. +6 hits.	Blisters give foe 1 hit per round. Foe must parry for 2 rounds. +7 hits.	Blast stuns foe for 1 round. Foe takes 2 hits per round and fights at -5 due to facial shock. +8 hits.	Strong, low blast stuns foe for 1 rnd; destroys foe's foot covering. If feet uncovered, foe is at -20 (frostbite).
46-50	Moderate blast. Foe must parry for 2 rounds. +6 hits.	Mild frostbite. 2 hits per rnd. Must parry for 2 rnds. +7 hits.	Blast stuns foe for 1 round. +8 hits.	Mild frostbite. Foe is at -10. +2 hits per rnd. Stunned 1 round. +9 hits.	Swirling blast spins foe about. +10 hits. Stunned 1 rnd. Drops weapon.
51-55	Unbalancing blast. Foe is stunned for 1 round. +7 hits.	Strong, but off-center blast stuns foe for 1 rnd. Foe takes 3 hits per rnd due to frostbite on shield wrist. +8 hits.	Blast is strong but low. Foe is stunned for 2 rnds. If foe has no leg armor, he takes 5 hits per round due to shock and pain.	Blistering blast to foe's side knocks foe back 5 feet. Foe takes 3 hits per round and is stunned for 2 rounds. +10 hits.	Strong side strike. Foe is stunned and unable to parry for 1 round, and takes 4 hits per round numbing pain. +11 hits.
56-60	Strong, but diffused, blast. Foe is stunned for 2 rounds. +8 hits.	Foe is stunned for 2 rounds, all wood exposed on foe's back is useless and brittle. Foe takes 2 hits per round. +9 hits.	Back blast freeze dries all organic material that is exposed on foe's back. Foe is stunned and unable to parry for 1 round. +9 hits.	Blast to foe's non-weapon arm. Frostbite. Foe is stunned and unable to parry for 1 round, takes 3 hits per round, and fights at -15.	Blast to foe's weapon arm. Foe is stunned and unable to parry 1 round, takes 4 hits per round, and fights -20.
61-65	Foe is stunned and unable to parry for 1 round. +9 hits.	Leg strike. Frostbite. Foe is stunned and unable to parry for 1 round, fights at -5, and takes 3 hits per round. +10 hits.	Leg strike. Frostbite. If foe has leather boots or greaves, they are destroyed. Foe is stunned for 4 rounds. +11 hits.	Strike to foe's non-weapon arm. If foe has arm armor, +20 hits. If not, arm is useless due to nerve and skin damage; foe is stunned 5 rnds.	Blast to foe's weapon arm. Foe drops whatever is in that hand. Foe is stunned and 3 rounds and fights at -30. +13 hits. Frostbite.
66	Blast causes foe to drop whatever he is holding. +10 hits. Foe is stunned and unable to parry for 3 rounds. Chest strike.	Foe is stunned and unable to parry for 4 rounds. If foe wears no armor or protective cloak, he takes 5 hits per round.	Foe is knocked down and stunned for 6 rounds. If foe has wrist armor, he takes 3 hits per round. If not, foe fights at -25 and takes +6 hits per round.	Neck blast. If foe has neck armor, he takes 4 hits per round and is stunned for 6 rounds. If not, foe fights at -50, takes 5 hits per round, is stunned 3 rounds.	Shoulder strike. Foe loses use of shoulder due to nerve and cartilage damage. If foe has not helmet he is knocked out for 1 day and takes 6 hits per round. +15 hits.
67-70	Back blast. Foe is stunned and unable to parry for 1 round. Frostbite. Foe fights at -5. +10 hits.	Back blast. Frostbite. Foe is stunned for 2 rounds and cannot parry for 1 round. Foe fights at -10. +11 hits.	Back blast. Foe is stunned for 2 rounds and cannot parry for 1 round. Foe fights at -15. Frostbite. +12 hits.	Back blast. Foe is stunned for 3 rounds and cannot parry for 1 round. Foe fights at -20. Frostbite. +13 hits.	Blast to foe's non-weapon arm. If foe has arm armor, he is knocked down and takes 2 hits per rnd. If not, massive frostbite, foe loses use of arm and is stunned 6 rnds.
71-75	Unbalancing blast. Foe is stunned for 2 rounds. Pain and shock cause foe to fight at -10. +11 hits.	Strike to foe's non-weapon side. Pain and shock give foe 3 hits/rnd. Foe is stunned and unable to parry for 2 rnds. +12 hits.	Strike to foe's side. Shock and frostbite. Foe fights at -20, takes 3 hits per round, and is stunned and unable to parry for 2 rounds.	Blast freezes foe's non-weapon shoulder. Arm is useless and foe is stunned for 2 rounds. +14 rounds.	Blast to foe's weapon arm. Frostbite and numbing pain make arm useless and stun foe for 3 rounds. +15 hits.
76-80	Chest strike. Foe is stunned for 2 rounds and cannot parry for 1 round. +12 hits.	Chest strike. Foe takes +3 hits per round, fights at -15, and is stunned for 4 rounds. +13 hits.	Chest strike. Foe takes 4 hits per round. If foe has chest armor, he is stunned for 3 rnds. If not, foe is knocked down, fights at -25.	Chest strike. Foe fights at -25 due to frostbite. Foe is stunned and unable to parry for 3 rounds. +15 hits.	Chest strike. Foe is knocked down and drops all he holds. Foe is stunned for 12 rounds. Shock and nerve damage. Foe fights at -30.
81-85	Back blast. Foe is stunned and unable to parry for 2 rounds. +13 hits.	Back strike. Foe is stunned and unable to parry for 3 rnds and takes 4 hits/rnd. +14 hits.	Thigh strike. Foe has broken bone and frostbite. Fights at -40, takes 5 hits/rnd, stunned 6 rnds.	Blast freezes both of foe's hands and foe loses use of both arms. Stunned 9 rnds, takes 6 hits/rnd.	Blast freezes foe s throat and lungs. Foe drops and dies in 12 rounds. +17 hits.
86-90	Leg strike. Foe is knocked down. If foe has leg armor, he is stunned for 2 rounds. If not, foe loses use of left foot, fights at -70 (frostbite).	Leg strike. Foe is knocked down. If foe has leg armor, he is stunned for 3 rounds. If not, foe loses use of foot, and fights at -75 (frostbite).	Lower leg blast destroys foe s foot covering, freezes both foe's feet, and stuns foe for 9 rounds. Foe takes 6 hits per round, fights at -80.	Upper chest blast knocks foe down. If foe has chest armor, he is knocked out. If not, foe dies in 12 rnds due to a cold, cold, heart.	Back blast freezes and shatters foe's backbone. Foe drops and dies in 9 inactive rounds. Broken neck. Massive shock.
91-95	Head strike. Foe is knocked down. If foe has helmet, he is stunned 3 rnds. If not, foe is stunned 6 rnds, fights at - 50, and loses both ears	Hip strike. Foe's hip is shattered. Foe is stunned and unable to parry for 3 rounds and fights at -75. +17 hits.	Abdomen strike. If foe has abdomenal armor, he is knocked out and takes +17 hits. If not, foe dies of organ damage in 9 rounds.	Foe's blood is entirely frozen solid. Foe dies in 9 inactive rounds. +18 hits.	Foe's lower body is fully frozen. Foe dies in 6 inactive rounds. +19 hits.
96-99	Neck strike. If foe has neck armor, he is stunned for 9 rounds. If not, foe loses lips, cannot speak for 2 weeks, and is knocked out.	Neck & collar strike. If foe has neck armor, he is knocked out. If not, foe's neck is frozen and shattered, and foe dies in 9 inactive rounds.	Side strike freezes and shatters foe's pelvis. Foe dies in 6 rounds due to shock and nerve damage. +18 hits.	Foe's heart and lungs are suddenly frozen. Foe dies in 6 inactive rounds of shock and suffocation. +19 hits.	Foe is a lifeless, frozen statue - well preserved, but quite dead. Add +10 to your next roll. +20 hits.
100	Foe is sent into a month long coma and loses nose as a result of severe frostbite and shock. +21 hits.	Blast freeze-dries foe's head. Foe dies in 1 round. Foe s skull and brain are brittle and lifeless. Add 5 to your next roll.	Head strike. Foe's eyes are destroyed; foe is in a coma for 2 weeks and is permanently paralyzed from the neck down.	Massive strike shatters foe s chest and freezes foe's body fluids. Foe dies in 2 rounds. +20 hits.	Foe freezes solid and then shatters into thousands of pieces after falling down 20 feet behind impact point.

18.4 CRUSH CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Zip	Weak grip. No extra damage.	+1 hit	+2 hits	+3 hits
06-10	+1 hit	+2 hits	+3 hits	+4 hits	Glancing blow +6 hits. Foe is slightly unbalanced. You have initiative next round.
11-15	Glancing blow. Foe takes +3 hits. You have the initiative next round.	Glancing blow. +3 hits. You have initiative next round.	Blow to foe's side. +7 hits. You receive initiative next round.	+5 hits. Foe must parry next round at -10.	+6 hits. Foe is stunned for 1 round. Add +5 to your next swing.
16-20	+2 hits. Foe must parry next round of action.	Blow to foe's side. +4 hits. Foe must parry next round at -10.	Blow to foe's side. +6 hits. Foe must parry next round at -20.	Minor fracture of ribs. +5 hits. Foe fights at -5. You have initiative next round.	Strong blow. Foe is stunned and unable to parry next round. Add +10 to your next swing.
21-35	Foe must parry next round. +3 hits. Add +5 to your next swing.	Foe must parry next round at -20. +4 hits.	You break foe's rib. +5 hits. Foe is stunned during next round. Hard blow to foe's side.	Strike to foe's side. +4 hits. Foe is stunned and unable to parry during next round.	Strike cracks foe's ribs. +6 hits. Foe is at -10. You have initiative next round.
36-45	Bruise foe's calf. +6 hits. You gain the initiative. Foe fights at -5 for next round.	Bruise foe's calf. +6 hits. You gain the initiative. Foe fights at -20 for next 2 rounds.	Bruise foe's calf. +9 hits. You gain the initiative. Foe fights at -25 for next 2 rounds.	Major calf bruise. +10 hits. Foe fights at -10. You have the initiative next round.	Strike to upper leg. Minor fracture. +12 hits. Foe fights at -10. You have the initiative next round.
46-50	Blow to foe's back. +4 hits. Foe must parry next round at -25. Hard, glancing strike.	Blow to foe's back. +6 hits. Foe must parry next round at -25.	Hard blow to back. +5 hits. Foe is stunned and unable to parry next round. You have the initiative for 2 rounds.	Hard blow to back. +10 hits. Foe is stunned and unable to parry during next round.	Strike to foe's lower back. +15 hits. Foe is stunned and unable to parry during next round.
51-55	Blow to foe's chest. +5 hits. Foe must parry next round at -25. Foe has a bruised rib.	Blow to foe's chest. +6 hits. Foe must parry for next 2 rounds.	Hard blow to chest. +5 hits. Foe fights at -10. Foe is stunned during next round.	Blow to chest. +10 hits. Foe has a pair of broken ribs and must fight at -15.	Blow to chest. +15 hits. Foe is stunned for 2 rounds. Foe fights -15.
56-60	Strike foe's thigh. +5 hits. Foe is forced to parry next round at -25. Glancing blow.	Strike foe's thigh. +6 hits. Foe has a bruise and is forced to parry 1 round. Foe is at -5.	Strike foe's thigh. +6 hits. Foe is at -5. Add +10 to your next swing. Foe must parry next rnd.	Blow to thigh. Foe is stunned next round. +6 hits. Foe is at -10 and is upset.	Blow to thigh. Foe is stunned and unable to parry next round. +10 hits. Foe is at -10.
61-65	Blow to foe's forearm. +5 hits. Foe is stunned during next round. Add +20 to your next swing.	Blow to foe's forearm. Foe is at -10. +9 hits. Foe is stunned during next round.	Disarm foe with a blow to forearm. +8 hits. Foe is stunned during next round.	Blow to forearm. Foe is stunned and unable to parry next round. +10 hits. Foe at -10.	Blow to forearm. Foe drops weapon. Foe is at -15. +10 hits. Foe is stunned for next round.
66	Shatter shoulder in foe's non-weapon arm. Arm is quite useless. Foe is stunned and unable to parry for the next 2 rounds. +8 hits.	Shatter elbow in foe's weapon arm. Arm is useless. Foe drops weapon, and is stunned and unable to parry for 3 rounds.	Shatter foe's knee. +9 hits. Foe is knocked down and is stunned and unable to parry for 3 rounds. Foe at -90.	Blow to side of foe's head. If foe has no helmet, you crush his skull. If foe has helmet, you knock him out for 4 hours. +20 hits.	Blow to back of neck, crushes backbone and severs spine. +15 hits. Foe dies instantly. Add +10 to your next swing.
67-70	Strike upper chest area. +8 hits. Foe is stunned for 3 rounds and unable to parry during next round.	Strike upper chest area. Foe is stunned and unable to parry for 2 rounds +10 hits. Foe is at -10.	Strike upper chest area. Foe is stunned for 3 rounds and unable to parry during next 2 rounds, +10 hits. Foe is at -10.	Blow to foe's shoulder area. Minor fracture. Foe is at -20. Foe is stunned and unable to parry for 2 rounds.	Blow to foe's non-weapon shoulder. If foe has arm armor, it if broken; otherwise, the shoulder is shattered, arm useless.
71-75	Blow to foe's lower leg. Bad bruise. +5 hits. Foe is stunned for 2 rounds and unnable to parry next round. Foe at -20.	Blow bruises foe's calf. Foe is at -35. +10 hits. Foe is stunned 2 rounds and unable to parry next round.	Blow bruises foe's knee. Foe is at -40. +10 hits. Foe is stunned and unable to parry for 2 rounds.	Blow breaks bone in leg. Foe is at -50. +12 hits. Foe is stunned and unable to parry for 2 rounds. Major cartilage damage.	Blow breaks foe's hip. Foe is at -75 and is knocked down. +15 hits. Foe is stunned 3 rounds.
76-80	Blow to foe's non-weapon arm. If foe has arm armor, it is broken; otherwise, the arm is badly broken and useless.	Blow to foe's non-weapon arm, shatters wrist. Arm is useless. Foe is stunned for next round. +6 hits.	Blow to foe's weapon arm. Bad bruise. +9 hits. Foe is stunned and unable to parry for next round. Foe is at -50.	Blow breaks foe's weapon arm. Foe is stunned and unable to parry for 1 round. Arm is useless. +8 hits. Tendon damage.	Blow to foe's elbow. +9 hits. Joint is shattered. Arm is useless. Foe is stunned and unable to parry for 2 rounds.
81-85	Blow to foe's side. +10 hits. Foe is stunned and unable to parry for 2 rounds. Foe is at -20.	Blow to foe's side. +12 hits. Foe has broken ribs. Foe is stunned and unable to parry for 2 rounds. Foe is at -25.	Strike to foe's side. Breaks 3 ribs. Foe is at -40. +12 hits. Foe is stunned and unable to parry for 3 rounds.	Strike to foe's side +15 hits. Foe is knocked down. Add +10 to your next swing. Foe is stunned and unable to parry 3 rounds.	Catch foe in armpit. +30 hits. Crush foe's ribs and destroy side. Foe drops and dies of nerve and organ damage in 3 rounds.
86-90	Strike Foe in back. +12 hits. Muscle and cartilage. Foe is stunned and unable to parry for 3 rounds. Foe is at -25.	Strike to back knocks foe down and smashes tendons. Foe is stunned and unable to parry for 4 rounds. Foe is at -30.	Blow to back smashes muscle and breaks bone. +20 hits. Foe is at -50. Foe is knocked down and stunned for 6 rounds.	Blow to foe's neck area breaks backbone and destroys spine. +25 hits. Foe falls and dies in 2 rounds.	Neck strike shatters bone and severs an artery. Foe cannot breath and is inactive for 12 rounds. The poor fool then expires.
91-95	Break foe's nose. Foe is stunned and unable to parry for 3 rounds. +15 hits. Foe fights at -30 for 2 days. Close.	Upper head hit. If foe has no helmet, he is in a coma for 3 weeks; otherwise, +20 hits and foe is stunned 12 rnds.	Blow shatters thigh. +9 hits and a compound fracture. Bone severs an artery. Foe dies after 12 rnds of inactivity.	Blow shatters non-weapon arm. Bone severs vein and an artery. Foe dies of shock and blood loss after 9 inactive rounds.	Blast to foe's back. +25 hits. Bone is driven into vital organs and foe is down for 6 rounds ...Then dies, sad.
96-99	Blow to foe's head. If foe has no helmet he is dead; otherwise, he is knocked down and stunned 6 rnds, +20 hits.	Blast foe's chest. Send ribcage through heart. Foe drops and dies. Add +20 to your next swing.	Blow to foe's abdomen destroys a variety of organs. The poor fool expires after 6 rnds of inactivity.	Blow to foe's side crushes chest cavity. Foe drops and dies in 3 rounds. Add +25 to your next swing.	Crush foe's skull. +30 hits. Opponent dies immediately. Add +20 to your next swing. You have a half round left to act.
100	Blow to foe's jaw. Drives bone through brain. Foe dies instantly. +50 hits, add +20 to your next swing.	Blow to back of neck paralyzes foe from the shoulders down. +25 hits. Foe is quite stunned.	Strike to forehead. +30 hits. You squash foe's eyes and destroy them. Foe is stunned and is unable to parry 24 rounds.	Blast to foe's chest area. Destroy foe's heart. Foe dies immediately. +25 hits. Fine work.	Crush foe's hip. +35 hits. Opponent is stunned for 2 rounds, active following 4 rounds at -30, then dies of nerve damage.

18.5 GRAPPLING CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Weak grip. No bonus.	Indecision and an opportunity lost.	+1 hit	+2 hits.	+3hits
06-10	+1 hit	+2 hits.	+3 hits	+4 hits.	Glancing attack. You have the initiative next round. +5 hits
11-15	Glancing attack. No extra damage, but you have the initiative next rnd. Practice.	Passing strike. You have the initiative next round. +2 hits.	Grazing side strike. You receive the initiative next round. +4 hits.	Glancing blow. You receive the initiative next round. +6 hits.	Lame attack, but foe must parry next round. +6 hiits.
16-20	Foe is free, but you have the initiative next round. +3 hits.	Foe fends off attack. But is forced to parry 1 rnd. +2 hits.	Foe recovers but is forced to parry next round. +4 hits.	Side strike unbalances foe. You have initiative for 2 rnds. +5 hits.	Strong, passing blow. Foe is stunned for 1 round. +3 hits
21-35	Grazing hip strike. You have the initiative next round. +5 hits.	Attack has punch, but nothing more. Foe must parry next round at -20.	Glancing attack. Foe is stunned for 1 round. +2 hits.	Hard but misplaced strike. Foe eludes grip but is stunned for 1 round. +3 hits.	Disjointed attack and a little luck allow foe to escape grasp. Foe is stunned for 1 round. You have initiative 2 rounds.
36-45	Blow to lower back. Foe must parry next round.	Unbalance foe. +4 hits. Foe must parry next round. You have initiative for 2 rounds.	Flailing attack. Foe is stunned for 1 round and must parry the following round.	Strike to foe's shield arm. If foe has shield, +3 hits. If not, arm is caught for 6 rounds (and immobile), and foe stunned 3 rnds.	Attack to upper leg. Foe is spun about and breaks loose, but is stunned and unable to parry 1 round.
46-50	Passing hip strike. Foe must parry next round at -20. +3 hits.	Blow to chest stuns foe for 1 round. +5 hits.	Your attack produces a weak grasp around foe's waist. Foe is at -25 for 3 rounds.	Attack yields weak hold around foe's chest. Foe is at -30 for 3 rounds. You have initiative 4 rnds.	Attack produces a hold around foe's leg. Foe slips away, but is stunned 2 rnds and is unable to parry next rnd.
51-55	Slightly unbalancing blow to chest. Foe must parry next round.You have initiative for 2 rounds.	Blow to back stuns foe for 1 round. +7 hits.	Attack yields slipping grasp around foe's leg. Foe is stunned and unable to parry for 1 round.	Attack results in slipping grip around foe's waist. Foe is at -50 for 3 rounds.	Foe breaks free of hold around shield arm. Foe is stunned for 2 rounds and unable to parry next round. +5 hits.
56-60	Glancing back blow. Foe must parry next round at -25. You have initiative 2 rounds.	Unbalancing strike. Foe spins free but is stunned for 1 rnd and must parry the following rnd.	Foe breaks free of hold around thigh, but is stunned and unable to parry 1 round. +3 hits.	Attack produces hold around leg. Grip is slipping but foe stunned 3 rounds. +6 hits.	Grasp around foe's leg. Foe is stunned and unable to parry 1 round and is at -25 the following 3 rounds.
61-65	Blow to shoulder. Foe is stunned 1 round. +3 hits.	Slipping grasp around foe's waist is weak. Foe is stunned for 2 rounds.	Grasp around foe's chest. Foe is at -50 for 3 rounds. +3 hits.	Grasp around foe's chest. Foe is stunned and unable to parry for 1 round and is at -20 for the following 2 rounds.	Attack to foe's non-weapon arm. If foe has arm armor, +6 hits. If not, foe is stunned and unable to parry for 3 rounds, takes +7 hits.
66	Grasp around weapon arm disarms foe. +2 hits. Foe is stunned for 2 rounds.	Grasp around weapon arm disarms foe and sprains his wrist. Foe is stunned 2 rounds, and fights at -25.	Grasp around both of foe's legs. Foe slips away, but is knocked down and prone for 1 round. +5 hits.	Grasp around leg knocks foe down. Tight grip. Foe is prone and immobile 2 rounds. +6 hits.	Grasp foe around neck and knock him down. Foe has torn neck muscles, is at -20. Foe is prone and immobile for 3 rounds.
67-70	Passing chest strike. Foe eludes entanglement, but must parry next two rounds at -20.	Entangle foe's leg. +4 hits. Foe is stunned and unable to parry for 1 round.	Entangle non-weapon arm. If foe has arm armor, he is at -50 until he removes it. If not, he is at -50.	Entangle leg. Foe is stunned for 2 rounds and unable to parry next round. +7 hits.	Entangle weapon arm. Foe is stunned and unable to parry for 2 rounds, and at -75 round following.
71-75	Attack results in an uneasy hold on foe's midsection. Foe is at -50 for 2 rounds. +5 hits.	Attack yields a weak hold around foe's lower chest. Foe is at -50 for 3 rounds. +4 hits.	Attack results in loose grasp on foe's midsection. Foe is stunned for 2 rounds and is at -50 for the following 3 rounds.	Attack yields loose hold around foe's midsection. Foe is stunned and unable to parry 1 round and is at -70 the following 3 rounds.	Entangle foe's leg. Foe is knocked down, and stunned and unable to parry for 2 rounds. +9 hits.
76-80	Infirm hold on foe's midsection. For the next 3 rounds foe is at -50 and you have the initiative.	Entangle non-weapon arm. If foe has arm armor, he is at -30 until he removes it. If not, he is at -40.	Entangle weapon arm. Foe is stunned and unable to parry for 2 rounds, and is at -50 during the following round.	Entangle foe's weapon arm. Foe hangs onto weapon, but the arm is immobilized. +3 hits.	Grapple weapon arm. Foe is disarmed and is left stunned for 3 rounds. Torn ligaments and pulled muscle leave foe at -40.
81-85	Grasp foe's leg. Foe breaks free but is stunned for 2 rounds. +3 hits. You have initiative 6 rounds.	Infirm grasp on foe's midsection. For the next 6 rounds foe is at -50 and you have the initiative.	Grasp around foe's chest breaks rib and leaves foe stunned and unable to parry for 3 rounds. Foe fights at -5.	Entangle foe's leg. Foe is knocked down, stunned and unable to parry 2 rounds, and is disarmed. Fall breaks non-weapon arm.	Entangle both of foe's arms and pin them to his chest. Foe cannot move his arms and has mobility reduced by -75.
86-90	Attack foe's non-weapon arm. If foe has arm armor, he must parry next round. If not, arm is immobilized; foe is at -50.	Entangle foe's leg. Foe is knocked down and is stunned and unable to parry for 2 rnds. Pulled muscle leaves foe at -10.	Entangle foe's foot. Foe stumbles, falls, and breaks shoulder. +8 hits. Foe is stunned 6 rounds and fights at -30.	Tie up both of foe's arms so they are immobile. Foe is stunned for 9 rounds and cannot fight. +6 hits.	Entangle foe's foot. Foe stumbles, falls, breaks weapon on impact, and is stunned 2 rounds. If no chest armor, roll "D" crush crit.
91-95	Entangle foe's leg. Foe is knocked down. Stunned and unable to parry for 2 rounds. +3 hits.	Both of foe's legs are tied up. Foe is at -25, downed, disarmed and stunned and unable to parry for 2 rounds. Ankle sprain.	Pin both of foe's arms to chest. Foe is stunned and unable to parry 44 rounds, then fights at -95.	Entangle and completely immobilize foe's legs. Foe falls and is left stunned and unable to parry for 30 rounds. +10 hits.	Wrap up both of foe's legs. Foe tumbles to ground and is knocked out. Foe is at -95 due to 2 broken arms and a broken ankle. +20 hits.
96-99	Tie foe up completely. Foe is entirely immobilized for 12 rounds, and is at -60 for the following 3 rounds. +7 hits.	Attack completely entangles and immobilizes foe. Broken leg leaves foe at -40. The pitiful creature is left prone but conscious.	Entangle and completely immobilize foe's legs. Foe falls, is disarmed, breaks weapon arm, and is knocked out. +20 hits.	Grapple foe's neck. If foe has neck armor, he is left disarmed, and stunned and unable to parry for 3 rounds. If not, he dies in 6 rounds.	Attack resuls in strangling hold. Foe is unable to break free and dies after 9 rounds of amazingly helpless struggling. Grim.
100	Both of foe's legs are entangled. Foe is downed and knocked out.+9 hits. Add +20 to your next roll.	Attack yields vicious hold around foe's neck. Foe is knocked out. Spained neck leaves foe at -90.	Grapple foe's neck. If he has neck armor, he is at -75 due to a neck sprain and stunned for 3 rnds. If not, he dies of broken neck.	Grapple foe's head. If foe has helmet, he is stunned and unable to parry for 9 rounds. If not, foe falls into coma due to fracture.	Crush foe's windpipe. Foe dies instantly due to massive shock and savage asphyxiation. Add +25 to your next roll.

18.6 VACUUM CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Cool breeze delivers no hits.	Refreshing breeze ruffles hair. Boy, does he look cool	Target's ears pop. +1 hit.	Winds distract target: he loses initiative for 1 round.	+1 hit.
06-10	Chilly breeze delivers 1 hit.	+1 hit.	Target's ears pop audibly; +2 hits.	+2 hits; target forced to parry 1 rnd.	+3 hits, target must parry next round.
11-15	Cold breeze delivers 2 hits.	+2 hits.	Target's ears really pop. +3 hits, permanent minor hearing loss.	+4 hits and target must parry for 1 round.	+5 hits.
16-20	Icy wind delivers 5 hits; target loses a round of initiative.	Target is unbalanced. +3 hits and he must parry one round.	Inner ears pop. Target unbalanced. +5 hits, must parry 1 rnd.	Escaping air stuns target for 1 round; he takes 6 hits.	Airburst stuns target and delivers 7 hits.
21-35	Staggering airburst gives target 3 hits and he loses 2 rounds of initiative.	Blast of air unbalances target. +5 hits and he is forced to parry 1 round.	Pressure change causes equilibrium problems. +6 hits, stunned 1 round.	Fleeing oxygen gives target pause; he is stunned for 2 rounds.	Target stunned no parry 1 round; 9 hits.
36-45	Rushing winds deliver 3 hits; target unbalanced (and stunned 1 round).	Escaping environment buffets target, delivering 8 hits and stunning him for 1 round.	Target is muddled and must parry for 2 rounds. +7 hits.	Roaring winds confuse target. He is stunned 3 rounds and takes 8 hits.	Target stunned 4 rounds by freezing air.
46-50	Target loses 3 rnds of initiative in the rush of air. +2 hits.	Howling winds force target to parry for 2 rounds. +6 hits.	Target stunned for 1 round. +8 hits	Target slashed by debris: +10 hits and 5 per round.	Target struck by debris: +20 hits, 2 per round and stunned 2 rounds.
51-55	Target unbalanced. +6 hits, stun for 1 round.	Whirlwind stuns foe for 1 round. +8 hits.	Debris strikes target in leg; he is stunned 1 round, and takes 2 hits per round.	Target's hand is struck by debris: off-hand wrist is sprained and at -50. +12 hits and stunned for 2 rounds	Target struck in weapon-arm: 50% chance item in hand is dropped (and lost in vacuum). +10 hits and stunned 5 rounds
56-60	Cold and air loss take target's breath away; he is stunned for 3 rounds and takes 15 hits.	Deafening howl of escaping air; +10 hits; renders target stunned and unable to parry for 1 round.	Blast stuns target for 2 rounds; he cannot parry for the first round. Leg hit, +9 hits.	Airburst staggers target, +10 hits; he is stunned and unable to parry for 1 round.	A flurry of sharp metal fragments slash target. +20 its and 7 per round.
61-65	Fog of rushing air stuns target for 2 rounds. +10 hits.	Target does a forced about face, stunning him for 3 rounds.	Target spun about. +5 hits. Stun 3 rnds, loses initiative for 3 more.	Target spins like a top. +10 hits, and foe is stunned no parry 2 rnds.	Target whirls like a gyroscope. +15 hits; foe is stunned no parry 2 rnds.
66	Blast sends target spinning. +10 hits, left arm is broken and useless, he is stunned for 5 rounds.	Target hears bells; eardrums burst and hearing permanently damaged. Nose bleeds; 2 hits/rnd. +18 hits. -50 to activity for 5 rounds.	Flying debris strikes target in head, +12 hits and he is stunned 6 rounds by impact. If no helmet skull is fractured, target unconscious with concussion.	Target flung outward by winds, but gets a reflexive grip on the edge of the breach. 25 hits, Stunned no parry 5 rnds (but holding on until unconscious).	Wasting no time, target zips out through hull breach. Surrounded by a cloud of frozen oxygen, he explores the final frontier. If he has a spacesuit, fine; if not, he is dead after 6 rounds. Wave good-bye.
67-70	Flying debris strikes target in back; he is stunned for 1 round. +8 hits.	Winds stun target 1 round, deliver 2 hits.	Back strike. Target is stunned and cannot parry for 2 rounds. Target is at -10. +11 hits.	Target thrown 2 meters and slammed against a bulkhead. He is stunned 3 rounds and takes 10 hits.	Lack of air takes target's breath away. He is at -50, stunned 3 rounds, and takes 10 hits.
71-75	Blast of fleeing atmosphere disorients target; he is stunned and unable to parry for 1 rnd.	Fog of escaping gas confuses target and stuns him 3 rounds.	Airborne stuff blinds target, stunning him for 2 rounds and delivering 10 hits.	Whirling debris strikes target in head; +15 hits; a minor concussion; stunned no parry for 2 rnds.	Flying debris strikes target in head. He is stunned no parry 2 rounds, +15 hits.
76-80	Crystallizing atmosphere cloud stuns target for 2 rounds, +15 hits. Foe is unable to parry for one round.	Whirling oxygen crystals blind target, stunning him for 4 rounds.	Now you know why it's called "Hard" vacuum: blast knocks the wind out of target, +15 hits, breaks ribs; stuns him for 3 rnds.	Depressurization damages ears. Inner ear equilibrium upset, stun 3 rnds, +10 hits. Maneuvers at -50 for 2 days. Permanent deafness.	Decompression collapses one lung and destroys hearing. Target at -70; +20 hits and he is stunned 6 rounds.
81-85	Swirling debris delivers 10 hits and breaks two of target's ribs; he is at -25.	Blast sends target careening 2m, impact causing broken leg. Foe is at -50, stunned 3 rnds; +15 hits. (Strapped in target only takes 5 hits).	Brutal wind carries target 3 meters, slamming him against a hard surface. Foe is stunned for 10 rnds; +25 hits. (Strapped-in target only takes 10 hits).	Escaping atmosphere drags target 4m, battering him on the way. Both of his arms are broken; stunned for 4 rnds; +25 hits. Strapped in target: only +15 hits; stunned 2 rnds.	Explosive decompression hurls target 5m, pummeling his poor body. Internal organs are damaged; +50 hits; dies in 12 rnds. Strapped in target: only +25 hits; stunned 8 rnds.
86-90	Target feels his blood simmering. +10 hits and 5 per round while exposed.	Target's boiling blood delivers 15 hits and 7 per round while he is exposed to vacuum.	Target 's blood starts to boil: +30 hits and 10 per round while exposed. He is stunned for six rounds.	Target 's blood is bubbling: +40 hits and 15 per round while exposed. He is stunned for eight rounds.	Target 's circulatory system becomes a balloon: +50 hits; 20 hits/rnd while exposed. Stunned for 3 rnds, then (if exposure continues) unconscious as major organs are seriously damaged. Poor bloated fool dies in 12 rnds.
91-95	Disconcertingly, target bleeds through nose and ears. He is at -30, takes 10 hits, 3 hits per round and is stunned for 5 rounds.	Unpleasantly, target bleeds through eyes, nose, and ears. He is at -50, takes 15 hits, 5 hits per round and is stunned for 7 rounds.	Grossly, target begins to bleed through eyes, nose, ears and under fingernails. He is at -70, takes 20 hits, 7 hits per round and is stunned for 9 rounds.	Disgustingly, target bleeds through all of his bodily orifices. He is at -80, takes 25 hits, 9 hits per round and is stunned for 10 rounds.	In a clear attempt to gross everyone out, target bleeds through all of his pores. He is at -90, +30 hits, 12 hits/rnd and is stunned for 6 rnds before losing consciousness (if not before).
96-99	Target is struck in the head; +20 hits. If foe has a helmet, he is unconscious for 1 day; otherwise he is in a coma for 10 days.	Target's lungs collapse. +20 hits; target is at -80 and dies in 12 agonizing rounds of asphyxiation.	Sudden pressure change causes multiple internal organ malfunctions. Foe is completely incapacitated for 10 rounds, then dies.	Target is slammed by rushing air. +25 hits, bone is driven into target's internal organs, killing him in three helpless, painful rounds.	Target unwittingly attempts to turn inside out. Unsuccessful (sort of), he loses use of all sensory organs as well as lungs; tumbles, unconscious, through deep space. +80 hits.
100	Target is knocked down and is struck on the head. +25 hits. Helmet is crushed and useless, target stunned 5 rounds. If no helmet, skull is fractured, target dies in 3 rounds.	Luckily, target is lodged between conduits within 3 meters of a door to safety, avoiding an unpleasant space walk. Unluckily, his spine is damaged and he is paralyzed from the waist down. +25 hits.	Explosive blast sends target's brain out through ears. He is quite dead.	Lack of air pressure disrupts lungs, eyes and ears. Not a pretty sight. Target dies in 12 messy rounds, blind and deaf.	Rather abrupt decompression. Target explodes into billions and billions of tiny bits of flesh, quite severely dead.

18.7 M.A. 'STRIKES' CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Sorry.	Fine artistry, but no extra damage.	+1 hit	+2 hits	+3 hits
06-10	+1 hits	+2 hits	+3 hits	+4 hits	Glancing strike makes foe respect you a little more. +5 hits.
11-15	Weak strike, but you gain the initiative. +3 hits	Mild blow. You gain the initiative next round. +4 hits.	Mild strike. You have the initiative next round. +5 hits.	Kick to foe's side yields +6 hits. You have the initiative next round.	Moderate strike stuns foe for 1 round. +7 hits.
16-20	Kick to foe's side yields +4 hits and you have the initiative next round.	Side strike. Foe loses initiative next 2 rounds. +5 hits.	Side strike forces foe to parry next round. +6 hits.	Side strike forces foe to parry at -10 next round. +8 hits.	Side strike cracks foe's ribs and stuns foe for 1 round. +5 hits. Foe is at -10.
21-35	Light,but well-placed strike forces foe to parry 1 round. +5 hits.	Strong, but poorly aimed strike forces foe to parry next round. +6 hits.	Kick foe in ribs and stun him for 1 round. +6 hits.	Side strike. Foe is stunned next round and loses initiative for 3 rounds. +2 hits.	Fine side strike cracks 3 ribs. Foe is at -20. +6 hits.
36-45	Mild chest strike forces foe to parry next round at -10. +6 hits.	Chest strike. Foe must parry next round at -20. +7 hits.	Clever fake yields fine but light chest strike. Foe is stunned for 1 round. +8 hits.	Chest strike. Foe is stunned and unable to parry next round. +5 hits.	Back strike stuns foe 1 round. You have a clear shot to foe's rear next round.
46-50	Acrobatic move forces foe to parry next round at -25. +6 hits.	Glancing kick to foe's back. Foe is stunned 1 round. +5 hits.	Strike to foe's back. Foe is stunned and unable to parry for 1 round.	Chest strike. Foe is stunned for 2 rounds. Broken ribs. Foe is at -10. +3 hits.	Chest strike. Foe is stunned for 2 rounds and unable to parry for 1 round. +5 hits.
51-55	Strike to hip stuns foe for 1 round. +3 hits.	Strike to foe's chest. Stuns him for 1 round. +6 hits.	Side strike. Foe is stunned and unable to parry next round. Add +20 next attack.	Upper leg strike causes deep bruise. Foe operates at -25. +6 hits.	Hip strike spins foe. +5 hits. Foe stunned for 3 rounds.
56-60	Strike to foe's lower chest stuns foe for 1 round. +5 hits.	Back strike. Foe is stunned for 2 rounds. +3 hits.	Strong wheel kick sends foe 10 feet in any desired direction. Foe is stunned 2 rounds. +8 hits.	Back strike. Foe is stunned for 3 rounds. +4 hits.	Chest strike. Foe is stunned for 2 rounds, unable to parry next round and operates at -10.
61-65	Blow to top of foe's foot is slightly misplaced but quick. Foe operates at -20 +5 hits.	Strike to back of lower leg. Foe is stunned for 2 rounds. +7 hits.	Upper leg strike. Foe has deep bruise and operates at -25. +5 hits.	Blow to nerve in upper leg. Foe is stunned 2 rounds and operates at -25 for 6 rounds.	Forearm strike cleanly disarms foe. +3 hits.
66	Strike to Achilles tendon. Vicious bruise. Foe is at -50. +7 hits and foe stunned 2 rounds.	Kick to foe's head sprains neck and fractures jaw. Foe is stunned 9 rounds, operates at -50.	Knife hand strike breaks foe's weapon arm, leaving it useless. Follow-up punch to solar plexus knocks foe out.	Superb move. Break foe's weapon. Foe is stunned for 3 rounds. Add +20 next roll.	Simultaneous open palm strikes destroy foe's hearing and balance. Foe at -95. He is stunned 24 rounds.
67-70	Weak spear hand stuns foe for 2 rounds. +2 hits.	Spear hand to foe's chest. Foe is stunned 3 rounds.	Strong knife hand to upper portion of foe's non-weapon arm. Arm is broken and useless.	Strike to top of foe's foot. Foe is stunned and unable to parry for 2 rounds.	Combination elbow to solar plexus and back fist to face drops foe. Foe is stunned 3 rounds and unable to parry 2 rounds.
71-75	Knife hand, spear hand combination. Foe must roll on fumble table and is stunned 1 round.	Strike to foe's weapon arm. Deep bruise. Foe is at -20. +6 hits. Foe stunned 2 rounds.	Strike to back of lower leg. Foe is stunned and unable to parry for 2 rounds.	Knife hand strike breaks foe s collarbone. Foe is stunned and unable to parry 2 rounds, acts at -25.	Heel kick breaks bone is foe's foot. Foe is at -50. +5 hits. Fool is stunned for 3 rounds.
76-80	Kick to foe's non-weapon arm. Arm is useless and +6 hits.	Blow to back of foe's knee damages tendons. Foe is stunned 2 rounds and operates at -25.	Kick disarms foe and stuns him for 1 round. Foe fights at -10 due to cartilage damage.	Strike to area behind foe's knee. Tendon and cartilage damage. Foe is at -75.	Front kick to midsection doubles foe over. You follow with knee strike which breaks foe's nose and knocks him out.
81-85	Kick to foe's weapon arm disarms him. +3 hits.	Kick foe's weapon 5 feet away and break 2 fingers. Foe stunned 2 rounds and fights at -20.	Heel kick breaks bone in foe's foot. Foe is at -50; he is also stunned and unable to parry for 2 rounds.	Kick breaks foe's leg. Foe is stunned and unable to parry 2 rounds and operates at -75. +5 hits.	Strike to knee shatters joint. Foe drops and is stunned and unable to parry 6 rounds. Foe is at -80. +6 hits.
86-90	Fluid move followed by a leaping kick to foe's back knocks foe down and stuns him 3 rounds.	Wheel kick knocks foe flat. Smash tendons and tear muscle. Foe is at -30. He is also stunned 9 rounds.	Strike to leg severs Achilles tendon and drops foe. +10 hits. Foe stunned 9 rounds, acts at -80.	Open-handed blow to foe's adam's apple (neck) crushes windpipe. Foe dies in 18 rounds — shock and asphyxiation.	Roundhouse kick hits kidney drops foe. Your follow-up knife hand snaps foe's neck. He is knocked out, dies in 9 rounds.
91-95	Strike to nerve in upper leg. +8 hits. Foe stunned and unable to parry for 2 rnds, and operates at -40 for 6 rnds.	Strike to foe's knee shatters joint. Foe drops, is at -85. He is stunned and unable to parry 4 rounds.	Flying kick to foe s back. You knock foe down, disarm him, and leave him stunned and unable to parry for 12 rounds.	Jab to foe's eyes blinds him. Crescent kick sends foe 10 feet to right or left. Sucker is at -100. He is stunned 10 rounds.	Strike to stomach destroys a variety of organs. Foe drops helplessly and dies in 12 rounds. Add +10 to your next round.
96-99	A chop deflects foe's attack, and a later strike knocks him down. Foe stunned and unable to parry for 3 rounds.	Roundhouse kick knocks foe out and fractures collarbone. Foe has sprained neck and shoulder.	Kick to solar plexus drops foe and leaves him stunned and unable to parry 30 rounds. +30 hits.	Brutal head kick flips foe over onto his head. Skull fracture is minor but concussion severe. Foe dies of hemorrhage in 9 rounds.	Double palmstrike to foe's nose breaks cartilage and drives bone into brain. Foe drops helplessly and dies in 6 rounds.
100	Gooseneck strike. Foe s inner ear ruptured. (He hears at -50, operates at -75.) Foe is knocked out by follow-up strike.	Knife hand strike to foe's weapon arm breaks bone. Kick to lower back breaks backbone, leaving foe paralyzed from waist down.	Sweep lays foe out and heel strike to foe's sternum collapses the ribcage. Foe is helpless and dies in 4 rounds.	Awesome spear hand strike finds seam, penetrates solar plexus and ruptures the heart. Foe dies instantly.	Kick disarms foe. A follow-up chop snaps his neck and subsequent flip sends foe 5 feet in any desired direction. Foe dies.

18.8 M.A. 'SWEEPS & THROWS' CRITICAL STRIKE TABLE

	A	B	C	D	E
01-05	Acrobatic, but no extra damage. +0 hits	Shoddy follow through. +0 hits	+1 hit	+2 hits	+3 hits
06-10	+1 hit	+1 hit	+2 hits	+3 hits	Unbalance foe. You have initiative next round. +4 hits.
11-15	You have initiative next round. +1 hit.	Foe takes 3 extra hits and you have the initiatiive next round.	You have the initiative next round. Add +20 to your next attack. Foe is confused.	Foe must parry next round. +4 hits.	Stun foe with your fine moves. Add +10 to next attack. Foe is stunned 1 round.
16-20	Foe must parry next round. +2 hits.	Dazzle foe. He must parry next round at -10.	Foe unbalanced and must parry next round at -20. +3 hits.	Foe is stunned for 1 round. +4 hits.	Sweep staggers foe. +2 hits. Foe is stunned and unable to parry 1 round.
21-35	Sweep forces foe to parry next round at -10. +2 hits.	Sweep unbalances foe. +3 hits. Foe must parry next round at -20.	Sweep stuns foe for 1 round. +4 hits.	Sweep sends foe to his knees. Foe is stunned and unable to parry for 1 round. +4 hits.	Sweep downs foe. Foe is stunned for 2 rounds.
36-45	Sweep staggers foe. Foe must parry next round at -20. +3 hits.	Sweep bruises foe's leg. Foe operates at -25 for 3 rounds. +4 hits.	Sweep bruises foe's leg. Foe fights at -10. You have the initiative next round.	Sweep bruises foe's calf. Foe operates at -20. +5 hits.	Sweep drops foe and bruises thigh. Foe is stunned 1 round. +5 hits. Foe is at -20.
46-50	Sweep forces foe to parry next round at -25. +4 hits.	Sweep stuns foe for 1 round. +5 hits.	Sweep downs foe. +4 hits. Foe is stunned for 2 rounds while trying to rally.	Sweep drops foe. +5 hits. Foe is stunned and unable to parry for 1 round.	Foe slips to his knees. +7 hits. Foe is stunned for 2 rounds and is unable to parry next round.
51-55	Sweep drives foe back 3 feet. Foe must parry next round at -30. +5 hits.	Throw knocks wind out of foe, and he is stunned for 1 round. +6 hits.	Throw stuns foe for 2 rounds. +6 hits.	Throw breaks 3 of foe's ribs. Foe is stunned for 1 round and operates at -20. +6 hits.	Throw drops foe. +8 hits. Foe is stunned for 3 rounds.
56-60	Throw stuns foe for 1 round. +6 hits.	Throw stuns foe for 1 round and sprains a finger on his weapon hand. Foe is at -10.	Sweep knocks foe back 5 feet. Foe is stunned and unable to parry for 1 round.	Sweep nearly knocks foe down. Foe is stunned and unable to parry for 1 round. +7 hits.	Surprising sweep sends foe reeling. Foe is stunned for 3 rounds. +9 hits.
61-65	Throw downs foe, but there is a good recovery. Foe is stunned for 1 round. +7 hits.	Throw pulls muscle in foe's weapon arm. Foe is stunned for 1 round. +3 hits. Foe is at -20.	Throw disarms foe. +3 hits and foe is stunned for 1 round. If you want to run, the time is now.	Throw disarms foe and leaves him stunned for 2 rounds.	Fine throw. Foe lands on his weapon arm, is disarmed, and is stunned for 3 rounds.
66	Throw dislocates foe's non-weapon shoulder. Foe is stunned and unable to parry 3 rounds, and is -50.	Nifty throw. You have foe pinned, on his face, and in an arm lock. +9 hits. Foe is disarmed and immobilized.	Sweep shatters foe's knee. Foe is stunned and unable to parry 4 rounds, operates -80.	Smooth throw. Foe lands on his head. If foe has helmet, he is knocked out. If not, he is paralyzed from the waist down.	Perfect toss sends foe flying over your shoulder and 10 feet. Foe dies on impact. Add +10 next roll.
67-70	Hard, but unsmooth throw stuns foe for 2 rounds. +7 hits.	Strong throw stuns foe for 2 rounds. You have the initiative for 6 rounds. +8 hits.	Foe is knocked back 5 feet and has a bruised chest muscle. Foe is stunned 2 rounds, is -10.	Throw drops foe on his non-weapon shoulder. Arm and collar bone +5 hits.	Foe lands on non-weapon arm. If foe has rigid arm armor, +10 hits. If not, foe's arm is shattered and useless, +20 hits.
71-75	Fall bruises foe's thigh. Foe is stunned and unable to parry 1 +2 fits. Foe is at -5.	Fall tears ligament in upper leg. Foe is at -10. +5 hits. Foe is stunned and unable to parry for 1 round.	Fall pulls muscle in foe's leg. Foe stunned 2 rounds and unable to parry next round. Foe operates at -25.	Foe falls and breaks leg. Minor fracture, but foe operates at -30. Poor fool stunned for 3 rounds.	Foe falls and breaks his hip. Mild fracture, foe is at -40. He is stunned and unable to parry 2 rounds.
76-80	Foe lands on non-weapon arm. Foe's arm is sprained, he is at -10, and he is stunned for 2 rounds.	Foe breaks fall with his weapon hand and sprains 2 fingers. Foe is at -25 and is stunned for 2 rounds.	Foe falls and dislocates non-weapon shoulder. +6 hits. Foe is at -40 and must parry for 6 rounds.	Throw puts foe on back an breaks shoulder blade. Foe is at -20. +9 hits. Foe stunned and unable to parry 2 rounds.	Throw sends foe down on his elbow. Joint shattered and arm is useless. Foe is stunned 4 rounds.
81-85	Sweep unbalances foe. +3 hits. Foe is stunned for 3 rounds. Add +25 to your actions next round.	Sweep knocks foe 10 feet to side. Foe stunned and unable to parry 2 rounds. +9 hits.	Sweep staggers foe. +7 hits. Foe is stunned and unable to parry 2 rounds. Add +30 to next attack.	Break foe's wrist on weapon arm. Arm is useless. +10 hits. Fine hand throw.	Throw foe 10 feet. Foe is down on his face, disarmed and stunned an unable to parry 6 rounds.
86-90	Foe lands on his back. Muscle and cartilage damage. Foe quickly recovers, but is stunned and unable to parry for 2 rounds. Foe is at -20.	Foe lands on his back and is stunned and unable to parry for 2 rounds. Torn tendon and broken bone, foe is at -25.	Throw drops foe on his back. Vertebrae cracked and foe is at -50. Foe is stunned and unable to parry 3 rounds.	Throw drops foe and you put him into a severely immobolizing arm lock. Foe is stunned and unable to parry for 6 rounds.	Throw sends foe flying into nearest enemy within 10 feet. All involved are stunned and unable to parry 3 rounds, take +9 hits.
91-95	Throw downs foe and breaks his nose. Foe is at -25. +7 hits. Foe is stunned and unable to parry 2 rounds.	Fall breaks ribs, disarms foe, and sends him rolling 10 feet. Foe is at -30 and is stunned and unable to parry for 12 rounds.	Sweep downs foe and you put him in a leg-breaking hold. +9 hits. Foe is pinned; stunned and unable to parry 15 rounds.	Throw bashes foe against nearly hard surface. Foe is knocked out and you can use a killing kick if you so desire.	Sly rolling throw sends foe into the air. Foe is left disarmed and unconscious. You spring to your feet 10 feet away.
96-99	Throw sends foe down on his head. If foe has helmet, he is stunned 9 rounds. If not, foe is knocked out.	Sweep stuns foe; kick disarms him; and another sweep knocks him flat on his back. Foe is unconscious. +20 hits.	Throw cracks foe's skull. If foe has helmet, he is in a coma. If not, he dies of brain damage in 1 round.	Throw sends foe down. He is impaled by broken rib or his own weapon and dies in 6 rounds.	Fall snaps foe's neck, killing him instantly. Add +25 to your next attack.
100	Snazzy throw. Foe is stunned and unable to parry 6 rounds. Foe is prone and you can finish him (if you desire) with a knee to the solar plexus.	Fabulous throw sends foe flying. Foe's neck is broken on impact and he dies after rolling 15 feet.	Fall breaks foe's back. +12 hits. Foe paralyzed from the neck down. Add +20 next roll.	Sweeps sends foe twisting backwards 5 feet. Foe's spine is snapped and he is left a quadriplegic.	Using but half the round, you use a rolling throw to send foe against nearest hard surface. Foe dies, you are up, press on.

19.1 ARCHAIC WEAPONS FUMBLE TABLE

	HAND ARMS (1-handed)	HAND ARMS (2-handed)	SPEAR & POLE ARMS	MOUNTED ARMS	THROWN ARMS	BOWS
01-25	Lose your grip and the opportunity to get in an open blow. Maybe you will improve.	Lose your grip. You lose the opportunity to take an open swing.	Lose your grip. You lose the opportunity to take an open swing.	Lose your grip. You lose the opportunity to take an open strike.	Lose your grip. You elect not to attack because of lost control.	Lose your grip. You elect not to attack. Good choice.
26-30	Drop your weapon. It will take 1 round to draw a new one, or 2 rounds to recover old one.	Drop your weapon. It will take 2 rounds to draw new one or 4 rounds to recover old one.	Fumble your delivery. You lose the option to attack but youcan still parry.	Fumble your delivery. You lose 2 rounds but can still parry.	You fumble your delivery and hang onto your weapon. Subtract 10 from your next attack.	One's ten thumbs just cannot handle loading. You lose the rounds.
31-40	You slip with grace and lose the opportunity to get in the vital blow.	You slip into fog of mind. You lose 1 round in order to collect your thoughts.	You slip and are stunned for 1 round. All right, you just look clumsy. Try again.	You slip and lose your saddle position. You lose 2 rounds but can still parry.	You slip and lose 2 rounds to fully recover. You hold onto weapon and still parry.	You fumble your ammunition. You lose 2 rounds trying to recover. Real weak, kid.
41-50	Bad follow through. You lose your opportunity and give yourself 1 hit. Real weak.	Stumble over an unseen imaginary deceased turtle. You lose 2 rndsof offensive action but can still parry.	Lose your grip and juggle weapon for 2 rounds. You can still parry. Your next swing is at -10.	Your mount rears and you are quite stunned for 2 rounds during the recovery.	You fumble your weapon after losing your grip. You are stunned for 3 rounds.	Break arrow and lose your cool. You find yourself out of 2 rounds of action.
51-60	You slip without grace and lose 2 rounds worth of opportunities. Good luck Pal.	Bad move. You lose 2 rounds of open swings. Fortunately, you can still parry.	You slip and almost fall. You are stunned and unable to parry for 2 rounds.	You lose your grip and fumble your weapon. You are stunned for 3 rounds.	Poor release. Weapon lands harmlessly 20 feet to the left of target.	Drop your arrow. You lose 2 rounds reloading. Try hand arms next time.
61-70	Lose your grip and juggle your weapon for 2 rounds. You can still parry.	Lose you grip and juggle your weapon for 2 rounds. You can still parry.	Lose your grip and juggle weapon for 3 rounds. Your next swing is at -10.	Your poor mount stumbles and you are stunned and unable to parry for 2 rounds.	Very poor release sends weapon off directly to the right. Reroll if someone lies in the new path.	Drop your bow. You lose 2 rounds while retrieving and reloading it.
71-80	Lose your grip and juggle your weapon for 2 rounds. Unfortu-nately, you cannot parry.	Very bad move. You are stunned and unable to parry for 2 rounds. Not good.	Fumble your follow-through. You lose 3 rounds. You are stunned for 2 rounds.	You break your weapon and lose 2 rounds while drawing a new one.	You slip and lose 3 rounds to fully recover. You hold onto weapon, but cannot parry.	Bowstring breaks. You lose 6 rnds while restringing bow or 2 rnds while drawing a new weapon.
81-85	You lose your "wind" and realise that you should relax and not swing for 2 rounds.	Lose your grip and juggle your weapon for 3 rounds. You can still parry.	Clumsy move. You are stunned and unable to parry for 3 rounds.	You drop your weapon in one of you lighter moments. Lose 2 rounds drawing a new one.	You drop your weapon. It will take 2 rounds to draw new one or 4 rounds to recover old one.	You fumble your weapon. You are stunned and quite unable to parry for the next 3 rounds.
86-90	Foe's smooth moves leave you stunned for 2 rounds. Hopefully, you will learn.	Incredibly bad move. You are stunned and unable to parry for 3 rounds.	Drop your weapon. It will take 2 rounds to draw new one or 6 rounds to recover old one.	You break your weapon and lose 2 rounds drawing a new one. You take 10 hits.	You fumble your weapon badly but hang onto it. You are stunned and unable to parry for 6 rounds.	You let your arrow fly much too soon. You strike 20 feet short of target. You are out 2 rounds.
91-95	You stumble. The classless display leaves you stunned for 3 rounds. You might still survive.	You stumble and nearly fall down in an apparent attempt to commit suicide. You are stunned 4 rounds.	You trip and fall. It will take 4 rounds to recover. You are unable to parry for 3 rounds.	Your seating is improper and you find yourself stunned and unable to parry for 3 rounds.	You let go of weapon too early and send it off 30 feet behind you.	Slip and fall down. You are stunned for 6 rounds, and unable to parry 2 rounds. Your shot goes astray.
96-99	Swallow tongue in the excitement. You are stunned and unable to parry for 3 rounds.	You trip and fall. It will take 4 rounds to recover. You are unable to parry for 3 rounds.	You injure your shoulder. You are stunned and unable to parry for 3 rounds and fight at -25.	Your body absorbs the impact. You take 20 hits and are stunned and unable to parry for 6 rounds.	You fall down. Your shot goes astray. You are stunned for 12 rounds.	Break your bow. You are stunned and unable to parry for 4 rounds of action. Good luck, pal.
100	Bad taste and poor execution. You attempt to maim yourself. Roll on the "D" critical table (slashes).	Worst move anyone has seen in ages. 50% chance you are out 2 days with a pulled groin. 50% chance opponent out 3 rounds laughing.	You break your weapon and are stunned and unable to parry for 6 rounds.	You fall off of your mount. Role on the "D" crush critical strike table.	You hit yourself during delivery. Roll on the "D" critical strike table (crushes).	Poor judgement. You let arrow fly and lose an ear. +5 hits. You take 2 hits per round.

19.2 MODERN WEAPONS FUMBLE TABLE

	Mini Weapon	Energy (1-handed)	Energy (2-handed)	Projectile (1-handed)	Projectile (2-handed)	Grenade/ Missile Launcher
01-25	Fumbling with your weapon, you miss an opportunity. No firing 'till the next available phase.	Trigger, trigger, where is the trigger? Forget shooting this fire phase.	Poor grip. Try next Phase.	Mysteriously, you elect not to fire at this time.	A moment's hesitation loses you the opportunity to fire this phase.	Uncertain aim causes you to elect to not fire this phase.
26-30	One's ten (12?) thumbs just cannot locate that eluse trigger. No further activity for you this round.	Stun, disrupt, vaporize or purée? The little dials on your weapon give you pause for a whole round.	Worse grip. Try again next round.	Your clumsy maneuvers prevent an effective shooting opportunity. Try again next fire phase.	Poor grip and nasty kickback conspire to deliver 10 hits (and you miss).	Your slowness with the weapon causes you to delay firing till next phase.
31-40	You discover just before firing that you are holding the thing backwards. Spend the rest of the round to re-orient. Read the manual next time!	The Safety was on. -50 to activity for this round and the next while trying to recover your self-confidence.	Get a grip. You are stunned (for 1 round) by your own incompetence.	Distracted by the Winged Victory of Samothrace, you fail to fire this round.	You empty the clip into the air, then you're stunned for 1 round as you realize your foolishness.	You elect not to fire for a full round.
41-50	Lose your grip. No further activity for the next round.	Oops, that was the cartridge ejection button, not the trigger. Spend 1 round re-inserting your weapon's power supply.	Cleverly, you eject the weapon power pack and watch it bounce a full 3m away. Spend 2 rnds inserting a new power supply, or 3-5 rnds recovering that one.	Get your eyes checked. Momentary double vision convinces you to wait out the rest of this round (you are at -50).	You empty a round/burst into the ground. Your sheer incompetence costs you 2 rounds of stunned amazement.	You tilt the launcher forward and all of its ammunition tumbles out onto the ground. Faulty loading by somebody.
51-60	You mishandle your weapon and are unable to fire for one round.	You really mishandle your weapon and are stunned for the next round.	You fire the weapon into the ground at your feet. ("Just testing the power charge.")	The ammo cartridge is jammed. It will take 2 rnds to draw a new weapon or 1-6 to wrest this one free.	Slight sprain to your non-weapon wrist causes all further 2-handed attacks to be at -20. You take 5 hits.	Confusion and a personal crisis stun you for 2 rounds.
61-70	Random distractions stun you for 1 round.	Trembling hands cause you to rethink your tactics. Take deep breaths for 2 rounds (i.e. you're stunned) to calm yourself.	You really, really mishandle your weapon and are stunned for the next 2 rounds.	Your spastic shooting hits 3 meters short of the target. You are at -30 to activity next round.	Break a finger and take 8 hits. You are stunned 2 rounds, and all weapon attacks using that hand are at -70.	A mental lapse: Did I load fusion missiles or *smoke grenades?* gives you pause for 3 rounds of complete inactivity.
71-80	The weapon pops open in your hand, and the energy cell(s) tumble merrily away. Spend 1 round per cell recovering and reinserting them.	A muscle spasm delivers 10 hits and stuns you for 2 rounds.	A painful muscle spasm delivers 12 hits and stuns you for 2 rounds.	Poke yourself in the eye while trying to get fancy. +8 hits, -20 to activity and stunned 2 rounds.	Trigger slips as you take aim. Make an attack with no modifications on the closest opponent.	Premature ejection causes the grenade to fire 30° to the left of intended target.
81-85	Suddenly more slippery than a greased tachyon, the little toy pops out of your hand and hits the floor. Make a Light roll on the *Equipment Mishandling Chart.**	As if of its own volition, your weapon leaps out of your hand. Check the *Equipment Mishandling Chart.**	Have you ever used one of these before? You drop your precious weapon. Check the *Equipment Mishandling Chart* *	Those pistols are a little tough to get a grip on. You unceremoniously drop the thing and it bounces a good 2 meters away. Check the *Equipment Mishandling Chart* *	Whirling around for no apparent reason, you bash your weapon against a nonagressive surface. Check the *Equipment Mishandling Chart* *	You manage to hit yourself with the weapon and take 8 hits, stunned 3 rounds.
86-90	Trip over yourself and fire into space. Two rounds of stunned contemplation will return you to your equilibrium.	A cruel flashback from your childhood leaves you stunned 2 rounds.	The weapon separates in your hands for easy storage. 1 round stunned and staring, and 2 rounds frantically putting it back together.	Cartridge drops out of weapon, scattering ammo, on which you slip and fall down in a comic display. You are down and stunned next round (and red-faced).	Horror at your own shooting ineptitude stuns you for 3 rounds.	Improper loading (whose fault is that?) causes the grenade to travel only half of the intended range.
91-95	You drop your weapon then step on it. Real swift, buddy. Make a Very Severe roll on the *Equipment Mishandling Chart.**	Your funny bone isn't always so funny, is it? You're stunned 4 rounds of intense agony.	Instead of your original target, you fire at the phantasmal Vogon Bulldozer 30° to the right. (You miss.)	Fingers mysteriously entangled in weapon cause you some consternation and 3 rounds of stunned extrication.	Burn yourself on the hot casing as you fire ineffectively. You take 4 hits and are stunned two rounds.	Your exhuberant hefting of the weapon gives you a hernia. +15 hits, and you are at -70 until cured.
96-99	Your clumsy fingers jam the firing mechanism. Spend 3 rounds unjamming it.	You seem to think that your weapon is a baton. It slips, however, and in trying to recover it you drop-kick it 3 meters away. Check the *Equipment Mishandling Chart.**	You boldly go... on your face. Fall down, on top of your precious weapon, and make a Severe roll on the *Equipment Mishandling Chart.** You are also down and stunned for 1 round.	While daydreaming, you put your hand in front of the barrel while firing. Lose a finger. +10 hits; 5 hits per round and stunned 3 rounds.	Very poor grip causes you to fire wildly. 20% chance you hit someone in a 180° arc in front of you (roll attack w/no skill bonus). Your foolishness stuns you for 4 rounds.	Too late, you realize you are aiming the thing backwards. Your shot fires exactly 180° from the intended direction, roll randomly for range.
100	Poor judgement and worse aim. You pull the trigger, lose an ear and take two hits per round.	Only you could get your finger caught in the trigger. You are stunned for 4 rounds of action. Try surrendering.	That heavy gun slips in your sweaty palms as you fire. You shoot off your toe. Now you're at -50 an take 8 hits, 2 hit per round, and are stunned next rnd.	You artfully spin the weapon in your hand and deal a point-blank burst attack on yourself (no skill bonus). Roll the attack and say your prayers, buddy.	You pull the trigger and empty the gun into your own foot. + 20 hits; 8 hits per round. -70 to activity and stunned 3 rounds.	With a puff of smoke and a "foof", the grenade plops out of the launcher and lands at your feet. It will detonate before you can move. Panic.

* Refer to the *Equipment Mishandling Chart* in the **Player Book**, pg 77.

31.3 MASTER INDEX

The following is a list of references to material throughout the three ***Space Master*** Books. Entries are coded with a 'P', 'G', or 'T', (for 'Player Book', 'GM Book,' or 'Tech Book,' respectively) indicating the book, and with a page number where the entry begins. References to Charts and Tables are italicized

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