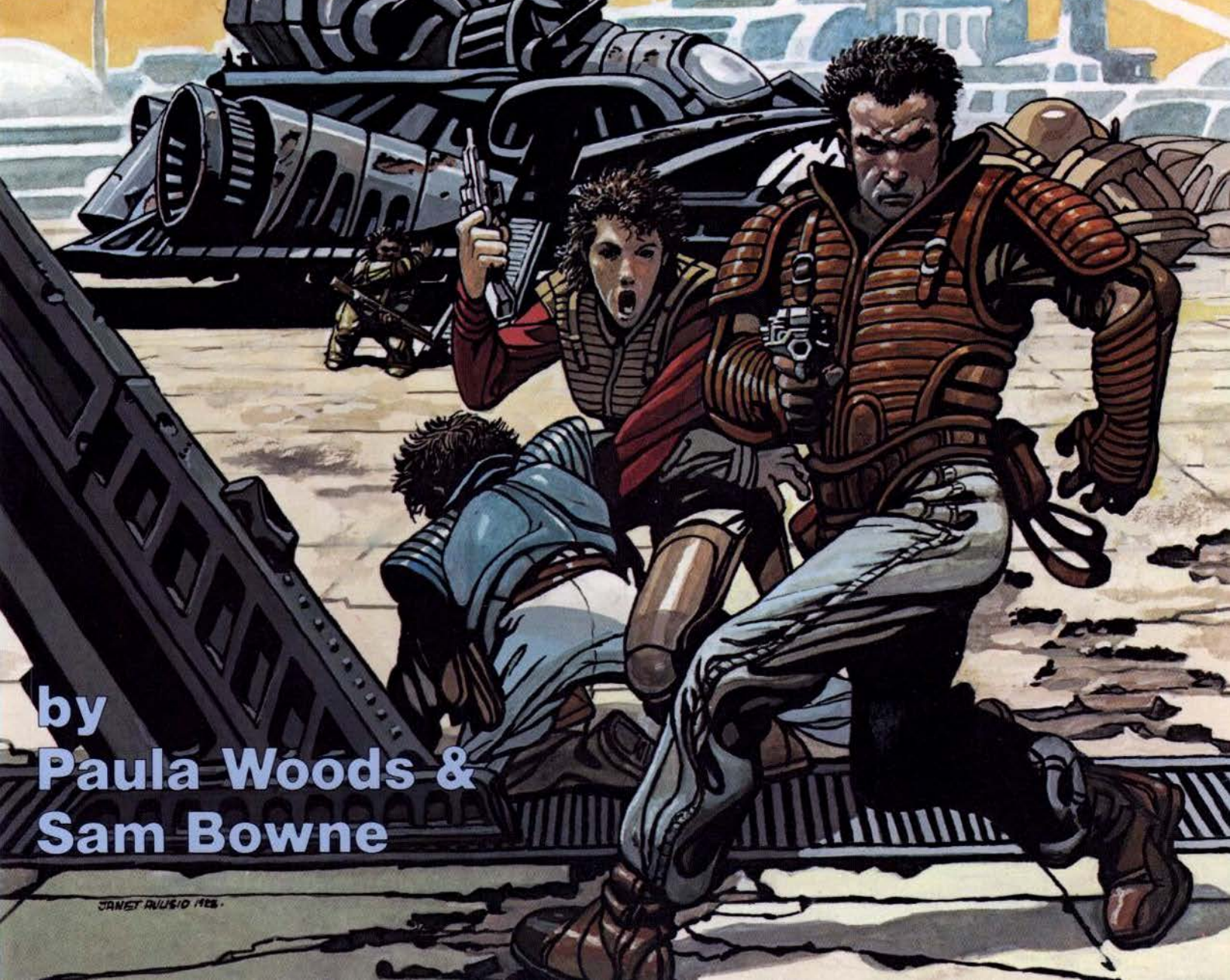




#50

A SCIENCE FICTION ROLE PLAYING GAME

STAR HERO™



by
Paula Woods &
Sam Bowne

JANET RILEY 1985

STAR HERO™

THE UNIVERSE OF SCIENCE FICTION

by Paula Woods and Sam Bowne

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Hero System™ designed by Steve Peterson and George MacDonald

Dedication: *This game is dedicated to all who have given their lives to bring us closer to the stars.*

For our convenience, we have employed the male gender throughout **Star Hero**. This does not imply any chauvanism on our part (quite the contrary), but it is hard to say him/her/it, or he/she (or "s/he") every time the situation crops up. So, please accept our apologies for this shortcut.

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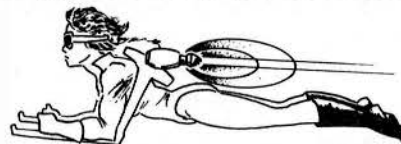
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INTRODUCTION



The spaceship hurtles down through the atmosphere and plows into the ground. It skids roughly along, screeching to a halt with the sound of tearing metal.

Searias, the pilot, exits the Starswan to survey the damage. As she walks back to the tail of the ship, something touches her leg. Searias jumps back from a slimy, amoeboid-like creature. The creature oozes forward, molding from its body one, two, then three eyeballs to dully observe the human.

"Surrender or perish," the Kindred general orders coolly over the radio. L'mn, hearing the warning, slowly turns his small spaceship toward the Kindred battlecruiser.

"Death First!" he yells, and his ship shoots forward.

"The fool! He'll ram us!" cries the Kindred General. L'mn only smiles.

"You're cheating!" says Chiron, pointing at Kaitere's cards. The rest of the creatures at the bar turn to look.

"I do not cheat," says Kaitere under his breath. The robot band almost drowns out his words.

Satora pats Kaitere's shoulder, and simultaneously slips a card into his pocket. She looks across the table. "Of course he doesn't cheat!"

"You have extra cards on you!" shouts Chiron. Suddenly he leans over, and pulls the card from Kaitere's pocket. "Ah, ha!"

"What?" Kaitere stares incredulously at the black ace. Chiron stoops to gather up the pile of credits on the table.

"Stop!" says Kaitere, as he pulls out his blaster, leveling it at Chiron.

Welcome to the universe of **Star Hero**. **Star Hero** is a science fiction roleplaying game. It contains rules for space travel, starship combat, building aliens and their societies, and futuristic devices. This is just one in a series of **Hero System** games. It is fully compatible with **Champions**, **Fantasy Hero**, **Robot Warriors**, **Justice Inc.**, and **Danger International**.

Gaze upon the night sky and marvel at the sublime beauty of space. Perhaps out there are sentient races waiting to meet another intelligent race, mineral rich planets to be mined, bloodthirsty aliens to be vanquished, galactic empires to be won, or a delicate alien flower to be picked. That's what this game is for: experiencing new worlds and new creatures.

FOR THOSE NEW TO ROLEPLAYING

Roleplaying is like improvisational theatre. You portray a character in a play, and make up the lines and actions of your character. Similarly, the other players are also characters. The Gamemaster is the "director", and designs the plot and plays the people you meet in the course of your adventures. Unlike board games, which are played in a single evening, a roleplaying game may develop into an entire campaign of adventures that entertain the players over many months.

The rules help the player define what skills your character has, his or her intelligence, strength, dexterity, and so forth. They also determine whether you can successfully perform a skill or complete an endeavor. The rules may determine your success in a task as simple as landing a spaceship to something as complex as establishing diplomatic relations with an alien race.

FOR THOSE NEW TO THE HERO SYSTEM

The Hero System enables you to customize your character to your tastes. You are not at the whim of dice, since you spend points to build your character. The Hero System relies on a simple formula for combat, which facilitates quick resolutions of fights. The Stun points in the game allow characters to be knocked out without being killed. For a short, easy summary of the system, see the "Instant Roleplaying" section.

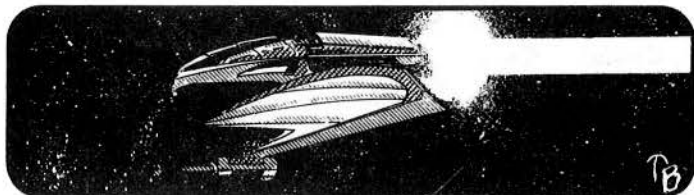
FOR THOSE FAMILIAR WITH THE HERO SYSTEM

You will find that **Star Hero** is compatible with all other Hero system games. New additions are found in the Starships section, the Devices section, and the Aliens section. New skills have been added to the Character Creation section. The Gamemaster's section has discussions regarding developing worlds and their societies.

HOW TO USE THIS BOOK

The book is divided up as follows:

- 1) Introduction.** This explains what roleplaying is, and gives a general description of the Hero System.
- 2) Instant Roleplaying.** This is a good section for those new to roleplaying or the Hero System. It highlights the major rules of the game without going into lengthy descriptions. GMs may wish to read "Instant Roleplaying" before trying to understand the whole book. Also, this is a good section to photocopy and hand out to new players.



- 3) **Character Creation.** This section gives directions for building the characters for a campaign. It includes skills, characteristics, disadvantages, and sample characters. This section describes how to use the character sheet.
- 4) **Combat.** This section describes how to resolve fights. It also describes how to spot people or objects, break walls and doors, impress people, and more.
- 5) **Technology.** This section includes exotic equipment, starships, and alien powers. Players have the option of picking devices off a list or custom building their own. This section also describes faster-than-light travel, starship movement, and starship combat. Players may use the alpre-created starships or design their own. Starship equipment has been listed to aid in building starships. There are more sample starships listed in the scenario.
- 7) **Gamemaster's Section.** This discusses questions like the different themes in campaigns, what type of player characters should be allowed in a campaign. It also includes guidelines for defining a society and its technology.
- 8) **Aliens.** This section contains rules for building aliens. There is also a discussion about fitting alien characters into the campaign.
- 9) **Sample Universe.** This gives the GM a universe to place his or her adventures in. It includes human and alien races, their cultures, technologies, and typical individuals. It also includes an outline for a campaign.
- 10) **Adventures.** A complete scenario is included here.

TERMS

Several terms are used repeatedly throughout the text:

d6 — This refers to the dice used in the game, which are the regular, 6 sided, cubical dice used in most family board games. One of these dice (a die) is referred to as a "d6". If there is a number in front of the "d6", it is referring to more than one die (for example, 2d6 means the player should roll 2 six sided dice and total the number).

FTL — means faster-than-light travel, the only way to travel between stars in a reasonable amount of time.

GM — means gamemaster, the person who makes up the adventure and acts as a "director".

NPC(s) — refers to non-player character(s): the characters the gamemaster portrays.

Number followed by a "-" — This means that in order for the character to succeed, he must roll less than the listed number on 3 six sided dice.

Example: Satora has Concealment Skill with a listed score of 13-. When she wants to try and conceal something, she rolls 3 six-sided dice, and totals the result. If the number is less than or equal to 13 (with appropriate modifiers), then Satora has been succesful.

PC(s) — means player character(s); characters portrayed by players other than the gamemaster.

Person or People — refers to not only humans, but also to any other intelligent life forms, such as aliens.

Sentient — is used to mean any intelligent life form. It also means self-aware life forms.

INSTANT ROLEPLAYING

So that you don't have to read the whole book before starting, we've provided here a quick summary of the rules. To help you along, look at a sample character below (don't worry about where the numbers come from; we'll explain that later):

Satora is a human spy for the Phychi government.

SATORA		
Value	Characteristic	Cost
15	STRENGTH	5
15	DEXTERITY	15
13	CONSTITUTION	6
11	BODY	2
13	INTELLIGENCE	3
10	EGO	0
18	PRESENCE	8
18	COMELINESS	4
3	PHYSICAL DEFENSE	0
2	ENERGY DEFENSE	0
3	SPEED	5
5	RECOVERY	0
20	ENDURANCE	-3
30	STUN	4

Cost	Skill	Roll
Combat skills		
2	Familiarity w/all small arms	
	<i>Phychi Techno Martial Arts</i>	
2	Kick	
3	Nerve Blow	
2	Martial punch	
3	Punch	
(a "-" means or less)		
3	Disguise	13-
3	Persuasion	13-
3	Culture	13-
3	Seduction	13-
3	Concealment	12-
3	Cryptography	12-
3	Criminology	12-
3	Bugging	12-
3	Concealment	12-
3	Security Systems	12-
3	Lockpicking	12-
5	Stealth	12-
3	Demolitions	11-
3	Mimicry	11-

75+ Disadvantages	
1	Distinctive Looks: Never removes her ring, Easily Concealable
6	Reputation: Troublemaker, 11-
3	Friend: Goge, a spaceship mechanic, competent
8	Watched by Phychi government Large group, 11-
12	Experience

Costs:	Char.	Skills	Total	Disadv	Base
	49	+	56	=	102
				=	30
				+	75

OCV: 5; DCV: 5; ECV: 3; Phases: 4, 8, 12
--

ROLLS

Skill Rolls: To make a skill roll, roll 3 six sided dice. Add the numbers on the 3 dice together (the result will be between 3 and 18). Try to roll equal to or below the number listed as your skill roll. Some skills are based on characteristics such as strength (STR), dexterity (DEX) or intelligence (INT). When a skill is based on a characteristic, the necessary roll is $9 + (\text{characteristic}/5)$. For example, if a skill is based on DEX, and the character's DEX is 10, the skill roll is $9 + 10/5 = 11$. Thus, the higher the characteristic, the higher the skill roll, and the easier the task will be. Round normally (for example, if your DEX was 13, the roll would be $(9 + 13/5 = 12)$). The base chance of success for any skill is listed to the right of the skill.

Other Rolls: Perception roll (INT based), DEX rolls, EGO rolls and STR rolls work the same as skill rolls based on characteristics.

COMBAT

Chance to Hit: To make an attack roll, roll 3 six sided dice. Your chance to hit someone is $11 + \text{the attacker's Offensive Combat Value} - \text{the target's Defensive Combat Value}$. Offensive Combat Value (OCV) equals the attacker's dexterity/3. Defensive Combat Value (DCV) equals the defender's dexterity/3. Round normally (so a DEX of 10 gives you an OCV of 3).

Example: *Pala punches Zakul. Pala's dexterity is 12 (so her Offensive Combat Value is 4) and Zakul's dexterity is 15 (so his Defensive Combat Value is 5). Pala's chance to hit Zakul is $11 + 4 - 5 = 10$. Pala has to roll 10 or less on 3 d6 to hit Zakul.*

Certain weapons and maneuvers can modify your OCV and/or DCV. For example, looking on the character sheet, the maneuver "Killing Blow" subtracts 2 from your character's OCV and DCV. That is, it subtracts 2 from your chance to hit someone with a killing blow, and increases your chance of getting hit. This reflects the fact that it is harder to hit someone with a Killing blow, and performing this attack makes it easier for someone else to hit your character.

Damage: If an Attack Roll succeeds, the target is hit, and may take damage. You roll six sided dice to determine damage; the more dice you roll, the more damage done. Weapons are usually listed with the amount of dice of damage they do (for example, a Phychi Stungun does 6d6 of damage).

Two types of damage are Killing damage and Normal damage. Normal damage is done by attacks such as punches and kicks. Killing damage is done by things such as knives and guns. Your Physical Defense (PD) is subtracted from the damage done by Normal physical attacks, while your Energy Defense (ED) protects you from normal Energy Attacks. You need armor or "Resistant" Defenses to protect yourself from Killing attacks. To determine the damage done by punching or kicking someone (Normal damage), divide the character's STR by 5. This gives you the number of dice of damage (for example, if Hawk's STR is 15, the number of dice of damage he does when he punches someone is 3).

Normal Damage: For Normal damage, each 1 on the dice counts as zero BODY done, 2 thru 5 counts as one BODY done, and 6 counts as 2 BODY done. Subtract the victim's Physical Defense (PD) from the damage done.

Example: *Hawk punches Zakul. Hawk makes a successful Attack Roll, and rolls his 3 dice of damage, rolling a 1, 5 and a 6. Hawk has done 3 BODY. Zakul has a PD of 2. Zakul subtracts 2 from 3 and takes 1 BODY.*

The total on the dice equals the STUN done by the attack. Subtract the victim's PD from the STUN done. In the above example, the STUN done is 12, minus Zakul's PD of 2: Zakul takes 10 STUN.

Unconsciousness and Death: When your STUN points hit zero or go below, you are unconscious.

When your BODY total equals zero, you are dying. When your body total equals the negative of your base BODY, you are dead (If you normally have a BODY of 10, when you reach -10, you are dead). If your BODY is less than zero, you lose 1 BODY per turn (12 seconds). A successful paramedic roll will stop a character from losing more BODY.

Killing Damage: Killing Damage is determined differently from normal attacks. The total rolled on the dice is the BODY done to the target. The attacker then rolls 1d6-1 (1 six-sided die minus 1), and multiplies this times the BODY to determine how much STUN is inflicted. The minimum STUN multiplier is 1.

Once the total damage (STUN and BODY) is determined, the character gets to subtract the appropriate defenses from both. A character's PD and ED do not protect against killing attacks, but armor and force fields do.

Example: *Zakul, having been punched, pulls out his laser pistol and fires at Hawk. Having made his roll to hit, Zakul rolls 2d6 for damage. The total on the dice is 9. Zakul rolls a 4 on his STUN multiplier die; thus he inflicts $9 \times 3 = 27$ STUN. Hawk isn't wearing armor, and gets no defense against the attack.*

Energy Defense (ED): Energy Defense works identically to PD above. The only difference is that ED works against energy damage done from things such as flames, lasers, or cold, while PD works against physical damage like punches, bullets, or clubs.

Movement and Phases: *Star Hero* uses a hex map. When using a map, each hex (1 inch) equals 2 real meters (about 6 feet).

Combat is performed in 12 second Turns. A character's Speed determines how often he or she moves in 12 seconds. If you have a Speed of 3, you move 3 times in 12 seconds, or every 4 seconds. When you perform an action it is called your Phase.

Each action is listed along with how long it takes. For example, to strike an opponent takes 1/2 phase. To perform a Flying Tackle takes 1 whole phase. Some actions are "zero" phase actions and are assumed to take little or no time. On your phase you may perform two 1/2 phase actions or 1 whole phase action, and as many zero phase actions as you like. However, once you attack, your phase is over.

Most characters can run 6 hexes in a phase (counts as a whole phase action) when in combat. Out of combat, most characters may run twice as far — 12 hexes. A character may make 1/2 move, and move only 3 hexes in combat (this counts as a 1/2 phase action) and then attack.

More details about the above rules are given later in the book (see the Combat section, and the Skills section).



Character Creation

INTRODUCTION

The character creation section includes all the information needed to build the human characters in your universe. The additional rules for building aliens are covered in the gamemaster's section.

The character creation section is divided into the following sections:

- 1) **Character conception:** This section will help you decide what type of person you wish to play. A galactic detective? A hardened Imperial Marine? A scientist? A spaceship pilot?
- 2) **Character creation checklist:** This tells you the steps involved in building your character.
- 3) **Characteristics:** This section describes what the characteristics (such as strength and intelligence) are, what they mean, and how to purchase them.
- 4) **Skills:** This section deals with skills (such as stealth and computer programming). It describes each skill, what it costs, and how to purchase it for your character.
- 5) **Disadvantages:** This section describes the problems or weaknesses a character may have; these give him or her more points to spend. Disadvantages are often used to help define a character's likes, dislikes, and mannerisms. The disadvantages are described, along with the extra points they give you.

Later in the book there are rules regarding how to equip a character.

You will want to make a photocopy of the character sheet. This is where you'll write down your character.

CHARACTER CONCEPTION

What personality piques your interest? Do you want to be a Scientist? Secret agent? Slime mold? As a player, you have your choice of being a human or an alien (GM permitting). Of course, there is a continuum of species between humans and totally inhuman aliens. Aliens can range from being very similar to humans, such as a heavy-worlder, to being bizarre — like a living, 100 mile-long gas cloud.

Try to get inside your character's head. How does he or she respond to danger? To prolonged stress? Is the character cynical or romantic? Curious or indifferent? Outgoing or introverted? Peaceful or bloodthirsty?

During character conception keep the following things in mind:

1. Is the character human or alien? The GM must approve the character's species. Unless there is only one player, the character must be able to meet the other player characters and interact with them.
2. Will the character fit into the GM's universe? Will he or she be willing to go on the adventures the GM creates? This relies heavily on what type of type of science fiction the GM will be running. The character could be a super spy, spaceship pilot, merchant, space explorer, diplomat, soldier, or police officer. Whoever the character is, all the characters must be working toward the same general goal. It won't work if one person wants to be a police officer while another wants to play a thief.

BUILDING HUMAN CHARACTERS

CHECKLIST FOR HUMAN CHARACTER CREATION

1. **Character Conception:** see above
2. **Package Deals:** Some large organizations, like the military, have basic requirements for employees. Characters in such organizations may wish to start by buying a Package Deal. This may require some increased statistics, and always includes skills. Not all characters will have Package Deals.
3. **Skills:** Choose the most important skills for your character, and buy them at the starting level, usually 3 pts. Skills can also be bought at a higher proficiency by spending more points. If there are other skills appropriate for the character, but which are less important, buy 1 point Familiarities with those skills. Try to make sure the character has some combat ability, even if it's just a 1 point familiarity with a hand weapon. Also, choose a few Familiarities or 2-point Knowledge skills that make the character unique, such as Wine Connoisseur, Old Earth Weapons, or Singing. These skills make your character more fun to play, and could even come in handy someday.
4. **Characteristics:** Buy Characteristics to match the character conception. If you want a hulking brute, buy up the STR; an agile acrobat would want a high DEX. Check the skills: if the character has a lot of skills based on the same characteristic, consider buying more of that characteristic. If the character is particularly poor at something, sell back some characteristics below the starting values.
5. **Disadvantages:** What things are not perfect about the character? Does he or she have an old enemy, a police record, or chronic bad luck? Such disadvantages help define the character and give you more points to buy skills or characteristics.
6. **Balancing:** The cost of the character may be more than 75 points + disadvantage points. Look at the character's statistics, some of these may be sold back. Downgrade less important skills to familiarities. Remember that later on the character will be earning experience points to improve skills and characteristics. Alternately, a character may have points left over. In this case, buy additional skills or improve the primary characteristics. Reconsider the disadvantages, and eliminate any that are inappropriate.
7. **Equipment:** Determine what devices and vehicles the character has (see the Devices Section). There is a list of equipment with prices in the Device section. Optionally, you may also wish to custom build equipment (see the Technology section).





HOW ARE HUMAN CHARACTERS BUILT?

Dice are not used to build a character. Instead, the player (or the GM) spends points. The players usually get 75 Hero points to spend, which are used to increase characteristics or buy skills. To get more than the normal allotment of Character Points to begin with, the character can have certain Disadvantages which limit some of his or her effectiveness.

Human characters start with Familiarity with 7 skills (see the Skill Section).

Four types of people populate a campaign world. Player-characters will usually be the fourth type, although the GM can set the campaign at any desired power level.

- (1) **The Incompetent Normal.** This most wretched of individuals starts with -20 (that is, negative twenty) Character Points. In other words, he is so inept that he must begin with his basic Characteristics lowered to reflect his general incompetence. Incompetent Normals are almost always Non-Player Characters (run by the Gamemaster). Examples of Incompetent Normals include feeble informers, small children, old or infirm people, and so forth.
- (2) **The Normal.** The normal is just an average person with average characteristics. Normals have no extra Character Points, although, the GM may wish to move points around (to make each normal unique). They are usually Non-Player Characters (NPCs).
- (3) **The Talented Normal.** A Talented Normal is given 50 Character Points to buy skills and boost Characteristics. Player-Characters in a lower-powered campaign will be Talented Normals; a lot of NPCs will be, too. The Talented Normal is capable of performing physical, mental, and talent-related feats impressive to the average person. This character can out-think, out-maneuver, out-fight, and otherwise out-perform lesser opponents. The Talented Normal makes a great villain or special thug for the player-characters to fight.
- (4) **The Hero.** The Hero, on the other hand, begins with 75 Character Points, and is generally capable of feats which will, in turn, impress the Talented Normal. The Hero gets involved in the most rigorous and dangerous of all modern escapades. The Hero has the competence level of characters on TV shows, movies, and books. Most player-characters in the campaign will be based on 75 points.

Characters accumulate Experience Points through adventuring. Experience Points are similar to Character points. They can be used to purchase Skills, boost Characteristics, and diminish or even eliminate Disadvantages (see Experience Points section).

The GM may choose to run a lower or higher powered campaign by altering the point base that characters are given. A 50 point base would result in less impressive characters, while a 100 point base would mean very tough heroes.

CHARACTERISTICS



All characters are described by a set of **Characteristics**. These characteristics represent the attributes that a person (human or alien) has, such as strength, intelligence, or comeliness. Each characteristic has a numerical value. This shows how a character compares to other people in that characteristic; whether a character is better or worse in that regard.

Every player character starts with a score of 10 in each "primary" characteristics. These numbers reflect a slightly better-than-average character, a "hero".

The following chart lists the primary characteristics, how many Character points it costs to raise each characteristic, and the maximum value a characteristic normally reaches.

EXPLANATION OF CHARACTERISTICS

Each Characteristic is listed with its standard abbreviation in parentheses. The description gives an idea of the use of the Characteristic in the game. For more details, see the Combat section.

PRIMARY CHARACTERISTICS

STRENGTH (STR)

This Characteristic represents the character's raw physical power. Strength determines the damage a character does in hand-to-hand combat, and how much the character can lift, carry, or throw. Strength also adds to the base value of Physical Defense, Recovery, and Stun. A character is considered twice as strong for every +5 points of STR. One point of STR costs 1 Character Point.

DEXTERITY (DEX)

This Characteristic represents the character's coordination and agility. A character's Combat Value is based on DEX. Certain Skills are based on DEX, and a character's base Speed is calculated from DEX. One point of DEX costs 3 Character Points.

CONSTITUTION (CON)

This Characteristic represents how hardy and healthy a character is. Constitution keeps a character from being stunned too easily in combat, and adds to the base value of Energy Defense, Recovery, Endurance Pips, and Stun Pips. One point of CON costs 2 Character Points.

BODY (BODY)

This Characteristic represents how much damage a character can take before being killed. Body Pips add to the base value of a character's Stun Pips. One Body Pip costs 2 Character Points.

INTELLIGENCE (INT)

This Characteristic represents the ability to take in and process data quickly. Intelligence increases the character's Perception Rolls and certain Skills. One point of INT costs 1 Character Point.

EGO (EGO)

This Characteristic represents a character's mental power and strength of will. Ego helps a character in tests of willpower, when he or she is wounded, resisting interrogation, or trying to overcome psychological flaws. One point of EGO costs 2 Character Points.

PRESENCE (PRE)

This Characteristic shows how forceful and charismatic a character is. Presence allows the character to impress or awe others and resist the effects of another person's high Presence. One point of PRE costs 1 Character Point.

COMELINESS (COM)

This Characteristic represents how beautiful or handsome a character is: this may sometimes affect certain Skills or Presence Attacks. One point of COM costs half a Character Point.

PRIMARY CHARACTERISTICS

Base Value	Characteristic	Cost	Maximum Value
10	Strength (STR)	1	20
10	Dexterity (DEX)	3	20
10	Constitution (CON)	2	20
10	Body (BODY)	2	20
10	Intelligence (INT)	1	20
10	Ego (EGO)	2	20
10	Presence (PRE)	1	20
10	Comeliness (COM)	1/2	20

A character is further defined by a series of **Figured Characteristics**. The base values of these Characteristics are calculated from the character's primary Characteristics, but they may be raised or lowered independently of the primary Characteristics. These figured Characteristics are:

FIGURED CHARACTERISTICS

Base Value	Characteristic	Cost	Maximum Value
(2)	Physical Defense (PD)	1	8
(2)	Energy Defense (ED)	1	8
(2)	Speed (SPD)	10	4
(4)	Recovery (REC)	2	10
(20)	Endurance (END)	1/2	50
(20)	Stun (STUN)	1	50

CHARACTERISTIC FORMULAS

Physical Defense	=	(STR/5)
Energy Defense	=	(CON/5)
Speed	=	1 + (DEX/10)
Recovery	=	(STR/5) + (CON/5)
Endurance Pips	=	2 x (CON)
Stun Pips	=	BODY + (STR/2) + (CON/2)

Example: A character with a Strength of 20 will have a base Physical Defense of 4 (20 divided by 5 = 4). If his Constitution is 15, then his base Energy Defense would be 3 (15 divided by 5 = 3). With a STR of 20 and a CON of 15, he would have a base Recovery of 7 ((20 divided by 5) + (15 divided by 5) = 4 + 3 = 7).

Example: Bassi has a BODY of 10, a Strength of 13, and a Constitution of 11. Her total Stun Pips will be 11 + 13/2 + 11/2 = 11 + 7 + 6 = 24.

The formulas for these Figured Characteristics appear here; they're also listed on the Character Sheet for your convenience.

FIGURED CHARACTERISTICS

PHYSICAL DEFENSE (PD)

This Characteristic represents how tough a character is against physical attacks (like punches). A character's PD is subtracted from the STUN and BODY damage done by a normal physical attack. Physical Defense has a base value of (STR/5), and may be increased by 1 point for each 1 Character Point spent.

ENERGY DEFENSE (ED)

This Characteristic represents how tough a character is against energy attacks (like electricity). A character's ED is subtracted from the amount of STUN and BODY damage done by normal energy attacks. Energy Defense has a base value of (CON/5), and may be increased by 1 point for each 1 Character Point spent.

SPEED (SPD)

This Characteristic represents how many actions a character may perform in a turn. Speed has a base value of $1 + (\text{DEX}/10)$. Each additional Speed point costs 10 Character Points. Speed is the only value in *Star Hero* that does not round off in favor of the character.

To increase their Speed, characters must buy the remaining fraction of a Speed point. Each $1/10$ of a Speed point costs 1 Character Point.

Example: A character with a DEX of 18 has a base speed of $1 + (18/10) = 2.8$, which rounds down to 2, so the character is SPD 2. If the character wanted to be SPD 3, it would cost 2 Character Points. If the character wanted to be SPD 4, it would cost 12 Character Points.

RECOVERY (REC)

This Characteristic represents how fast a character recovers from being exhausted or knocked out. Recovery has a base value of (STR/5) + (CON/5). Each point of Recovery allows the character to regain one point of lost STUN and one point of lost END each post-Segment 12 Recovery phase and each phase the character does nothing else. Each additional point of REC costs 2 Character Points.

ENDURANCE (END)

This Characteristic represents how long a character can expend energy. A character who uses an alien power, moves, or uses STR expends END. END has a base value of $2 \times \text{CON}$. Each additional Endurance Pip costs $1/2$ Character Point.

STUN (STUN)

This Characteristic represents how much damage a character can take before being knocked out. STUN has a base value of $\text{BODY} + (\text{STR}/2) + (\text{CON}/2)$. Each additional Stun Pip costs 1 Character Point.

MAXIMUM CHARACTERISTICS

The Maximum Value listed for the Characteristics means that humans don't normally have a Characteristic over that number. It's not impossible to exceed the maximum listed score in a Characteristic but it is expensive. The cost of Characteristics over the Maximum Value is twice the normal cost listed.

Example: Ethan wants his character, a rocket scientist, to have an INT of 23 (to be exceptionally bright and to help out with some of his Intelligence based Skills). The score of 23 exceeds the listed maximum of 20 by 3. Ethan uses 10 of his Character Points to buy his INT up to 20. After that, the cost per point doubles, so that the three additional Intelligence points cost six more Character Points. Ethan has spent a total of 16 Character Points and his character now has an Intelligence of 23.

LOWERING CHARACTERISTICS

Not only can Characteristics be raised above the listed maxima, they may also be reduced below beginning values. The bonus is the same as the price for raising the Characteristic.

Example: Melissa wants her character to be less healthy than normal, and wants her to start with a Constitution of 8 instead of 10. If she decides to do this, she gains the Character Points appropriate to the loss. Since her character lost 2 CON Points, and CON Points are worth 2 Character points each, the character gains 4 Character Points to buy other Characteristics or Skills. However, she's also rather frail.

A character may reduce each and every Primary Characteristic below the listed value, but only one figured Characteristic may be reduced. No Primary Characteristic may be reduced below 5, except with the GM's permission. In any case, the minimum value of a Characteristic is always 1.

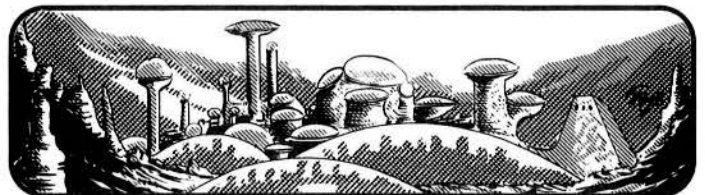
Example: David decides to sell back his character's STR and BODY. He sells his character's STR back to 8, getting 2 points, and his BODY to 7, giving him 6 points.

Example: Melissa wants to sell back her character's END. Her character's END is 16, and she decreases it to 14. Since END is $1/2$ point per pip, the character gets back 1 point.

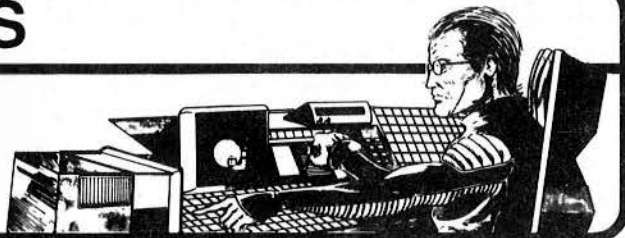
ROUND-OFFS

When using the formulas for generating figured Characteristics the numbers rarely come out evenly. In the case of a number with a fractional remainder, always round to the nearest whole number. When the fractional remainder is $1/2$, the number should be rounded in the character's favor, either up or down. This rule applies to all cases in the game where there's a fractional remainder, except for Speed (SPD).

Example: Energy Defense (ED) is figured from the formula $\text{ED} = \text{CON}/5$. If a character has a 10 CON, his $\text{ED} = (10/5) = 2$. If the character has a 12 CON, his $\text{ED} = (12/5) = 2.4$, which rounds to 2. If he has a 13 CON, his $\text{ED} = (13/5) = 2.6$, which rounds to 3.



SKILLS



Skills are the abilities that characters can have in the game. An example of a Skill would be lockpicking, or space-ship piloting, or robotics; any field in which a character is trained or has some knowledge. Characters are assumed to have a basic knowledge of the world around them, including the ability to read and speak their native language, do basic arithmetic, use a simple computer, and so forth. Skills that are important in a game sense to characters, such as the ability to move silently or fire a gun, are not possessed by everyone. Such Skills are purchased with Character Points – the same Character Points used to buy Characteristics.

A character may obtain a Skill by paying the Character Point cost listed. Once a character has bought a Skill, that Skill may be used over and over without paying any more Character Points.

Example: *Logan pays 3 Character Points for Concealment Skill. She may use Concealment Skill whenever she wants to without paying more Character Points.*

Skills are grouped into eight categories, primarily for ease of use. The categories are: Combat Skills, DEX based Skills, General Skills, INT based Skills, Knowledge Skills, PRE based Skills, Other Skills. Characters may have Skills from any or all categories.

The cost in Character Points of INT, DEX, or PRE based Skills is 3 points for the base Skill Roll. The base Skill Roll for the INT, DEX, or PRE based Skills (also called "stat-based" Skills) is calculated by the formula below. There are some other stat-based Skills (listed under Other Skills and Sciences); they also use the following formula:

Base Skill Roll = 9 + (Characteristic/5) or less

This roll is made on 3 six-sided dice (3d6). Thus, the base Skill Roll for an INT based Skill would be 9 + (INT/5) or less. The base Skill Roll for a DEX based Skill would be 9 + (DEX/5) or less, and so on.

Example: *Satora, who has a 13 INT, pays 3 Character Points for Concealment Skill. Satora's Base Concealment Skill Roll is 9 + (13/5) = 12.*

The General Skills cost 3 Character Points with a base 11 or less roll. Some of the Skills have different costs, but these are noted in the individual Skill description. The cost of a +1 to a Skill Roll for any INT based, DEX based, PRE based, or General Skill is 2 Character Points. Knowledge, Combat, and Other Skills have different costs, explained in their individual sections.

A failed Skill Roll means the character won't be able to perform the chosen action (such as picking a particular lock) until the situation changes; i.e., somehow the character gets at least a +1 to the Skill Roll. Obtaining a +1 to a Skill Roll can be as simple as spending more time at the Skill (see Skill Modifiers).

Skills may be improved above their base rolls by purchasing Skill Levels, which add a +1 to the base roll for every Skill Level. The cost of these Skill Levels depends on the type of Skill, and the number of different Skills where the Skill Level applies. See Knowledge Skills for the cost of Skill Levels.

SKILL VERSUS SKILL

Sometimes characters use their Skills in opposition, such as when one character hides something with Concealment Skill, and another character tries to find the object. In such cases, the following rules may be used.

If the first character fails the Skill Roll, the opposing character doesn't have to make a Skill Roll to undo the first character's efforts. If the first character makes the Skill Roll, then the opposing character must have the appropriate Skill, and must make the Skill Roll. For every 1 point that the first character makes his or her Skill Roll by, the other character must make his or her skill roll at -1 to succeed.



Example: Zakul has Concealment Skill on a 12 or less. He attempts to conceal a laser pistol in a room, and rolls a 14 (failing his roll by 2). Zakul has failed to conceal the pistol, possibly because there are no good hiding places immediately obvious to him (a GM judgement call). Zakul tries again, taking more time in this attempt, so the GM gives Zakul a +1 modifier to his Skill Roll. Zakul now needs to roll a 13 or less to conceal the laser pistol. He rolls a 9; thus, the pistol is now concealed from casual observation. Anyone trying to find the laser pistol must make their Perception Roll at a -4 penalty to find the laser.

In any Skill versus Skill situation, the character taking action will make his roll first, and the character who is reacting will take the modifier. Thus, the person setting a bomb will make a Demolition Skill Roll. The person trying to defuse the bomb will take the modifier on his Demolition Skill Roll.

The GM should resist the temptation to overuse the Skill versus Skill system. If the situation is obvious, there's no need to make Skill Rolls. For instance, if Zil says he is Concealing an object in a particular drawer, and Ila comes along and searches that drawer, she's going to find the object. Role-playing the situations will reduce the need to make unnecessary die rolls.

Most Skills work directly against the same Skill. Some Skills, however, work against a Perception Roll, such as Stealth. Thus, a character makes a Stealth Roll, and other characters attempting to spot the character would make a Perception Roll (see Perception Rolls).

COMPLEMENTARY SKILLS

In some situations, a character may have two (or more) Skills that are applicable to the problem at hand. In such a case, the GM should determine the primary Skill involved. The GM may decide that another Skill is considered complementary to the problem at hand. The character then attempts a Skill Roll for the complementary Skill.

A character adds +1 to his chance to perform a primary Skill for each 2 points the complementary Skill Roll is made by. Thus, if a character makes a complementary Skill Roll by 0, 1, or 2, he gets a +1 to the primary Skill; if he makes the Roll by 3 or 4, +2 to the primary Skill Roll; and so forth. This rule also applies if someone is helping the character perform the Skill.

Example: Chiron is attempting to get some information from a young woman; he believes she knows the whereabouts of a lost teleportation belt. Chiron has both Conversation Skill (on a 12 or less) and Seduction Skill (on a 13 or less). Since, Chiron is trying to gain information, the GM rules that Chiron's Conversation Skill is primary in this case, and his Seduction Skill is complementary. Chiron first tries to make his Seduction Roll, and rolls a 10, making his roll by 3. Charming Chiron gets a +2 to his Conversation Roll for this conversation, which may improve his chance to find the lost belt.

SKILL MODIFIERS

The GM should apply modifiers to the Skill Roll depending on the circumstances. All such modifiers qualify the number the character needs to roll, not the dice roll. This includes any bonus due to Skill Levels, and any complementary Skills.

Example: Lem attempts to conceal an illegal mind control helmet in her spaceship. The GM rules that since Lem has a small spaceship, this attempt will take a -2 modifier to Lem's Concealment Skill Roll. Lem has a base Concealment Skill roll of 13 or less. With the -2 modifier, Lem needs to roll an 11 or less to successfully hide the device.

The GM should provide modifiers to deal with each situation that comes up in the course of the game. The Skills are very general in order to cover many situations; individual circumstances can modify the chance to perform a Skill tremendously. Providing modifiers will act as an incentive for the players to be clever and creative, and that's when they're having the most fun. Modifiers help describe the situation to the players in a very concrete fashion, which makes the game more visual and exciting.

The following table provides a general list of modifiers that apply to most of the Skills. The GM should use this list as a guideline when determining the modifiers; remember, circumstances alter cases. Individual Skills may not use some of these modifiers. Some Skills may list specific modifiers as additional guidelines.

SKILL MODIFIERS	
Modifier	Circumstance
+1	Preparing a phase
+2	Preparing a turn or up to a minute
+3	Preparing 10 minutes or more
+1 to +3	Character has extensive knowledge of the object of his Skill Roll
+1 to +3	Character roleplays the Skill use well
+1 to +3	Using good equipment in connection with the Skill Roll
+1 to +3	Excellent conditions for performing the Skill
-1 to -5	Poor conditions for performing the Skill
-1 to -5	Extremely strange or weird object to perform the Skill on
-1 to -5	Lack of proper equipment (if appropriate)
-1 to -3	Combat conditions, for Skills not normally used in combat

EVERYPERSON SKILLS

All human characters start with some ability in a few Skills, which reflects the fact that everybody knows how to do these things to some extent. These Skills are Climbing, Concealment, Deduction, Disguise, Paramedic, Shadowing, and Stealth. All human characters have Familiarity with these Skills. These Skills may also be purchased and improved just like any other Skills. In this case the full cost must be paid — the everyperson familiarity does not reduce the cost.

Some aliens, or perhaps even some humans, will not have the everyperson skills listed above. An alien may have more, less, or different everyperson skills. In this case, the alien may sell back or buy different everyperson skills. For more details on how to do this see the alien creation section.

In addition to these Skills, all characters begin with 4 Character Points in their native language and 1 Character Point (that is, Familiarity) in Home Area Knowledge. These should be noted on the Character Sheet, since they can be improved like normal Skills. These Skills are given free, so the cost shouldn't be added in to the character's point total.

THE SKILL LIST

The Skills are listed here alphabetically, with the Type of Skill, the Base Roll, the Base Cost and the cost of a +1 to the Skill Roll. The descriptions of the Skills are organized alphabetically by Skill Type, so that similar Skills are grouped together. The Skills marked with a cross (†) are Everyperson Skills, and all characters have an 8 or less chance with them automatically. The exception to this is aliens, who may have different Everyperson skills (see alien creation section).

This is not an exhaustive list. People should feel free to take skills not on the list. Indeed, there are general categories such as "knowledge skills" to cover skills not listed.

THE SKILL LIST			
Skill	Type	Base roll	Base/+1 cost
Ambidexterity	other	—	3/-
Astronomy	Science	11*	2*/1
Biochemistry	Science	11*	2*/1
Biology	Science	11*	2*/1
Breakfall	DEX	9+(DEX/5)	3/2
Bribery	PRE	9+(PRE/5)	3/2
Bugging	INT	9+(INT/5)	3/2
Bureaucrats	PRE	9+(PRE/5)	3/2
Carousing	PRE	9+(PRE/5)	3/2
Chemistry	Science	11*	2*/1
Climbing †	Other	9+(STR/5)	3/2
Combat levels	Combat	—	-/varies
Computer programming	INT	9+(INT/5)	3/2
Concealment †	INT	9+(INT/5)	3/2
Contacts	Other	11	2/1
Conversation	PRE	9+(PRE/5)	3/2
Criminology	INT	9+(INT/5)	3/2
Cryptography	INT	9+(INT/5)	3/2
Culture	PRE	9+(PRE/5)	3/2
Deduction †	INT	9+(INT/5)	5/2
Demolitions	Gen	11	3/2
Disguise †	PRE	9+(PRE/5)	3/2
Electronics	General	11	3/2
Familiarity	Know	—	1/-
Favors	Other	14	1/-
Forensic medicine	Gen	11	3/2
Forgery	Gen	11	3/2
Gambling	Gen	11	3/2
Interrogation	PRE	9+(PRE/5)	3/2
Inventor	INT	9+(INT/5)	5/2
Knowledge	Know	11*	2*/1

Languages	Know	—	1/1
Linguist	Other	11	3/-
Lockpicking	DEX	9+(DEX/5)	3/2
Luck	Other	—	5/-
Martial Arts	Combat	varies	varies
Mechanics	General	11	3/2
Mimicry	General	11	3/2
Navigation	Knowledge	11	2/1
Other Science	Science	11*	2*/1
Paramedic †	INT	9+(INT/5)	3/2
Persuasion	PRE	9+(PRE/5)	3/2
Perception	Other	—	-/3
Perks	Other	—	1/-
Pharmacology	Science	11*	2*/1
Physics	Science	11*	2*/1
Pilot	DEX	9+(DEX/5)	3/2
Planetology	Science	11*	2*/1
Resistance	Other	—	-/1
Robotics	Science	11*	2*/1
Running	Other	—	-/2
Scholar	Other	—	3/-
Security Systems	INT	9+(INT/5)	3/2
Seduction	PRE	9+(PRE/5)	3/2
Sensors Operation	INT	9+(INT/5)	3/2
Shadowing †	Gen	11	3/2
Skill levels	—	—	-/varies
Sleight of hand	DEX	9+(DEX/5)	3/2
Sociology	Science	11*	2*/1
Stealth †	DEX	9+(DEX/5)	5/2
Streetwise	PRE	9+(PRE/5)	3/2
Survival	Gen	11	3/2
Swimming	Other	—	-/2
Tracking	INT	9+(INT/5)	3/2
Translation	INT	9+(INT/5)	3/2
Vehicle familiarity	DEX	9+(DEX/5)	3/2
Weapon familiarity	Combat	—	1/-
Weapon Skill Lvl	Combat	—	-/varies
Weaponsmith:	Know	11	2/1
Xenobiology	Science	11*	2/1*
Zero-G combat fam	Combat	—	1/-

* Knowledge Skills (including Sciences) can be based on a Characteristic, usually INT. In this case the cost of such skills is:

Knowledge Skills	Know	9+(CHAR/5)	3/1
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† All human characters have an 8 or less chance with these Skills. Alien characters may or may not (see the Building Aliens section).

COMBAT SKILLS

MARTIAL ARTS

If players wish to have martial arts maneuvers they must buy them. Each maneuver is bought separately, but the character must have a minimum of 3 martial maneuvers and have paid a minimum of 8 points. Other than that, the martial maneuvers may be bought in any combination desired.

Example: *Logan, of the planet Earth, decides to learn Karate. She purchases Punch (3 points), Kick (2 pts.), Block (2 pts) and Chop (3 pts) for a total of 10 points.*

Example: *Zil studies martial arts on the planet Theris. Zil now has Therin martial arts, and purchases Dodge (2 points), Kick (2 pts.), Nerve Blow (3 pts.) and Escape (3 pts.) for a total of 10 points*

Maneuver	Cost	Phase	OCV	DCV	Damage/Effect
Block	2	1/2	+2	+0	Block, Cancel
Choke Hold	4	1/2	-2	-2	hold, STR/5 NND
Chop	3	1/2	-1	+0	(STR/15) Killing
Disarm	4	1/2	-1	-2	STR/5 +1d6 strike, Disarm
Dodge	2	1/2	—	+5	affects all attacks
Escape	3	see ¹	0	0	+3 to STR roll vs holds, grabs
Flip	2	1/2	-1	+3	STR/5, move opponent 1 hex
Grab	4	1/2	-1	-1	STR/5, +3 to STR roll to grab
Hold	3	1/2	-1	+0	STR/5, hold
Kick	2	1/2	-2	+0	+4d6, strike
Nerve Blow	3	1/2	-2	-1	(STR/5 + 1d6) NND, strike
Punch	3	1/2	+1	+0	+2d6, strike
Throw	3	1/2	+0	-1	STR/5, grab, can cancel

¹—1/2 phase if make break out roll by 5, 1 phase otherwise

+d6 or STR: The STR/5 listed under the DMG (damage) column means that the maneuver does the character's Strength damage in normal dice (STR/5 in dice). If a number is listed, like "+1d6", then do the character's normal STR damage plus that amount listed.

Affects All Attacks: The DCV of this maneuver affects all attacks, including ranged attacks.

Block: This prevents the opponent's attack from hitting the target, and sets up the defender to strike first on the next Phase. Normally, a Block requires the character blocking to compare his or her OCV to the opponent's OCV, rather than DCV.

Cancel: The character can abort his/her next phase to do this maneuver on a segment not normally his phase (see the Combat section).

Disarm: Knock any one-handed weapon from opponent's grasp.

Dodge: The dodging character may not attack, but gets a DCV bonus.

Grab: The grabbed character may be thrown around or dashed to the floor.

Hold: The attacker may do STR/5 in dice (d6) of normal damage, opponent may not attack.

Killing: Attack does killing damage instead of normal damage. The attacker gets STR/15 in Killing Damage.

No Normal Defense: The target gets no PD or ED versus the STUN of this attack. The attack does only STUN, not BODY. The defense is wearing solid armor, in which case the target takes no damage.

Opponent Falls: The opponent automatically falls down after successful attack.

Strike: The attack does STR/5 in dice (d6) of normal damage.

Take Half Damage: Halve the Stun and Body done from any non-ranged attack.

You Fall: The attacker falls down after doing this attack.

WEAPON FAMILIARITY

Characters have to buy Weapon Familiarity in order to know how to use weapons. Without this Skill, the character takes a -3 OCV penalty for using an unfamiliar weapon. For example: Tessa, whose gun was knocked out of her hand, grabs a laser sword off the wall. Since she didn't pay for Weapon Familiarity with swords, she takes a -3 OCV penalty. Weapon Familiarity is bought per Group (such as "pistols"). The cost is 1 Character Point per group. Familiarity may also be bought in larger categories, such as: all Melee Weapon, Missile Weapon, or Small Arms at the cost of 2 Character Points each. A characters must buy Weapon Familiarity separately for each weapon group in the Other Groups. All characters have Familiarity with Club (from the Melee Weapons Group) and with Hand-To-Hand Combat for free.

Melee Weapon Groups:

Clubs: This group includes all impromptu clubs (like two by fours, baseball bats, and guns used as clubs), as well as blackjacks, nightsticks, etc.

Knives: Includes throwing knives when used in melee, as well as daggers or laser knives.

Exotic Melee Weapons: These include archaic weapons such as swords, maces, and unusual modern day melee weapons such as powered nunchuks, Kindred shock gloves, or Phychi stun whips. This category may be used for weapons which do not fit the other two melee categories. This is a flexible category which the GM may wish to subdivide into smaller categories.

Missile Weapon Groups:

Thrown Knives: Includes throwing knives, shuriken, or throwing axes.

Grenades: Buying this weapons group means that the player has had instruction in arming and throwing grenades.

Exotic Missile Weapons: Electric Bolas, blow guns, bow and arrows, laser crossbows, or other unusual missile weapons fall into this category.

Small Arms Groups:

Pistols: This includes modern day guns that shoot bullets, energy guns like lasers, and guns which fire chemicals, such as sleep drugs, truth serum, etc. This group includes both revolvers and automatic pistols; basically, any small arm that does not have autofire, and that may be used with one or two hands.

Rifles: These are two-handed guns larger than pistols. This would include guns which weigh about 3.2 to 12.5 kgs. This category also includes shotguns.

Autofire weapons: These are small arms that can fire bursts of many shots. They are hand held, almost always with two hands.

Other Weapon Groups:

Large Hand-held Arms: This category includes hand-held grenade launchers, bazookas and mortars. Weapons in this category are larger than rifles but are still small enough to be carried by a human (usually 25 to 50 kgs).

Ship To Ship Weapons: This category includes weapons mounted on spaceships which are used in spaceship combat. These weapons are usually large and permanently installed.

Heavy Weapons: This category includes the extremely big guns used for shooting down airplanes or spaceships or for attacking other ground targets. These weapons are usually very large (128 kgs and up). They cannot be carried by a human, and may be permanently installed or mounted on large vehicles. A government would own these types of weapons.



WEAPON GROUP SUMMARY

Melee Weapon Groups:	Small Arms Groups:
Clubs	Pistols
Knives	Rifles
Exotic Melee Weapons	Autofire Weapons
Missile Weapon Groups:	Other Weapon Groups:
Thrown knives	Large hand held arms
Grenades	Heavy Weapons
Exotic Missile Weapons	Ship to ship

COMBAT SKILL LEVELS

Once a character knows how to use a weapon, his or her ability can be improved by buying Combat Skill Levels. The Combat Skill Level has a number of potential uses, though the Skill Level may only be used for one of these things at a time. A player can change the assignment of Skill Levels at the beginning of the character's action phase, but they stay there until the beginning of his next action phase.

The following list details the different uses of Combat Skill Levels.

- 1) One Combat Skill Level can be used as a +1 OCV with any attack that the Weapon Skill Level applies to.
- 2) One Combat Skill Level can be used as a +1 DCV while attacking with a melee weapon or hand-to-hand combat, but **not** with a Missile Weapon or Small Arm, or any of the Other Weapon Groups. A Combat Skill Level used for DCV does **not** affect the character's DCV against ranged attacks.
- 3) One Combat Skill Level can be used as a +1 to the Range Modifier of a ranged attack. Thus, a -1/3" Range Modifier would become -1/4". At short ranges, it doesn't help, and the Skill Levels should be put on OCV. At medium distances, it's the same either way. At long distances, it becomes more useful to put Skill Levels on Range Modifier than on OCV.
- 4) Two Combat Skill Levels can be used to increase the Damage Class of a melee weapon by one step (see the Damage Class section). For instance, a 1d6+1 weapon would then do 1 1/2d6. Four Combat Skill Levels would raise the weapon's Damage Class by two, and so on, up to a maximum of twice the original Damage Class. This may also be done with any Hand-To-Hand Combat maneuver or Martial Arts maneuver. This cannot be done with Missile Weapons, Small arms, or Other Weapons Groups.
- 5) Two Combat Skill Levels can be used to add +1 BODY to the damage done by a melee weapon (that's for a killing attack only). However, the damage the character does cannot exceed the normal maximum for the weapon.

Example: If a character has a 1d6 weapon and uses two Combat Skill Levels to add a +1 BODY to the damage, the possible damages would be 2, 3, 4, 5, 6, 6 (that's 1d6+1 with a maximum of 6 BODY). This can be done with a Karate Chop, but cannot be done with any Missile Weapon, Small Arm, or Other Weapon Group.

- 6) Two Combat Skill Levels can be used to increase the STUN Multiplier of a melee weapon or hand to hand attack by +1. A 1d6-1 STUN Multiplier would become a 1d6 STUN Multiplier. The maximum possible STUN Multiplier is 1d6. If the GM is using the Hit Location Rules, this increases the STUN Multiplier by +1 for the Hit Location, to a maximum of 6.

Combat Skill Levels only apply to those weapons that the character knows how to use; that is, the character has purchased Weapon Familiarity for those weapons. For instance, if Satora has one Skill Level with all Small Arms, this won't help her if she didn't buy Weapon Familiarity with any small arms. If she only bought Weapon Familiarity with Pistols, her Skill Level won't help her when she picks up a rifle.

There are several types of Combat Skill Levels shown on the Combat Skill Level Cost chart. The 3 point Skill Level applies to any one of the weapon groups listed on the Weapon Groups chart. The weapon group it applies to doesn't change, though how the character uses the Skill Level can change, as explained previously.

The 5 point Skill Level can be bought as +1 with all Hand-To-Hand Combat, +1 with all Melee Weapons, +1 with all Missile Weapons, +1 with all Small Arms and so forth.

The 8 point Skill Level applies to any type of combat whatsoever. Unlike any other Combat Skill Level, the character can apply an 8 point Skill Level to DCV against all attacks, including ranged attacks.

When buying these Skill Levels, think of the kind of weapon specialties the character should have. The more Skill Levels the character buys, the more choices he or she has during combat.

Example: *Plenias has a 3 pt. level with pistols, a 3 pt. level with exotic melee weapons, and an 8 pt. level with combat. Plenias, armed with a laser pistol, is fighting a dangerous alien. Plenias puts his 3 pt. level with pistols into +1 OCV and his 8 pt. level into +1 OCV. He now has a bonus of +2 OCV. His level with melee weapons does not count since he is currently fighting with a pistol.*

COMBAT SKILL LEVEL COST

Cost	Application
3	+1 with any one weapon group (+1 with pistols, +1 with Karate, etc.)
5	Either +1 with all melee weapons, +1 with all missile weapons, +1 with all hand-to-hand combat, or +1 with all Small Arms.
8	+1 with all combat

ZERO-GRAVITY COMBAT

This skill represents familiarity with fighting in a place that lacks gravity, such as a spaceship or satellite. This skill is also useful on planets or asteroids with little or no gravity. Individuals without this skill take -3 to their OCV and DCV when in zero-gravity conditions, whether in hand to hand or ranged combat. The characters will also take -3 to DEX rolls when Diving for Cover. Characters with Zero-G Combat take no penalty when fighting in zero-gravity. Zero-G Combat may only be bought once.

Zero-G Combat costs 1 point.

DEX BASED SKILLS

Dexterity based Skills cost 3 Character Points for a base (9 + DEX/5) or less roll; the exception is Stealth Skill, which costs 5 Character Points. A +1 to any DEX based Skill costs 2 Character Points.

BREAKFALL

This Skill allows a character to roll out from a fall, thus being able to stand up without wasting a half phase (see the Action Phase Chart). The character may also fall from a height of up to 4" and take half damage from the fall with a successful roll. Each +1" of height is a -2 to the Breakfall Roll. If the Breakfall Roll is made by one-half, the character takes no damage from the fall. The damage done from falls can be found in the section on Falling.

Modifiers to the Breakfall Roll of -1 to -3 would be used in situations of the character being wounded, carrying something or someone, or landing on an uneven, slippery surface. An unsuccessful Breakfall Roll would mean that the character takes full damage from the fall.



LOCKPICKING

This Skill allows the character to open key, combination, electronic, and magnetic locks. The character is assumed to have some lockpicks or other equipment in order to use the Skill. Using objects such as hairpins or magnetic credit cards as lockpicks is possible, but the GM should assign minuses to the roll. Some locks may be particularly tricky, and have an electronic alarm system of some type connected to the lock or the door. Disabling alarms requires Security Systems skill. Some of the more difficult locks can be a -1 to a -5 modifier to the Lockpicking Skill Roll. Mechanic Skill is a complementary Skill for lockpicking key and combination locks; Electronics is a complementary skill for picking electronic and magnetic locks.

An unsuccessful Lockpicking Roll can mean a jammed lock, an alarm going off, or even a broken lockpick. Usually, though, it just means that the lock was too tough. Lockpicking by an expert can be accomplished in an amazingly short time with easy locks — just as fast as using a key.

SLEIGHT OF HAND

This is the ability to palm items, fool the eye, perform magic tricks, etc. This Skill is useful for getting a weapon into a character's hand without being seen, or for subtly transferring objects to someone else. Large objects (anything bigger than a small pistol) are, of course, more difficult to palm (-1 to -5).

Sleight of Hand can also be used to pick pockets. When picking pockets, use Sleight of Hand versus a Perception Roll as a Skill vs. Skill comparison. An unsuccessful Sleight of Hand Roll doesn't necessarily mean that the character's action was spotted: other characters must make a Perception Roll to spot the motion.

PILOT

This skill enables a character to drive a starship or spaceship. Characters with this skill know how to read a starmap, but would have difficulty determining their location in unfamiliar territory, or after becoming lost in space (Navigation is helpful in this situation).

The skill roll is used for landing, taking off, and piloting during combat. The character does not need to make a Pilot roll while landing in a spaceport, unless something abnormal has happened, like the spaceship or landing pad is damaged, or the ship is being shot at. The character needs to make a Pilot roll when landing on uneven or soft ground; otherwise the landing gear may be damaged.

In combat, this skill allows a pilot to add his or her DCV to the starship's DCV. It also allows the pilot to attempt special maneuvers as detailed in the Starship Combat Section.

Characters with this skill are automatically familiar with one class of vehicles — spaceships. Characters wishing to be familiar with more than one class of vehicle should purchase Vehicle Familiarity.

STEALTH

Stealth is the ability to hide in shadows, move silently, or avoid detection in combat conditions. Use Stealth roll versus the Perception Rolls of those attempting to find the character for a Skill vs. Skill comparison (see Perception Rolls). This Skill allows the character to not be noticed while moving. If he or she wants to hide, use the Concealment Skill.

A character who is carrying a heavy burden will find it

harder to be Stealthy (-1 to -3). Good conditions for Stealth would be loud background noise and dark, crowded areas. A failed Stealth Roll doesn't necessarily mean that the character was seen; use the system outlined under Perception Rolls. All characters have a chance to be Stealthy on an 8 or less, even without buying the Skill.

Stealth Skill costs 5 Character Points.

VEHICLE FAMILIARITY

This skill is for characters who know how to drive or pilot vehicles, such as cars, antigrav-scooters, hovercrafts, boats, or planes. This skill does **not** include starship piloting, which is a separate skill.

For 1 point, the character knows how to operate the vehicle. The character has an 8 or less roll for performing dangerous maneuvers with the vehicle (jumps, screeching turns, etc.). During normal driving, the character does not have to make a roll.

For 3 points, the character has a DEX Roll (9+DEX/5) for performing dangerous maneuvers. This roll may be increased by paying 2 points for each +1 to the skill roll. The character has the same Skill Roll with all the vehicle categories he or she is Familiar with.

After buying the first Vehicle Familiarity, each additional Vehicle Familiarity costs 1 point, or 2 points for an entire category.

Example: Hawk pays 3 points for small ground vehicles, 1 point for large ground vehicles, and 2 points for Recreational Vehicles. Hawk now has a DEX Roll with all Ground Vehicles and Recreational Vehicles, and has paid a total of 6 points.

Ground Vehicle Categories:

Small vehicles: Hovercrafts, cars, antigrav-scooters, motorcycles

Large vehicles: large trucks, construction equipment, Buses

Air Vehicle Categories:

Planes

Helicopters: gyrocopters, anti-grav vehicles

Unpowered air vehicles: Balloons, Hang gliders

Water Vehicles:

Boats: any vehicles which go on top of water

Submarines: any vehicles which go beneath the water's surface

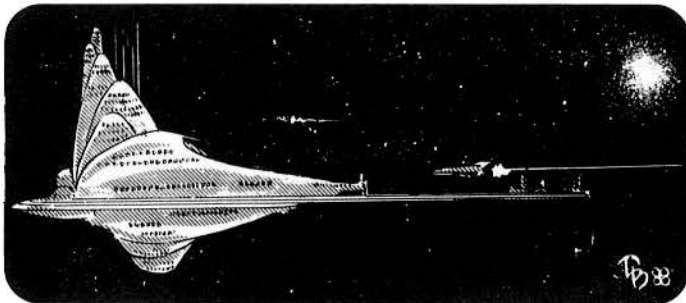
Recreational Vehicle Categories:

Riding: including horses and other animals (alien ones too)

Scuba: artificial gills

Skiing

Parachuting



GENERAL SKILLS

General Skills cost 3 Character Points for a base 11 or less roll. A +1 to any General Skill costs 2 Character Points.

DEMOLITIONS

Demolitions is the ability to use explosives. The character knows how to handle and set off explosives, where to plant explosives for maximum effect, and how to estimate the amount necessary to destroy structures. The character may defuse explosive devices, determine the fusing mechanism, and discover any booby traps in an explosive device with the same roll.

Mechanics or Chemistry may be complementary to Demolitions Skill, depending on what the character is trying to do. It's a good idea to have extra levels with this Skill, because if the character blows the roll ...

ELECTRONICS

The character is trained in electronics: able to identify, understand, repair, and rewire electronic devices. Note that electronic devices could cover a wide range of technology, from radios to teleporters. The character needs tools to perform these operations, and usually a fair amount of time is required for any intricate operation. The character may also build electronic devices from plans. This Skill is useful for determining the purpose of electronic devices the characters may discover and for disabling such devices.

Skills such as Bugging and some Sciences may be complementary skills, depending on the exact function of the particular device. Unsuccessful Electronics Rolls may result in failure or possibly even malfunction of the device.

FORENSIC MEDICINE

Welcome to the exciting world of Forensic Medicine! The character has the ability to make inferences from a corpse about the cause of death, how long the individual has been dead, and so forth. Forensic Medicine Skill can also tell the character whether the corpse was moved after death, how far the killer was standing from the victim if a gun was used at short range, and so on. The ability to do an autopsy is included with this skill. The character may perform autopsies on aliens, but will take a -1 to -5 penalty unless he or she has Xenobiology skill or a book on the topic. A character may be able to spot obvious data about the corpse by just a cursory glance, but a full autopsy can take several hours.

Complementary Skills may include Medicine, Criminology, or Xenobiology. An unsuccessful Forensic Medicine Roll usually means failure to gain information, but can also mean incorrect information.

FORGERY

This is the ability to duplicate official documents, signatures, magnetic codes and so forth. This requires time and specialized equipment in most cases. The more a character makes the Forgery Roll by, the more time it will take to discover that the papers are forgeries. Making an unsuccessful Forgery Roll does not necessarily mean that the papers will be obvious fakes; the examiner must make a successful INT Roll. A character who fails a Forgery Roll will not always be aware of it, even after examining the papers.

GAMBLING

This skill is the ability to win games of chance, such as lmen roulette, craps, poker, Denebian roller bones, and so on. A successful Gambling skill roll means the character understands the rules of the game and the odds of winning. The more a character makes a gambling roll by, the more the character wins. A character may also use the Gambling skill to cheat, unless the cheating involves sleight-of-hand.

Games with a larger "house advantage" or games alien to the character apply a negative modifier to the Gambling Roll. Unsuccessful cheating may be spotted by anyone with a Perception Roll, but only someone else with Gambling Skill can spot a successful cheat. Perception Rolls may be a complementary Skill to spotting a cheater.

MECHANICS

The character is skilled with mechanical devices and knows how to repair, replace, and build them. This Skill also allows a character to modify a mechanical device; for example, a character could modify a hovercraft engine into a jetpack. Tools of some sort are almost always necessary to perform Mechanics Skill.

This skill also enables the character to fix and repair starships. The character understands how ship engines, life support, sensors, and other ship systems are built. The character also understands the stress limits and structural integrity of ships. Mechanics enables a character to determine if a ship is spaceworthy. Tools are usually required to perform mechanical operations. If a person is trying to repair a ship with inferior tools or supplies, or is in a hurry, there may be a -1 to -5 modifier to the roll.

Of course, Knowledge Skill of the particular mechanism would be a complementary Skill. An unsuccessful Mechanics Roll usually means inability to perform the task, but can sometimes mean that the device fails later under stress.

MIMICRY

Mimicry is the ability to imitate someone else's voice. This skill can be quite helpful to a successful disguise (it may be used as a complementary skill to Disguise). This skill is especially useful to fool someone over the radio or the telephone, since the poorer quality of the sound reproduction can add +1 or +2 to the Skill Roll. Imitating the opposite sex, or an alien race is -1 to -3 (or more) to the Mimicry Roll. The chance to detect Mimicry is a Perception Roll vs. the Mimicry Roll, like skill vs skill.

The longer the speech, the greater the chance of making a mistake (-1 to -3). Imitating while speaking a foreign language is -1 to -3. Noisy surroundings, short speeches, or whispers can help the Mimicry Roll (+1 to +3). Failing a Mimicry Roll means that the deception is immediately obvious if the voice was known to the observers.

SHADOWING

Shadowing (or tailing) is the ability to subtly follow someone. Different circumstances can modify the roll. For example, following someone in a desert without being seen is difficult, and would give negative modifiers (-1 to -3). Following someone in a busy spaceport is easier. The person doing the shadowing should make a new roll when the subject does something tricky, like entering a store and running out the back. Failing a Shadowing roll means that the follower lost the subject, while an exceptionally bad failure means the subject has spotted the tail. Shadowing can be done on foot or from a vehicle (Driving would be a complementary skill).

Shadowing also gives a character the ability to spot and lose a tail. If the tail failed the Shadowing roll, the subject only needs a successful perception roll to spot the tail. If the tail made the Shadowing roll, do a skill vs. skill check, with both characters using their Shadowing skill.

City Knowledge may be a complementary skill to Shadowing.

SURVIVAL

This Skill enables the character to live off the land, find food and water, identify dangerous plants and animals, and so on. This Skill is very popular among intrepid explorers and adventurers. The GM should have the character make this Skill Roll only when the character is under-equipped for a particular area (usually when a character is marooned). The Survival Skill Roll should be made on a daily basis to see if the character has found food, shelter, and other necessities. The Skill Roll might be required more often in a particularly harsh or dangerous environment (on an ice-world during a blizzard, for instance).

Lack of available resources like tools, food, water, clothing, and so forth, would be a -1 to -5 modifier on the Skill Roll. Very benign conditions (well equipped, many animals, lots of water) could mean a +1 to +3 modifier. Of course, Knowledge of the creatures and plants in the area is complementary to Survival Skill. Other complementary Skills would be Area Knowledge of the area, Biology, Xenobiology, or similar Sciences. An unsuccessful Survival Skill Roll could be damaging to the character, and failing the Roll several days in a row could be fatal.

INT BASED SKILLS

Intelligence based Skills cost 3 Character Points for a base (9 + INT/5) or less roll: the exceptions are Deduction and Inventor Skills, which cost 5 Character Points. A +1 to the roll of any INT based Skill costs 2 Character Points.

BUGGING

Bugging is the ability to properly implant and operate listening, visual, or other sensors devices ("bugs"). With a successful roll, the character has properly placed microphones or cameras and gets good sound or video from the area (see Perception Rolls). Characters with Bugging Skill may also "sweep" for bugs, searching physically or with detectors.

Bugging also includes the ability to listen or watch from a distance with parabolic mikes, telescopes, laser microphones, and other such devices. A properly bugged vehicle can also be followed with a successful Bugging Roll and a tracking device. Unsuccessful Bugging Rolls can mean the wrong bug was used for the job, broken equipment, bad sound, false noises, etc.

COMPUTER PROGRAMING

Computer Programing gives the character the ability to program computers. The character may also attempt to discover access codes, gain information, change programing, and conceal tampering. Some of the common uses for Computer Programing include extracting information from data banks, defeating computer assisted Security Systems, falsifying records or other data, and so on. Separate Computer Programing Rolls may be necessary to perform each different task.

Computer Programing usually takes a fair amount of time to accomplish, from several minutes to many hours for the most complicated tasks. The computer may have sophisticated protection, resulting in a -1 to -3 modifier. Unsuccessful Computer Programing Rolls can cause an alert to be set off or the system to crash, but usually you just fail.

CONCEALMENT

This is the ability to hide things and to find things that other people have hidden, like important papers, weapons, jewels, artifacts, drugs, and so forth. Some common hiding places include behind an instrument panel, inside a heel, or under fake skin. This Skill can be a lot more fun if the GM actually describes the situation, and the character then describes exactly where he hides the object.

The character may hide from a search using Concealment ("Zil wedges himself behind a console"). Stealth Skill should be used for any active concealment, as when the character is trying to move silently; only use Concealment Skill for nonmoving objects. Areas that are very crowded with junk are much easier to hide things in (+1 to +3); conversely, areas that are very bare are very difficult to hide things in (-1 to -3).

Any Skill directly connected with the object being hidden (like Demolitions when hiding a bomb) is a complementary Skill. Failing a Concealment Roll may mean that the object is uncovered after the character left, or it's in a location that is easily checked. Just because an object is in an open, obvious place doesn't mean someone will find it; remember the *Purloined Letter*.

CRIMINOLOGY

The character knows how to look for clues, dust for fingerprints, examine evidence, do ballistics tests, examine records, search through files, and so forth. In a high-tech world criminology could be very advanced. DNA analysis may reveal the identity of the person who left flakes of skin at the scene of the crime. Laser scanners could detect footprints. Computer records may be vast (for example, keeping track of every purchase made) and in strict societies, computers may monitor every citizen's whereabouts. Chemical analysis of gases may reveal traces of vehicle exhaust, cigarette smoke, or ozone from a laser blaster at the scene of a crime. Many other details of a person's identity, origin, habits, and recent whereabouts can be discerned. This skill also simulates the amazing scientific deduction talent exhibited by the great detectives.

Criminology tests can require a great deal of time, but much can be told from a quick examination of the scene of the crime. Extensive use of Criminology requires some equipment, access to information files, and perhaps some Bureaucrats. Microscopes, a chemistry lab, fingerprinting materials, and other tools are necessary for certain tests.

Knowledge Skills (especially sciences) are often complementary Skills. Knowledge of an area or a city could also be complementary for certain facts. Failing a Criminology Roll can result in improper conclusions or results, but generally means "no conclusive result".

CRYPTOGRAPHY

The character may solve simple ciphers and encrypt or encode messages. A cypher is a method whereby each letter in a message has a different letter, number, or character substituted for it. Cyphers can become very complicated by using nulls (meaningless characters), or multiple substitutions. Secret messages may be imprinted on paper in ultraviolet, grown into crystal structures, or hidden until looked at through certain optic fibers. A highly advanced race may hide messages in the fundamental constants of the universe!

Codes are very difficult to break unless there have been many messages, or if the codebook has been discovered. Both encrypting and encoding can take some time, even with a codebook, unless the characters have a device to help them. Decoding and deciphering can take a long time unless the character has some clues to the nature of the code or cipher.

A failed Skill Roll may result in failure to decode the message, or an incorrect translation of the message. The character with Cryptography may also use invisible inks and other techniques for hiding messages. Note that Mathematics Knowledge and Computer Programing can greatly aid Cryptography.

DEDUCTION

Deduction is the art of taking several facts and leaping to an unjustified conclusion. This is the classic detective's skill. Deduction should be used sparingly; it's useful when the player is stumped, the GM wants to move the scenario along, and the character should be able to figure out what's going on. The GM should try to help the character out, but not reveal everything. Complementary Skills would be any Skill directly connected with the problem the character is trying to solve (i.e., Bureaucratics for a paperwork mystery). A failed Deduction Roll usually means that the character can't think of an answer, or it can mean an incorrect deduction.

Deduction Skill costs 5 Character Points.

INVENTOR

This Skill enables the character to design and construct new devices. To use Inventor, the character needs the complementary Skill in the field he or she is working in (for instance, Electronics, Physics, Biochemistry, Computer Programing and so on). The inventor may design gadgets that require several Skills or Knowledges, so long as he has each of those particular Skills.

Designing gadgets requires a fair amount of time in the laboratory; the GM should decide on a reasonable time frame (usually one week or more). The Devices section describes how to construct devices in game terms.

The GM may allow characters with Inventor Skill to modify equipment or gadgets in combat. Such modifications should always be fairly minor, and well justified by the character. The length of time required will vary with the complexity of the equipment and the modification. An unsuccessful Inventor Roll can mean that the character doesn't know how to make the device, or it could mean a laboratory accident (though that should be rare).

Inventor Skill costs 5 Character Points.



PARAMEDIC

This is the ability to stop bleeding, repair damage, and generally keep someone alive. A character at zero BODY is dying (see Bleeding). A character with Paramedic may keep an injured person alive with a Paramedic Roll. (GMs who desire additional realism may require the paramedic to make this roll at -1 for every 2 BODY the injured individual is below zero). Successful performance of this Skill takes at least a full phase, and the character may wish to take more time in order to get the bonus (see Skill Modifiers). To be a licensed doctor, the character must also buy Knowledge Skill: Medicine (which costs 2 Character Points; see Knowledge Skills). The difference between being a paramedic and being a doctor is that a paramedic provides immediate, emergency care, while a doctor provides long term cures. Unsuccessful Paramedic Rolls may mean stopping the bleeding is beyond the capacity of the character.

When using Paramedic on unfamiliar races, there may be minuses of -1 to -3, depending on how different the race is. For example, Logan tries to save an alien, who is an intelligent tree, from dying. The GM rules there is a -3 to her roll.

SECURITY SYSTEMS

This Skill gives the character the ability to recognize and evade various types of alarms. These alarms include such things as electric eyes, sonar, retina print sensors, voice print analyzers, wires, or pressure plates. The character may need equipment for dealing with certain Security Systems.

Complementary Skills would be such things as Electronics and possibly Computer Programming. Alarms can be very complicated, with several backup alarms, so a -1 to -5 modifier is not unreasonable. An unsuccessful Roll may mean merely a failure, but if the character fails the Roll by more than one point, the alarm should go off.

SENSORS OPERATION

Characters with this skill understand how to operate ships' sensors. They know how to sweep for other ships, planets, and stars, and can examine a planet for cities, radioactivity, life forms, or metals (assuming the proper sensors are available).

This skill also covers all aspects of communications, such as sending coded messages and locating weak transmissions. Modifiers of -1 to -5 may be put on the Sensors Operation roll if the radio frequencies are being jammed or the equipment is damaged.

TRACKING

The character has the ability to follow a trail by observing tracks, marks, broken twigs, and so forth. Characters may get pluses to Tracking rolls for using high-tech sensors like IR goggles. A great deal of information can be derived from tracks, such as the weight of the person, the number of people, how long ago they passed by, what they were doing, and so forth. The GM should require the character to make a Tracking Roll whenever the individual being tracked does something unusual to throw off the pursuit or passes over difficult terrain (like bare stone).

Knowledge Skill of the given terrain and Area Knowledge are complementary to Tracking Skill. Unsuccessful Tracking Rolls may lead the character in the wrong direction.

TRANSLATION

This is the ability to translate unknown languages into a language the character understands. Translation is useful when meeting new alien races. A character will often use devices to aid in the translation process, such as tape recorders and computers. Translation may take weeks, and will take a minimum of at least one hour of listening to the new language, and then the character will know the language only crudely. Translation does not give a character free language skills, as the translation process is too slow, and often requires repeated references to books. Translation is useful for such things as reading strange markings on alien artifacts, or conversing slowly and clumsily (and probably with reference to a computer and books) with a newly contacted alien race. A character with the Translation skill will quickly forget the new language. If the character wishes to retain the language, he or she must pay points for the language (see Other skills section: Languages).

There are positive modifiers (+1 to +3) to the translation roll under good conditions, such as if a language is similar to an already known language, or if aliens are helping the character learn the language. There may be negative modifiers (-1 to -3) under bad conditions, such as aliens that speak on a different frequency, or the character only has a small sample of the language.

KNOWLEDGE SKILLS

Knowledge Skills cost 2 Character Points for a base 11 or less roll. Alternately, characters can base the knowledge Skill upon a characteristic (usually INT) for 3 Character Points, giving a base $(9 + \text{CHAR}/5)$ roll. In either case, each +1 to the Skill Roll costs 1 Character Point. Several of the Knowledge Skills have different point costs. These are noted under the individual Skill. Generally, any Knowledge Skill can be used by anyone (for no cost) with an 8 or less chance if they have appropriate references (such as computers, books, maps), and enough time to study them.

FAMILIARITY

This reflects a rudimentary understanding of a more complicated skill. A character may buy Familiarity with any Characteristic-based, General, or Knowledge Skill. Familiarity may be purchased with some of the Other Skills (see each Skill listing). Familiarity with a Skill costs 1 Character Point, gives a basic knowledge of the skill, and the chance to perform it on an 8 or less. The chance is an 8 or less for any Skill, whether or not the Skill is based on a Characteristic.

The one point spent for the Familiarity counts toward the cost of the Skill if the character later buys the full 3 point Skill. Thus, if Xil buys Familiarity with Culture Skill for one point and later decides to buy Culture Skill, which costs 3 pts., Xil only needs to spend 2 more Character Points.

All Skills marked with an asterisk (*) can be performed by any character on an 8 or less; in other words, everybody has Familiarity with those Skills for free. However, the cost of such Skills is not in any way reduced.

Skill Levels of any kind do not add to the 8 or less chance to perform a Familiar Skill, since the character doesn't have a good understanding of the Skill. The GM may assign Skill Modifiers to make performing a Familiar Skill easier; for instance, taking several turns should make being Stealthy an easier task.

KNOWLEDGE

This is a very general and flexible Skill. It includes knowledge of certain groups, places, people and things. A list of all the possible knowledge skills would be immense.

Two points gives the character an 11 or less roll to know a fact about the subject. Alternately, characters can base the knowledge upon a characteristic (usually INT) for 3 Character Points, giving a base $(9 + \text{CHAR}/5)$ roll. In either case, each +1 to the Skill Roll costs 1 Character Point. Players define how specific their knowledge skills are. Do they have alien cultures knowledge, or knowledge of one specific alien race? The general category, "alien cultures" would give a wide overview of most alien cultures. The character would have a rough idea of a certain alien race, but not details. If the player had chosen knowledge skill of one particular alien race, then the character would know many details about that race, but not much about other aliens. The more general the Knowledge title, the less the character will know about specifics.

Of course, certain facts would be difficult or impossible for a character to know, so the GM should apply appropriate modifiers for difficulty.

Knowledge can be broken down into four general categories: Groups, People, Places, and Things. These categories can help you determine what Knowledges to buy.

Groups: These would be different organizations or cultures, like Knowledge of the Confederation of Planets, or of the alien race "Ylems". This gives the character thorough knowledge of a culture or organization, including such things as the appropriate gestures, customs, taboos, requirements and protocols. Failing your Knowledge Roll for a group could result in a hazardous social blunder.

People: This would be Knowledge about a specific person at its narrowest, or Knowledge of a type of person. For instance, Scientists, or Physicists, or Subatomic Physicists, or Dr. Xil. Such Knowledge would tell you about individuals or (more generally) how such people would react to different situations (like being asked questions or offered money).

Places: This gives the character thorough knowledge of an area, ranging from an individual street in a city to an entire continent or planet. This Skill gives a character knowledge of the geography, major cities, politics, economy, etc., of that country or area. This information can help the characters decide where to go to find certain items or people or what certain clues mean. A map or reference book, should he happen to have one, can add +1 to +3 to the Roll, depending on what knowledge the character seeks. Of course, the book or map may not help at all if the character is looking for the kind of information that isn't in books. An unsuccessful Knowledge Roll usually means that the character doesn't know the answer to the particular question. Of course, if the GM wants to be nasty, failing a Knowledge Roll can mean incorrect answers, which could be dangerous.

Applying this Skill to a city gives the character thorough knowledge of a city's layout, streets, spaceports, meeting places, fine restaurants, shortcuts, criminal areas, and other important spots. Where Area Knowledge will give only general information about a city (where it is, how big it is), City Knowledge gives very specific information. This Skill can help during chases and can greatly cut down travel time within the city.

This Knowledge can also be applied to various terrain types, which is very useful for Skills like Survival or Sailing. Some terrain types might be Plains, Forest, Jungle, Desert, Tundra, Arctic, Oceans, Swamps, or Caves. This could also include strange alien environments, such as planets with an atmosphere of chlorine gas, molten rock, or extremely high gravity. Of course, you could be very specific (Luray Caverns Knowledge) or very general (Underground Knowledge).

Things: This category of Knowledge would be anything that doesn't fall into the other categories. This category does not include sciences, as they are covered in a later section.

Examples: *Alien statues. Trees. History. Holographic video games. Philosophy. Religion. Anti-gravity skateboards. Politics. Secret Societies. Tax Evasion.*

The possibilities are literally infinite; talk to the GM about exactly what Knowledge would be most appropriate for character's skill.

When buying Knowledge Skill, try to think of your character's background. Usually, the character may have Knowledge Skills that help explain how he or she learned other Skills.

SCIENCE SKILLS

Science skills are cost 2 points for a base roll of 11-. Alternately, characters can base the Science skill upon INT for 3 Character Points, giving a base $(9 + \text{INT}/5)$ roll. In either case, each +1 to the Skill Roll costs 1 Character Point. Some skills which could be considered sciences have been listed in other categories. For instance, computer programming is listed under INT skills.

Characters may not take a science that exactly duplicates another skill presently in the game (although skills often partly overlap).

Some Sciences require equipment. Characters with a science skill are assumed to have a working knowledge of the equipment of their trade. If characters attempt to perform a science without adequate equipment or time, the GM may add modifiers of -1 to -5 to the character's roll. The GM may give positive modifiers for excellent equipment. Usually, characters may carry a "field bag" with some basic equipment (enough to perform basic experiments without a penalty). Characters need **not** buy a general category of science before buying a specific science (a character need not buy Chemistry before buying Biochemistry).

Astronomy: Astronomy is the study of the universe: stars, planets, nebulae, and the origin of the universe. This includes astrophysics. Astronomy is useful for determining when a sun will go nova, whether a star is likely to have habitable planets, and identifying strange objects in space. A failed Astronomy roll may mean a person mistakes a radio message for a pulsar, misses an unnatural object in the sky, and so on.

Biochemistry: Biochemistry is the study of chemical processes that take place in living things. Biochemistry involves the study of hormones, proteins, metabolism, DNA, and photosynthesis. Biochemistry has contributed to the discovery of antibiotics, and would be useful if the characters contract some alien disease. Biochemistry would also be useful in the study of strange alien life forms. Characters will usually require some equipment to perform biochemistry. A failed biochemistry roll may mean incorrect data, or an ineffective vaccine.

Biology: Biology is the study of living things. It is generally broken up into two categories: botany (the study of plants), and zoology (the study of animals). Biologists study anatomy, ecology, genetics, bacteriology, microbiology and marine life. A biologist would have a general understanding of cells, organs, ecology, fossils, bacteria, and viruses. A character with the skill Biology has a general knowledge of the field, but is not good at specific fields of biology (such as genetics). If the player wants instead a more specific branch of Biology they should see the Other Sciences.

Chemistry: Chemists determine what substances are made of and how they react with each other. Chemistry is useful for analyzing objects such as soil samples, unmarked liquids, or pieces of an alien spaceship. A chemist may be able to make such things as replacement fuel, an acidic compound to eat through a door, or a polymer to form a rope. A chemist usually needs equipment to work.

Pharmacology: Pharmacology is the study of the effects of drugs on living things. Pharmacology is useful for knowing which drugs cure diseases, cause unconsciousness, make people docile, act as stimulants, and so forth. Pharmacologists have a vague knowledge of chemistry and biology, but mostly understand drugs and their uses.

A failed Pharmacology roll may mean using the wrong drug. This is unlikely to kill a character, but it may lower some statistics temporarily or knock the patient unconscious.

Physics: Physics is the study of energy, force, matter and time. Physicists understand magnetism, heat, light, sound, electricity and particles. The skill Physics is useful for understanding the theory of faster-than-light travel, the stresses on a ship, how nuclear reactors work or how particle weapons function. A physicist has a good understanding of mathematics, but does not know as much as a mathematician.

Planetology: Planetology is the study of planets. A character with this skill would understand the motions of planets, how planets form, and what temperature, atmosphere, and surface features a planet is likely to have. A planetologist given a planet's orbit may determine whether it could sustain human life, what minerals may be found, weather patterns, and so forth.

Robotics: The skill Robotics is used for inventing, designing, and building robots. This skill may also give the character a basic understanding of artificial intelligence, depending on whether this technology existed where the player learned robotics.

A character with Robotics may be able to spot a robot posing as a person. Make a Robotics roll, with perception as a complementary skill (there may be modifiers). A person with this skill may also be able to identify the manufacturer of a certain robot.

Characters with Robotics do not necessarily own a string of robots. Robots are expensive and take time to build.

Sociology: Sociology is the study of individuals, groups, and institutions that make up a society. Sociologists analyze attitudes, behavior and types of relationships. Sociologists may understand the causes of crime, poverty, bigotry and establishment of hierarchy. A character with this skill may know the arts, customs, languages, and religious beliefs of a society. A successful sociology roll may help the players know how to behave on a world and what behavior to expect from an alien. Characters with this skill may be able to spot someone falsely posing as a native from a certain world, or pose as natives themselves. A character with this skill may do a diplomatic deed by giving suggestions to a foreign ambassador on how to solve social problems (such as poverty or crime).

Sociology in a technologically advanced world may itself be very advanced. Sociologists may know high mathematics and have an uncanny ability to predict the future of a society (or its collapse).

Xenobiology: Xenobiology is the biology of alien life forms. A character with Xenobiology has a basic understanding of the known aliens, how they get food or energy, how they reproduce, their anatomy, and their habitat. Xenobiology includes both intelligent and unintelligent life forms, although usually there is emphasis on the intelligent life forms.

A character who purchases Xenobiology will have a basic knowledge of any given alien. If a character wants a more detailed knowledge of a certain alien race, he or she will have to buy the skill Xenobiology of that race specifically (such as Xenobiology: Ylems).

Xenobiology may be helpful in determining what drugs or weapons will affect an alien, how to medically treat an alien, and how to identify what type of alien it is. A xenobiologist has a chance of spotting aliens posing as humans. This can be done with a successful Xenobiology roll, with perception as a complementary roll (there may be modifiers).

Other Sciences: This is a general category for any sciences not specifically listed. This includes specific branches of the general sciences listed like microbiology or organic chemistry. A character with a specific science has a vague knowledge of the general science, and vice versa. For example, a player with Microbiology knows a lot about microscopic organisms, and general facts about Biology.

This category also covers studies which incorporate several sciences, such as biophysics, or psychobiology.

Examples of sciences that fit into this category include: Archaeology, Bacteriology, Biophysics, Botany, Cosmology, Ecology, Embryology, Exobiology, Genetics, Inorganic chemistry, Mathematics, Marine biology, Medicine, Microbiology, Molecular biology, Nuclear physics, Organic chemistry, Paleontology, Human physiology, Psychology, Subatomic physics, Veterinary medicine, Zoology.

This category also includes the myriad sciences based on the study of aliens. Like Xenobiology, these sciences can be general studies of all alien races, or they can focus on a single alien race. Examples of Alien Sciences include Xenoarcheology, Xenobiochemistry, Xenoecology, Xenopharmacology, Xenopsychology, and Xenosociology.

LANGUAGES

Each player should choose a native language for his or her character. This language the character knows for free. The character is considered to know his or her native language well, to the 4 point level as described in the following table. Learning other languages costs Character Points. The table below describes the fluency the character gets for each point cost.

FLUENCY COST	
Fluency	Character Points
Basic conversation	1 pts.
Fluent conversation	2 pts.
Completely fluent w/accents	3 pts.
Idiomatic, native accent	4 pts.
Imitate dialects	5 pts.

A character without complete command of a language may sometimes have to make an INT Roll to understand some very rapid or slurred phrases in a foreign language. The GM should also be aware that there are usually a number of dialects for each language, and sometimes these dialects are very hard to understand, except for someone with an idiomatic command of the language.

SKILL LEVELS

Skill levels are pluses to related skills. An extra +1 with related Skills may be purchased as explained on the table below. There are two types of levels, listed below with their costs.

SKILL LEVELS	
Character Pts.	Type of Level
3 pts.	+1 with any two related Skills (+1 with Culture and Seduction; +1 with Mechanic and Lockpicking; etc.)
5 pts.	+1 with a group of similar Skills (+1 with all DEX based Skills; +1 with all INT based Skills; etc.)

Note that these Skill Levels do not apply to Combat Skills. Also, Skills may be related without being in the same category. The GM is the final judge of whether or not Skills are related.

NAVIGATION

Navigation is used for determining your location by the location of planets, stars, nebulae and other astronomical objects. Navigation is useful for charting unknown galaxies and for finding your way home when lost in space.

Astronomy is a complementary skill to Starship Navigation.

WEAPONSMITH

This skill is useful for building, maintaining and repairing weapons of various types. A character with this skill will be able to identify the origin and effects of a weapon.

The cost for buying weaponsmith with one category of weapons is 3 pts. Each additional category costs 1 pt. Regardless of how many categories the character is familiar with, the roll may be increased by paying 2 pts for each +1 to the skill roll.

Archaic Weapons: Includes swords, crossbows, maces, axes, and whips. A character with this skill may be able to identify the origin of a weapon.

Energy Weapons: Includes the full range of energy weapons, including lasers, magnetic, and electrical guns. A character may recognize guns by sight or maybe even sound. Electronics may be used as a complementary skill.

A character with this skill may be able to build an energy weapon, given the right materials and enough time. To create a new type of gun would take Inventor and possibly knowledge of other sciences (like electronics or mechanics).

Heavy Weapons: Heavy weapons include intraplanetary, planet to space, and ship to ship weapons.

Slugthrowers: Slugthrowers include 20th century guns such as revolvers, automatic pistols, machine guns, and rifles. It includes virtually any type of gun which fires a projectile: even blunderbusses and muskets. It also includes chemical guns.

This skill enables a character to clear a jammed gun in combat in one phase with a successful skill roll. Failing any of the weaponsmith rolls may mean that the gun is still jammed or incorrectly repaired. A character may recognize the type of gun by sight or sound, and may be able to identify the origin of the gun.

Characters with this skill may be able to build a slugthrower given adequate equipment and time. However, creating a new type of gun may require the skill Inventor and other sciences.

OTHER SKILLS

These Skills don't fit into any of the other categories, so they're lumped together here as Other Skills. The cost is listed with each Skill.

AMBIDEXTERITY

This represents the ability to use either hand to perform tasks, with no penalty. Normally, using a weapon with your off hand (the left hand for right-handers and vice-versa) means a -3 OCV penalty. Certain Skills that involve the hands (like Lockpicking) would also take a -3 penalty if using the off hand. Ambidexterity removes this penalty, but does NOT allow the character to attack twice in one combat phase. (To attack more often in a turn, buy more SPD.) This Skill is particularly useful when the character's good hand is injured.

Ambidexterity Cost: 3 character points; you cannot buy pluses to ambidexterity.

CONTACTS

This represents the fact that a character might know someone who can occasionally help him. This Skill can be purchased many times; in each case, it represents a single person that the character knows.

Contacts will usually be determined when buying the Skill, and any Contact must be approved by the GM. Some examples: a police sergeant, an alien ambassador, a space-ship pilot, an underworld informant, a makeup artist. Each Contact is bought like a Knowledge Skill; that is, the character gets that Contact on an 8 or less for 1 point, an 11 or less for 2 points, and +1 to the Contact Roll for every +1 point thereafter. The GM may rule that exceptionally useful Contacts (like an emperor, President of the Confederation of Planets, or a billionaire) would cost more; charge an extra 1, 2 or 3 Character Points for the base 8 or less Contact Roll.

When the character needs some special help during an adventure, he or she can try to get in touch with a Contact. The GM should require the player to make the character's Contact Skill Roll for that Contact. Of course, modifiers are appropriate (camping out on the Contact's doorstep will add a +2 bonus). Once in touch with the Contact, the character has to convince the Contact to help. The base chance is the Contact Skill Roll. This is modified extensively by the exact nature of the help the character needs. If it's troublesome, dangerous, or expensive, this can be a -1 to a -5 (or worse) penalty to the Skill Roll. Persuasion and Seduction can be complementary Skills. Similarly, offering money or a future Favor in exchange can add a bonus to the Skill Roll. If a Contact has already been used in an adventure, each subsequent attempt to use the Contact will take a -2 penalty.

Contacts can be almost anyone, from a janitor to the President. The GM should keep in mind that the people with the highest offices and influence are the most watched, and therefore will refuse to help in many ways. For example, if Xil had Madame President Tania as a Contact, she couldn't get Xil's murder charge dismissed, because she'd be impeached. However, she could get Xil an invitation to a diplomatic party, or provide an appointment with almost anyone. A clerk in the records department of the police station could almost certainly get you information much easier than a police captain, whose conduct is watched more carefully. The GM should keep careful control over Contacts and their use.

Contacts should only be used to do things that the character can't do, or would have great difficulty in doing. Contacts are there to help move the adventure along when the players are stumped about how to proceed, or need a little help to get through a sticky spot. Contacts should **never** hand the solution for an adventure to the characters. Contacts can help find out information (their most common use); also, they can (occasionally) get charges dismissed, smuggle equipment, help with money or deals, etc.

Contacts cost 1 pt. for an 8- roll, 2 pts. for 11-, +1 to this roll per 1 additional point.

CLIMBING

This Skill allows the character to climb unusually difficult walls, trees, buildings, and so on as long as there are handholds. All characters have Climbing Familiarity for free. In other words, all characters have an 8 or less chance to climb difficult surfaces, and can climb ordinary things (like ladders) without making a roll. A character may successfully climb on a roll of 9 + (STR/5) or less under adverse conditions. The climbing speed will vary according to the structure being climbed, but the base speed is 1" per phase.

A climbing character's OCV and DCV are reduced by half, and may be 0 if the character is in a really difficult position. An unsuccessful Climbing Roll usually means that the character cannot climb that area, but it can sometimes mean a fall if the roll was spectacularly bad.

Climbing Cost: 3 Character Points for a base 9 + (STR/5) or less Climbing Roll, +1 to the Climbing Roll for 2 Character Points. Every character has Familiarity with Climbing for free.

FAVORS

This Skill works like a Contact Skill with a 14 or less Skill Roll. However, once a character has used a Favor, it's gone; the character does not get that Character Point back. Really large tasks may require that the character uses up several Favors. The GM may award player characters Contacts or Favors for free as a result of an adventure.

Favors Cost: 1 point and up, like the skill "Contacts".

LINGUIST

This Skill allows the character to learn new Languages more easily. Linguist decreases the cost of each Language skill a character has by one point. The minimum cost of a language is still one point, but for 1 point the character speaks fluently (which usually costs 2 points). Linguist may only be purchased once.

Linguist Cost: 3 Character Points

LUCK

This talent represents that quality which helps events turn out in the character's favor. The GM may have the player make a Luck Roll when he is totally overwhelmed in combat, when an opponent is escaping, when the character is looking for something and can't find it, or any other time that outrageous fortune could come to the character's aid. Of course, player-characters without this talent are often lucky too; Luck is meant to represent those characters with unusual amounts of good fortune.

Luck should never rule a situation — the GM has full control over when, how often, and how much Luck will help a character. Luck shouldn't come into play very often (say a maximum of 3 times per evening of play). Luck should occur as a surprise, not something the character can depend upon.

To perform a Luck Roll a character rolls 1d6 for every 5 Character Points of luck that the character has. Each 6 that is rolled counts as 1 point of Luck. The GM should then decide what (if anything) lucky happens to a character. The more points of Luck that the character rolled, the luckier the character should be. The following is a table giving some general guidelines to follow when determining the effects of Luck:

POINTS OF LUCK	
Points	Possible Effect
1	The character might find a clue or gain information, or the character's opponent could be distracted or impeded, giving the character a momentary advantage.
2	The character could accidentally happen upon someone important, or stumble across some one he or she was looking for. The character's opponent could be inconvenienced by a blaster malfunction or an airlock door that won't open.
3	The character might be saved by the most miraculous of coincidences. The character may stumble upon the villain accidentally, or have a terminal fall broken by a huge pile of air mattresses that just happen to be in the right place. Incredible coincidence is possible.

Luck Cost: 5 Character Points per 1d6 of Luck, maximum of 3d6.

PERCEPTION

The character may buy a +1 to his or her Perception Roll for 3 Character Points. The character may also buy +1 to a specific sense (usually sight or hearing) for 2 Character Points.

PERKS

Perks (or perquisites) are useful licenses, permits, or other rights that characters may have. Normally, these are given out free to members of an agency or an organization (or part of the Package Deal). Individual characters can also purchase Perks with the GM's approval. Exactly how these would work in a campaign is up to the GM.

Perks range in price from 1 point to 10 points, depending on the usefulness of the Perk.

EXAMPLE PERKS

Cost	Example
1	Weapon Permit; Starship Pilot's license; Interplanetary Press Pass (may allow a character to enter emergency or police cordoned areas)
2	Concealed Weapon Permit
5	Diplomatic Immunity; member of Planetary Royalty
10	License to kill; Member of Interplanetary ruling family

RESISTANCE

Resistance is the ability to resist interrogation through self-hypnosis, meditation, or just pure stubbornness. The cost is 1 Character Point for a +1 to the character's EGO Roll for the purpose of resistance. Thus, with 3 Character Points of Resistance the character adds +3 to his or her EGO Roll when interrogated, mind controlled, or hypnotized.

RUNNING

The character may buy +1" to his or her base Running for 2 Character Points, through +4". The cost becomes 4 Character Points per +1" Running thereafter.

SCHOLAR

The character learns new Knowledge Skills easily, at a -1 Character Point to the cost. The minimum cost of a Knowledge Skill is still 1 Character Point, but for that one point the character is able to make an 11 or less roll.

Scholar costs 3 Character Points, and may only be purchased once.

SWIMMING

In the game, assume that everyone knows how to swim at a base 2" per phase for free. The GM may rule that aliens do not know how to swim. Extra swimming may be bought for +1" for 2 Character Points for the first +3", +1" per 4 Character Points thereafter.

PRE BASED SKILLS

Presence-based Skills cost 3 Character Points for a base (9 + PRE/5) or less roll. A +1 to any PRE based Skill costs 2 Character Points.

BRIBERY

The character knows when to bribe someone, how to approach him, and how much to offer. The proper bribe can vary greatly from place to place; sometimes it's money, but occasionally such things as cigarettes will do. The bribery attempt should be roleplayed out as much as possible, with the GM allowing a character to make Bribery Rolls at crucial points in the bargaining to help the character determine how much to offer, how subtle to be, and so on.

If the Bribery attempt is failed badly, or if the character attempts to bribe someone he shouldn't have bribed, the target of the bribery may call the police, the planetary secret service, or even pull out a blaster. Also, just because someone has been successfully bribed doesn't mean they'll stay bribed. Complementary Skills can include Persuasion, Seduction, and Area Knowledge. The right language also helps immensely. There may be minuses (-1 to -5) for bribing an alien, as aliens may not understand or value money.

BUREAUCRATICS

The character knows how to deal with bureaucrats, cut through red tape, whom to talk to, how to reach them, and how to extract information from bureaucracies. Bureaucratics Skill comes in handy when the characters need travel papers while on foreign planets, are going through Customs, arranging for appointments, or performing similar activities. These procedures usually take a fair amount of time, from several hours to several days. The character can get quicker action with a better Bureaucratics Roll. Some of the complementary Skills to Bureaucratics would be the Language of the (alien) race, Knowledge of the planet or customs, Seduction, Bribery, or Persuasion. Strange alien races may require certain ceremonial courtesies and gifts.

If the character is dealing with a technical request of some sort, then the particular Science would be complementary. Unsuccessful Bureaucratics Rolls can result in the character's request being turned down, or worse, stalled forever in red tape.

CAROUSING

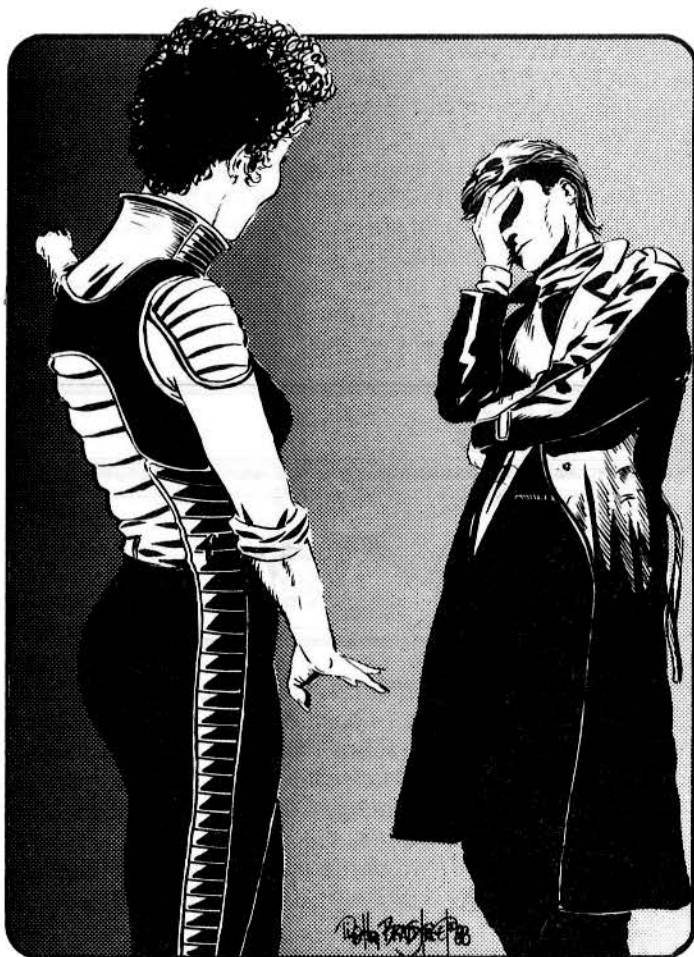
Carousing is the "low brow" form of Culture. It gives a character the ability to hold down liquor, fit in at seedy bars, associate with sleazy types, and engage in drunken revel. A successful roll means that the character blends in well and is enjoyable company. An unsuccessful roll means that the character sticks out like sore thumb and is obviously out of place. There may be minuses to the roll for distinctive looks, inappropriate reputation, and when associating with aliens. Streetwise, Knowledge of the planet, race, and its customs are Complementary skills for Carousing.

CONVERSATION

This Skill allows the character to extract information from people with careful conversation. Use of this Skill takes time, and if the roll is blown, the subject will realize he or she is being pumped and will usually stop talking. If the Skill is properly performed, however, the victim won't be aware of divulging anything. Conversation Skill is a handy way for the GM to give information to the characters through NPCs. Sometimes the target of Conversation Skill may be subtly using his or her own Conversation Skill to get information.

This skill should not substitute for roleplaying. If the character makes clever or stupid statements, the GM should apply modifiers to the roll. Many conversations will be roleplayed out without making Conversation skill rolls.

To properly use the skill, the character must know the language being spoken. If the character doesn't know the language too well, the GM should apply a -1 to -3 modifier. If the information the character is trying to get is technical, then a Science Roll is complementary. Seduction and Persuasion Skills can also be complementary to Conversation.



CULTURE

This Skill gives the character the knowledge of high society, what are considered sophisticated drinks (Altarian brandy?), and how to mingle with royalty and very important people. Culture Skill is very useful for the character that wants to get into those special parties (and get invited back). This Skill varies from society to society, so Area and Culture Knowledge are very important complementary Skills. Some alien cultures may be so strange as to cause minuses (-1 to -3) to Culture rolls (Servalin can't even eat Denebian grub flambe, much less do it elegantly). Culture Skill can make some Disguises very effective, particularly in gaining information. A failed Culture Roll can result in a terrible mistake at a social function, which can be very embarrassing. ("You fool, shaking an Altarian's tentacle is considered a mortal insult!")

DISGUISE

Disguise is the ability to change a character's appearance through makeup, costumes, and acting. Use Disguise versus an INT Roll for Skill vs. Skill to detect a disguise. It is more difficult to impersonate someone specific (-1 to -3), as is maintaining a disguise over a long time (-1 to -3). Makeup and proper props add +1 to +3 to the Disguise Roll. In a high tech society, disguises can be amazingly effective. Masks could be made of living tissue, laser scans of someone's face could give a perfect duplicate mask of them, entire suits could be worn to make a human look like very inhuman, or holographic projection belts could function as a disguise.

Disguises with a great deal of preparation and study can be much more successful, but the preparation can take several days to several weeks of study. Disguises can be spur of the moment things, like knocking out a guard and putting on the uniform.

Area Knowledge, Languages, and Sciences can all be complementary to Disguise. Failing a Disguise Roll means that other characters may make an INT Roll to penetrate the disguise.

INTERROGATION

Interrogation is the ability to get information from unwilling people. Depending on his or her background, a character with this skill may have technical knowledge of mind control drugs, mind control devices, or hypnosis. Characters can "interrogate" by speaking persuasively or manipulatively. This Skill is not very heroic, and is found most often among villains. Sciences or other technical Skills can be complementary to Interrogation.

Interrogation Skill works against an EGO Roll as a Skill vs. Skill. Resistance Skill can aid a character's EGO Roll against Interrogation.

PERSUASION

Persuasion is the ability to convince, persuade, or influence people. This ability is normally used only on NPCs. Players are usually allowed more latitude with their decisions, but a successful Persuasion roll should make the player character much more inclined to believe the orator. This also includes the ability to tell a believable lie. Modifiers are very important to this Skill. If the victim wants to believe, the GM should give the liar at least +3 to the Persuasion roll. Some alien races may be incapable of lying, and, believing others to be the same, may be very gullible. Of course, the more outrageous and unbelievable the lie is, the more negative modifiers the GM should attach to the roll.

Persuasion Skill can be used to aid Presence Attacks, and Presence Attacks can be used to affect Persuasion Rolls. If the character makes a Persuasion Skill Roll, add +1d6 to the Presence attack. If the character rolls under half the necessary roll, add +2d6. Other circumstances may modify the Persuasion Roll or the Presence Attack (violent actions, surprise, target is bizarre alien). Use the modifiers listed under Presence Attacks as a modifier to the Persuasion Roll (i.e., a +2D6 modifier would equal a +2 Skill Roll modifier).

SEDUCTION

Seduction is the ability to gain other's trust by offering companionship or favors. Circumstances have a great effect on this roll. A Comeliness Roll may be considered complementary to this skill, although Comeliness may be race specific (Riss, from a race of lizard beings, thinks humans are hideous). Just because two races look different does not mean they are repulsed by each other (humans like cats, for instance). Also, Seduction does not have to be based just on looks, but is also based on manner and personality. The GM will have to judge whether an alien race gives pluses or minuses to Seduction rolls. A successful Seduction usually makes it easier to learn information from the victim, so treat Seduction as complementary to Conversation Skill, and vice versa.

This Skill is normally for use on NPCs; players should be given more control over their character's actions. The GM may rule that Seduction can be used on player characters when it fits their psychological disadvantages or personality. An unsuccessful Seduction Roll means that the attempt has failed or that the target could that the target was offended.

STREETWISE

This Skill gives the character knowledge of the seamy side of civilization: the ability to find the black market, talk to thugs, gain information, and so on. Remember, on alien worlds,

there may be no criminal types, or the underworld may have very different rules. Not knowing the language of the planet would make this much more difficult, of course. Carousing and Area, City or Planet Knowledge are complementary Skills, depending on the type of information the character is trying to find. Failing a Streetwise Roll can be quite dangerous, since there are a lot of very tough people who don't like people asking questions.

Encourage players to role play this Skill as much as possible; it's a lot of fun. Spaceport slums are common places to use the Streetwise skill.

DISADVANTAGES



Characters may have disadvantages, such as personality flaws, physical handicaps, or enemies. Characters may receive extra character points for these disadvantages, which they can use to buy more skills or characteristics.

The player only receives points for disadvantages taken during character creation. Characters do not receive points for disadvantages incurred during the play of the game (such as angering an alien race). That's just part of the hazards of adventuring.

The list contains many different categories of disadvantages, each with a different point bonus. Other disadvantages not strictly listed can be modeled after the ones listed.

CHOOSING DISADVANTAGES

The GM and the players should always remember the primary rule of Disadvantages: a Disadvantage which doesn't limit the character in some way isn't worth any points. If a character takes distinctive looks "cat person" and the game is played on a planet of cat people, then the character is not really unusual looking. Or if the character takes "hunted by Ylems", and there are no Ylems in the game, there is no disadvantage, and thus no points. Only disadvantages which hinder the character in the regular course of play should be allowed by the GM.

Disadvantages also help describe the character more fully. A good set of Disadvantages provides a picture of the character's history, friends, enemies, likes, and dislikes. Each Disadvantage should fit with the player's conception of his or her character. The GM should work with the player in picking each of the character's Disadvantages.

When taking more than one Disadvantage of the same type (for instance, several Hunteds or several Psychological Limitations), successive Disadvantages are worth less, according to the Disadvantage Cost chart.

DISADVANTAGE COST CHART

Disadvantage	Cost
First one	x1
Second similar one	x1/2
Third similar one	x1/4
Fourth similar one	x0
Any more similar ones	x0

Example: Xil tries to pile up some Character Points by taking three Hunteds: a 14 point Hunted, a 9 point Hunted, and an 8 point Hunted. Since these three Disadvantages are similar, Xil won't get full points for all of them. Instead, referring to the Disadvantage Chart, the most expensive Hunted is given full points, the second Hunted is worth x1/2 points, and the third Hunted is worth x1/4 points. Thus, Xil ends up with $14 + (9/2 = 5) + (8/4 = 2) = 21$ points.

USING DISADVANTAGES

Disadvantages also help the GM by making it easier to integrate the character into the campaign. Often, disadvantages can lead directly to adventures (Chiron is kidnapped by Zakul, one of Chiron's hunteds, and the scenario consists of Chiron trying to escape). If the GM doesn't have an idea for the night's adventure, a quick look at the characters' Disadvantages will usually suggest several good plots.

A Disadvantage shouldn't be overemphasized or play a major role in every adventure. Disadvantages should be used to give the feeling of a well developed character.

BUYING OFF DISADVANTAGES

Characters may "buy off" their Disadvantages with Experience Points (see Experience Points). This should be discussed with the GM beforehand, and the GM should try to come up with a scenario that provides an exciting reason for the character's Disadvantage to be removed.

Example: Satora is hunted by the galactic police for a murder she didn't commit. Satora tells the GM that she wishes to spend the points to buy off her hunted. The GM arranges a scenario where Satora discovers the real murderer and hands him over to the galactic police. Satora is no longer hunted for the crime. Satora pays experience points equal to the number of points in her hunted. Satora no longer has the disadvantage: hunted.

The GM may rule that some disadvantages may not be bought off.

THE DISADVANTAGES

AGE

A character may choose to have certain limitations placed on his or her Characteristics because of age, although an older character does not have to take the disadvantage Age. Normally, characters are assumed to be in the peak of health no matter what the player decides their calendar age to be; in other words, a character can have any Characteristic values at any age.

A character with the Age Disadvantage has different maximum values for certain Characteristics. The numbers listed under the heading on the table are for human beings. An alien with a different lifespan may need to correct the age listed for the characteristic maxima bonus. The alien character may wish to convert calendar age to "human years". For example, the alien race of Ylems lives 10 times longer than humans. For example, a Ylem at the age of 400 will be roughly equivalent to a 40 year old human.

AGE		
Characteristic Maxima	Age	Bonus
STR 15, CON 15, BODY 15, INT 25, EGO 25, PRE 25	40+	3 pts.
STR 10, CON 10, BODY 10, INT 30, EGO 30, PRE 30	60+	5 pts.

The benefit of Age is that the character has the opportunity to buy certain Characteristics beyond the normal maximum values. Of course, if the player doesn't want to buy up the character's INT, EGO, or PRE, there's less reason to take the Age Disadvantage. The Age Disadvantage can only be taken once.

DISCRIMINATION

A character with this disadvantage is refused certain rights or privileges due to his race, gender, number of appendages, not having a tail, or whatever the GM decides. The discrimination need not be limited to a physical aspect of a character. A character may be discriminated against for having a criminal record or for being a citizen of a certain planet.

A character with this Disadvantage may be forbidden to enter military bases, temples, expensive stores, and so forth. It may be illegal for characters to join the military or hold positions of power in the government or large corporations.

Discrimination is different than Distinctive Looks because Discrimination means that the character is indirectly punished and refused privileges, while Distinctive Looks means that the character is easily recognized. Also, characters with this Disadvantage need not be easily recognized.

Example: *Chiron is a citizen of the Phychi. He often has to deal with citizens of the Kindred planets. The Kindred hate all Phychi, and refuse to talk to Phychi, fight alongside them, or to permit a Phychi to sit at the same table as them. Chiron has the disadvantage Discrimination.*

DISCRIMINATION TABLE

Discrimination Occurs	Bonus
Rarely 8-	1 pt.
Sometimes 11-	3 pts.
Often 14-	5 pts.
Situation	
Character is denied minor privileges (social events, courtesies)	1 point
Character is denied major rights (to hold power, money, police protection)	3 points
Character is violently discriminated against (jailed, attacked, enslaved)	5 points

DISTINCTIVE LOOKS

A character with this Disadvantage has some easily recognizable features that are difficult to conceal. Distinctive Looks could be such things as bright red hair, a facial scar, unusual height (large or small), a peculiar walk, a strange voice, extra arms, green skin, or some other trait. In a science fiction game, these looks would really have to be unusual to be "distinctive". On a planet where there are hundreds of different races, people would consider very few traits to be unusual. However, on a planet of humans only, a visiting alien would be very unusual. The GM will have to decide how frequently a character will look distinctive to others, and whether it is enough to merit a Disadvantage.

This Disadvantage may only be taken once; having several scars just makes you more distinctive. The Character Point bonus is shown on the Distinctive Looks table.

DISTINCTIVE LOOKS

Concealability	Bonus
Easily concealable	1 pt.
Concealable (with Disguise)	3 pts.
Not concealable	5 pts.
Distinctive Looks cause extreme reaction: fear, disgust, rapture, etc. in viewers	2x pts.

Example: *A strange voice would be Concealable (worth 3 points), since the character could avoid talking. Since this would be noticeable, it would not be Easily Concealable. If the voice was so frightening that it would bother most people, it would be worth 2x points, or 6 points. Clothing may be considered Distinctive Looks, but the character has to dress that way even in inappropriate situations.*

FRIENDS

A character with this Disadvantage has a non-player character friend or companion who gets in the way and gets into trouble a lot, requiring the character to protect or save him. The character should define how competent the NPC is and how often the NPC gets involved in scenarios. The points for a Friend are given on the Friend table.

FRIEND	
Bonus	The Friend gets involved
3 pts.	Infrequently (8 or less)
5 pts.	Occasionally (11 or less)
8 pts.	Frequently (14 or less)
Bonus	The Friend is:
0 pts.	Competent (A normal person, with about 20 points in Characteristics and Skills)
3 pts.	Normal (A normal person, no extra points, but possibly some points are shifted around)
5 pts.	Incompetent (A normal person with -20 points in Characteristics)

The player must determine who the Friend is before playing the character. The GM can help and can develop the NPC's personality and Characteristics. The Friend can be written up on a character sheet and have a fully developed background. Friends, being the Disadvantage that they are, rarely gain Experience Points. The GM might even give the Friend some Disadvantages, thus making the character more interesting. Sometimes the player may leave the Friend entirely up to the GM, letting the Friend be a surprise. The Friend can also change from time to time, or even every adventure ("A date in every spaceport").

To take another player's character as a Friend, use the Psychological Limitation Disadvantage, or the Romance Disadvantage. A Friend can more easily influence a character's course of action, so give Friends a +2 to their Persuasion Roll when attempting to persuade the character.

When a Friend dies, the character has several choices, depending on the nature of his or her personality. The character can find a new Friend (provided by the GM), or gain the equivalent Character Points in a Psychological Limitation. Such a Psychological Limitation could be revenge, violence in general, or depression and uncertainty.

The GM should determine at the beginning of the adventure whether or not the Friend will be involved; the roll is given as a guideline. The Friend should be someone very close to the character; the character will take extra care to make sure that the Friend isn't harmed. Remember, a Friend is a Disadvantage. A Friend may help the character once in a while, but on the whole he just causes trouble. If a Friend is too helpful, the character shouldn't get any points for the Disadvantage. Examples of troublesome friends include the alien who can never tell a lie (even to people holding player characters at laser point), the slug ambassador who always attracts assassins, or the inexperienced friend who claims he can fly a spaceship and can't.

HUNTED

A character with this Disadvantage is hunted by some person or group. The character may or may not know he is being Hunted (player's choice). Taking this Disadvantage means that sometime during adventures the Hunters will show up and attempt to do something nasty to the character. This can range from interrogating him, to arresting him, to trying to kill him outright.



The number of Character Points a character gets for being Hunted depends on how many Hunters there are, what they will do with the character, and how actively the Hunters are looking for the character. The Character Point bonus is listed on the Hunted chart. First, choose the number of Hunters (one of the first three choices). These group sizes are intentionally vague, so the GM can modify them if necessary for the campaign. Next choose what the hunters will do when they catch the character. Lastly, choose how often the Hunters show up.

The chance for a Hunter to show up in each game session is a base 8 or less roll on 3d6. The GM secretly rolls this chance at the beginning of the adventure; if the GM rolls an 8 or less, the Hunter should show up sometime during the course of the adventure. This chance is meant as a general guideline for the GM, not a strict rule. The GM should feel free to ignore the roll if another adventure is planned. Just make a note of it, and have the Hunters show up during another session. Characters hunted more actively than an 8 or less receive more points; a 3 point bonus for an 11 or less roll, or a 5 point bonus for a 14 or less roll.

All Hunteds must be approved by the GM. Specify why the character is being Hunted by that particular individual or group; the Hunters may want to kill the character, take revenge on the character for some act, or retrieve something the character has taken. Use your imagination; the more creative the reason for the Hunted, the more fun the game will be.

The Hunted Disadvantage also covers the situation of a character being exiled from a certain planet — perhaps because he or she is the last member of a deposed royal family or a criminal. In essence, the character is Hunted when in the forbidden area. Of course, the area of exile must be one which the character visits often — otherwise it's not a disadvantage. The GM should not just execute players for breaking the exile. The players should be able to escape, or make deals, and so forth.

Characters don't get points for individuals or groups that begin Hunting the character during the campaign.

HUNTED	
Bonus	Type of Hunter
1 pt.	Hunter is a single person or forbidden area is tiny (a nation).
3 pts.	Hunter is a small group (50 to 100 people) or forbidden area is small (a planet).
5 pts.	Hunter is a medium group (500 to 1000 people) or forbidden area is medium sized (a small group of planets, perhaps owned by one race).
8 pts.	Hunter is a large group (2000 or more people) or forbidden area is large (a whole empire or alliance of planets).
+3 pts	Hunters are based on 75 pts or more, or use special equipment
Punishment:	
-3 pts.	Character will be mildly punished (deportation, fining, theft of possessions)
+0pts.	Character will be strongly punished (framed, imprisoned, enslaved)
Frequency:	
+0 pts.	Hunter is after character infrequently or character is usually not known to be exiled (8 or less).
+3 pts.	Hunter is after character full time or character is somewhat well known to be exiled (11 or less)
+5 pts.	Hunter is after character fanatically or character is well known to be exiled (14 or less).

PHYSICAL LIMITATION

A character with this Disadvantage is hampered by a physical problem, such as lameness or blindness. The amount of points given for a Physical Limitation is determined by how often the limitation gets in the way and by how damaging the limitation is. The GM, of course, is the final judge of how many points a Physical Limitation is worth. The points given for a Physical Limitation are shown on the Physical Limitation chart.

Often, Physical Limitations can have some other effect on the character. For instance, a character with the Physical Limitation: *Lame* would probably sell back some of the 6" of Running that every character has, maybe two or three inches. This would give the character an extra 4 or 6 Character Points in addition to the bonus for the Physical Limitation.

PHYSICAL LIMITATION	
Limitation Occurs	Point Bonus
Infrequently	3 pts.
Frequently	5 pts.
All the time	8 pts.
Limitation Impairs	Point Bonus
Slightly	+0 pts.
Greatly	+3 pts.
Fully	+5 pts.

Examples: Missing one eye (no peripheral vision on one side): (infrequent, slightly limiting) 3 pts.
Lame (also sell off some Running) (frequent, slightly limiting) 5 pts.
 One hand missing (all the time, greatly impairing) 11 pts.
Blind (all the time, fully impairing) 13 pts.

PSYCHOLOGICAL LIMITATION

A character with this Disadvantage has a mental quirk regarding a given thing or situation. The player defines how often the limitation occurs and how impairing it is. The character gets points according to the Psychological Limitation table.

There are basically three types of psychological disadvantages:

- 1) Morality or Codes of Conduct:** These include disadvantages such as a code of honor, code against killing, will not hit an unsuspecting target, protects women, and so on.
- 2) Fears and Hatreds:** This category includes things, places, events, etc. that cause the character fear or spark feelings of hatred. This category includes fear or hatred of heights, cramped spaces, aliens, open space, and so forth.
- 3) Personality Traits or Compulsions:** This category includes behavior that a character feels compelled to do or traits that are descriptive of the character. This category is not just a description of negative traits, but of positive ones also. This category includes disadvantages such as greedy, overconfident, doesn't understand humans (or aliens), cannot tell a lie, and so on.

PSYCHOLOGICAL LIMITATION	
Bonus	Situation Is:
3 pts.	Uncommon
5 pts.	Common
8 pts.	Very Common
Bonus	Intensity
+0 pts.	Moderate: decides character's choice of targets, reactions to situations, may only change with EGO Roll.
+3 pts.	Strong: character takes irrational actions concerning the situation, may only change with EGO Roll at -5 penalty.
+5 pts.	Total: character becomes totally useless or completely irrational in the situation, will not change his or her mind for any reason.

Once the situation has occurred, the character must react as the Psychological Limitation dictates for at least one phase. Then the character may attempt to control his or her feelings through strength of will. If the character makes an EGO Roll, the intensity of the Psychological Limitation is one category less on the table.

Even if the character has made an EGO Roll, the GM may impose negative combat effects on the character, such as half normal CV, when the Psychological Limitation deals with fear. The GM should feel free to modify the EGO Roll up or down considering the exact situation.

Psychological Limitations should be used to define the major outlines of the character's personality. The GM should not allow frivolous or silly Psychological Limitations (fear of mice, hatred of the color pink).

Examples: Code of Chivalry: Common

Situation, Total Commitment	10 pts.
Claustrophobia: Uncommon situation, Strong Reaction	6 pts.
Overconfidence: Very common situation, Moderate Commitment	8 pts.
Hatred of Vegans: Uncommon situation, Strong Commitment	6 pts.

The amount of points for these examples could of course vary due to the intensity of the limitation, which changes from character to character. Remember, this is a Disadvantage, so the GM should stress the bad aspects of the limitation. Occasionally, overconfidence may help the character, but most often it will cause trouble.

REPUTATION

Reputation means that people recognize and know about the character (due to the character's exploits before the campaign begins). This can occasionally be useful, but more often it serves to inform people of the character's whereabouts and gives them knowledge they wouldn't ordinarily have about battle tactics or equipment. Characters may, of course, build up a reputation during the course of adventuring, but this won't give them any Character Points.

REPUTATION	
Bonus	Recognized
0 pts	Sometimes (8 or less)
3 pts.	Frequently (11 or less)
5 pts.	Almost always (14 or less)
+3 pts.	Bad Reputation

RIVALRY

Characters may engaged in rivalries, either professional, romantic, or both. These are not like a Hunted, because the rival is usually on the same side and the rivalry usually affects the character's personal life. All Rivals must be approved by the Gamemaster, and by the other PC if that PC is the object of the rivalry.

In a rivalry situation, the character always attempts to upstage the rival, even to the detriment of the long-term goals of the campaign. Usually, the GM should forbid killing off a rival, except if the GM plans it as part of a scenario.

If a rival is killed, the player may choose a new rival, or the GM may permit the character to buy off the disadvantage.

RIVALRY TABLE	
Bonus	Rivalry Situation
3	Professional rival
2	Romantic rival
+3	Rival is in superior position (superior officer, is engaged to romantic interest, etc.)
+0	Rival is in inferior position (inferior rank, you are engaged to romantic interest, etc.)
+0	Rival is NPC
+2	Rival is PC

ROMANCE

Characters may become involved in romantic affairs, both requited and unrequited. All Romances must be approved by the Gamemaster, and by the other PC if that PC is the object of the romance. Romance takes overriding priority when rescuing is to be done.

Optional rule: Any Characteristic roll is lowered by -2 if the result would work against the interests of the beloved, and raised by +2 if they would work in the interests of the beloved.

ROMANCE TABLE	
Romantic Situation	Bonus Pts
In love with other character	3
Other is NPC	+0
Other is PC	+2
Love is mutual	+0
Other party not in love with you	+2

UNLUCK

A character with this Disadvantage has improbable, unlucky things happen to him or her. The GM should ask the character to make an Unluck Roll when the character is winning easily in a fight, depending on a sure thing, taking a simple task for granted, and so forth. The GM should be careful not to overemphasize this Disadvantage, as Unluck can be extremely frustrating and annoying. The GM might well want to roll secretly for Unluck, and let the player worry about whether or not it's working. Usually, Unluck should only be rolled once during an encounter, in order to give the GM a general idea of the outcome.

The character rolls 1d6 for every 5 Character Points of Unluck. Each "1" that appears on the dice counts as one level of Unluck. The more levels of Unluck, the more intense the effects should be. The following table gives some suggested effects for Unluck.



UNLUCK**Unluck****Levels Possible Effects**

- | Levels | Possible Effects |
|--------|---|
| 1 | Character slips and is put at a combat disadvantage, the computer malfunctions, character could lose a vital clue or piece of equipment, or get involved in a fight. |
| 2 | Bystanders get between the character and his or her target, normally friendly people are unwilling or unable to help the character, the character's blaster melts down, a vacuum suit temporarily malfunctions, or a fumble injures a friend. |
| 3 | The character is suddenly Stunned in a fight by falling debris, another enemy shows up, a downed enemy is revived by a spectacular coincidence, the character's jetpack shuts off in flight, or an airlock opens accidentally. |

Unluck is not just a roll; it should affect the character in minor ways whenever he is winning or on top of a situation. A character with Unluck may also buy Luck. The character would be Lucky when losing and Unlucky when winning (resulting in a very confused character). The maximum amount of Unluck allowed is 3d6 (15 Character Point bonus). Any more than this and the character would have great difficulty staying alive in a dangerous world.

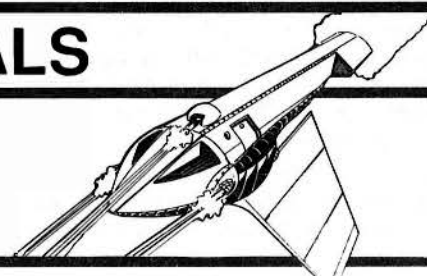
WATCHED

This Disadvantage is sometimes called Monitored. With this Disadvantage, the character is being Watched by some person or organization. They may be keeping track of the character by spies or informers, watching the character's credit transactions, or bugging his or her house, car, or clothes. The Watchers always have a good reason for keeping an eye on the character, and when that reason comes up, the Watched Disadvantage will turn into a Hunted. The Watchers may be looking to see if the character breaks any rules or laws (possibly part of a Package Deal), waiting for him or her to lead them to someone, or just to sell information to the highest bidder. Alternately, the Watcher could be the character's employer.

The GM should always be consulted when the character wants to be Watched. Normally, only one organization will be Watching a character. The bonus is found on the Watched table.

WATCHED**Bonus Type of Watcher**

- | | |
|---------|--|
| 1 pt. | Watcher is a small group (50 to 100 people). |
| 3 pts. | Watcher is a medium group (500 to 1000 people). |
| 5 pts. | Watcher is a large group (2000 or more people). |
| +0 pts. | Watcher is after character sometimes (8 or less). |
| +3 pts. | Watcher is after character full time (11 or less). |
| +5 pts. | Watcher is after character fanatically (14 or less). |

PACKAGE DEALS**WHAT IS A PACKAGE DEAL?**

A Package Deal is a framework for building a character. The Package Deal represents the set of Skills, Disadvantages, restrictions and bonuses that a character would acquire because of membership in an organization, or some other part of his past. Package deals represent the character's experiences, or minimum requirements for an organization.

Package Deals have advantages for both the player and the GM. For the player, it's easier to build a character because package deals give a place to start, and extra points for the character (due to the disadvantages connected with the Package Deal). The GM, in turn, now has a better idea of the character's background.

OBTAINING A PACKAGE DEAL

In order to acquire a Package Deal, simply pay the Package cost with character points. The character now has all the skills and disadvantages listed in the Package Deal. Do not be confused by the term "package bonus". The character does **not** get points from the Package bonus, it just makes the package cheaper.

CREATING PACKAGE DEALS

When constructing Package Deals, the GM should be careful not to include too many skills, as this takes away character individuality. Generally, Package Deals should cost the character between 3 and 10 points.

When the player writes down the Package Deal on a Character Sheet, he or she should put any points from Disadvantages in the Disadvantage section, and write down the Skills in the Skills section. The name of the Package(s) that the character has should also be written down.

A player can upgrade skills in a package by spending character points as usual. Remember, a package deal Disadvantage still counts like a normal Disadvantage, and hence when a character takes more than one of each type of Disadvantage, the point bonus is decreased (see the Disadvantages section).

CHARACTERISTICS

Many Package Deals would logically have some effect upon Characteristics. For instance, military troops might be given physical training which increases a recruit's Strength and Constitution. Thus, these Characteristics should be higher than normal for characters taking this Package.

Package Deals should never add Characteristics. This can lead to problems when a character is already near their Characteristic maximum. Instead, the Package Deal should require certain Characteristic minimums of the character. For instance, an individual joining an organization that requires tough physical training, might have to have STR 13 to be a member (to buy the Package Deal).

Such Characteristic minima are worth a bonus to the character of 1 point for every 5 Character Points of Characteristics that the character is required to buy over the normal 10. Thus, a Package that requires characters to be STR 13, DEX 11, and CON 11 forces the character to spend at least 8 points on Characteristics; so the Package Deal would include a $(8/5 = 2)$ 2 point bonus.

Raising Characteristic maxima is another possibility. However, the GM should be extremely careful about this possibility, or else the game may become unbalanced. If the GM wants to alter Characteristic maxima, then for every 3 Power Points the maximum is raised, the Package Deal cost is +1 point. When lowering the Characteristic maxima, the Package Deal gets a -1 point cost for every 2 Power Points lowered.

Example: *To join the Phychi Secret Service, a character must have a minimum INT 13 and DEX 11. INT costs 1 for 1, so it takes 3 points for INT 13. DEX costs 3 for 1, so it takes 3 points for DEX 11. The package bonus is 1 $(3 + 3 = 6; 6/5 = 1)$.*

PACKAGE BONUS

This is the most important part of a Package Deal. The intent behind a Package Bonus is to encourage a character to take the Package, by giving a "bargain price". The Package Bonus also serves to compensate the character for the fact that not all of the Skills in the Package will be equally useful. Assessing the bonus for a Package takes some time and judgement on the part of the GM, but it only has to be done once. The character can list the Package Bonus under that title in his or her Disadvantages area on the character sheet.

The Package Bonus is determined by looking at each Skill individually and judging how useful the Skill is in the context of the Package and the campaign. Thus, the language *Old Phychi* would be very useful to a Phychi Scholar Package, but would be rarely useful for a Police Package. However, if *Old Phychi* was the primary language of the campaign, *Old Phychi* would be very useful for any Package. Thus, context is all-important.

Rate each Skill as Very Useful, Sometimes Useful, or Rarely Useful. Then multiply the amount of points spent on the Skill by the multiplier given. The result will be the Package Bonus for the Skill. **Do not** round off this number if it's a fraction. Leave it as is, then add up all the Bonuses for the individual Skills, and then round off. The number remaining is the total Package Bonus.

PACKAGE BONUS	
Multiplier	Rating
x0	Very Useful
x1/4	Sometimes Useful
x1/2	Rarely Useful

Most combat Skills in a Package Deal will be Very Useful, not always because of their utility to the Package, but because they are Very Useful in most campaigns.

PACKAGE DISADVANTAGE

This section lists a Disadvantage associated with Package Deals. This Disadvantage isn't listed with the standard Character Disadvantages, because it is almost always associated with Package Deals.

FOLLOWER

The character is a member of an organization, and is subject to some restrictions concerning his or her actions. In other words, the character has to follow orders or face the consequences. The bonus is dependent on just how strict the organization is in terms of exacting orders and restrictions, how difficult, dangerous, or unpleasant the working conditions, and the consequences of failure or disobedience.

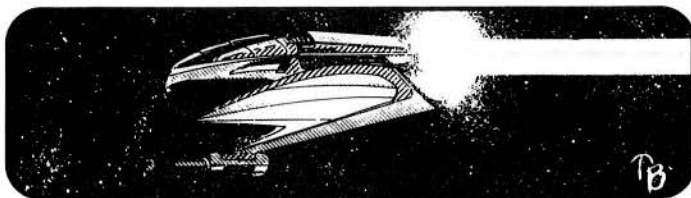
FOLLOWER BONUS	
Working Conditions	Points
Some danger or unpleasantness	0
Dangerous or ugly work	1
Very dangerous or repulsive	2
Structure	Points
Lots of freedom, few restrictions	1
Some latitude, many restrictions	2
Little choice, very restricted	3
Consequences of Disobedience	Points
Minor (get fired, minor punishment)	1
Major (blacklisted, flogging, imprisoned)	2
Death (if they catch you)	3

Example: *Logan works for the Phychi Secret Investigators, and must follow their regulations. She has the Follower disadvantage. The work is dangerous (+1), gives some latitude on adherence to the rules (+2), and she will be fired for being disobedient (1). Logan receives 4 points for the disadvantage.*

PACKAGE DEALS

Below are some sample Package Deals. Some refer to certain human races (the Kindred, Phychi, and Shadu); for more information on these, see the Sample Universe.

STARSHIP PILOT PACKAGE	
Skills	Cost
Pilot	3
Navigation (11-)	3
Sensors Operation (11-)	3
FAM: Mechanics (8-)	1
Package bonus	-1
CHA minimums: DEX 11, INT 12	-1
Package cost	8



SHADU CITIZEN PACKAGE (Class 6 and Lower)

Skills	Cost
KS:Atman religion (12-)	3
KS:Rituals (12-)	3
KS:Shadu society (12-)	3
Gambling (13-)	7
Job skill (such as farming, factory work, service work)	2
Package bonus	-5
Discrimination (lower class)	-8
Psychological limitation: closed minded to other cultures	-6
Package cost	0

PHYCHI SECRET SERVICE PACKAGE

Skills	Cost
FAM w/Small Arms	2
KS:Phychi secret service (8-)	1
KS:Kindred military (8-)	1
Stealth	5
Lockpicking (8-)	1
Security systems (8-)	1
Persuasion	3
"Phychi Stealth" Martial arts (Nerve blow, Dodge, Punch)	8
Package Bonus	-1
CHA minimums: DEX 11, INT 13	-1
Monitored by Phychi Secret service (11-)	-8
Discriminated against by Kindred	-4
Package cost	8

KINDRED MILITARY PACKAGE

Skills	Cost
FAM w/Small Arms	2
FAM w/Missile Weapons	2
FAM w/Ship to ship weapons	1
KS: Military procedure (11-)	2
Resistance (+2)	2
"The Kindred Way", Martial arts maneuvers: Choke hold, Chop, Punch	10
Package Bonus	-1
CHA minima: STR 13, DEX 11, CON 11, PRE 11, BODY 10	-2
Monitored by the Military (11-)	-8
Package cost	8

ROGUE PACKAGE

Skills	Cost
Pilot	3
Navigation (11-)	3
Sensors Operation (11-)	3
Mechanics (8-)	1
Carousing	3
Streetwise	3
Package bonus	-1
CHA minimums: DEX 11, INT 12	-1
Hunted by authorities Medium sized group, 8-	5
Package cost	9

STARSHIP ENGINEER PACKAGE

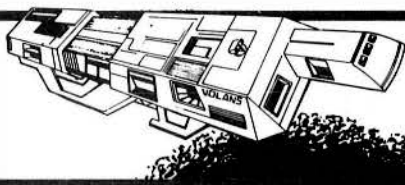
Skills	Cost
Mechanics (11-)	3
Sensors Operation (11-)	3
FAM:Pilot (8-)	1
FAM:Electronics (8-)	1
FAM:Mechanics (8-)	1
Package bonus	0
CHA minimums: INT 13	-1
Package cost	8



DIPLOMAT PACKAGE	
Skills	Cost
Bureaucratics	3
Conversation	3
Culture	3
Persuasion	3
Favor	1
Contacts	1
KS:Alliance politics	2
Foreign language	3
Package bonus	-3
CHA minimums:INT 13, EGO 11, PRE 13	-2
Watched by government	-5
Package cost	9

SCIENTIST PACKAGE DEAL	
Skills	Cost
Inventor	5
Physics	2
Chemistry	2
Biology	2
Choice of 2: Astronomy, Biochemistry, Pharmacology, Planetology, Robotics, Sociology, Xenobiology	4
Package Bonus	-3
CHA minimum: INT 13	-1
Scientific Curiosity: Common, moderate	-5
Package Cost	6

MONEY



Players will want money for buying equipment, homes, bribing guards, traveling and more.

Money is in Credits (Cr), where 1 credit is worth about 1 dollar in the modern United States. Large sums of money are measured in 1,000s of Credits, abbreviated kilo-Credits or KCr. Tremendous sums of money are measured in 1,000,000s of credits, abbreviated mega-credits, or MCr. GMs may modify this, if they desire, to any other convenient measure.

HOW MUCH MONEY DOES A CHARACTER HAVE?

The GM has several choices in determining how much money a player has. At the start of a campaign the GM could assume the characters all have a home, job, vehicle and about 5000 credits. Or the GM could assign rough amounts of money depending on the character's background. For example, Zakul owns stock in a major corporation and therefore has 100,000 credits in the bank, while Plenias decided he was an out of work starship pilot and has only 5 credits to his name. A third choice is to use the optional money system explained below.

The amount of money characters have will fluctuate as a campaign proceeds. Perhaps the players will discover a revolutionary device and sell it for 1,000,000 credits, or perhaps their property will be seized by a planetary government, and they'll be left with nothing.

OPTIONAL MONEY SYSTEM

The optional money system works by having the players pay for their income level with character points, or receive character points back like a disadvantage if they are poor.

Of course, a rich player could lose all his or her money, while a poor player could strike it rich. The GM may wish to assume that these are the **starting** income levels of the characters. This is their income at the beginning of the campaign. Thus if PCs strike it rich, they would have to buy off the poverty Disadvantages or exchange it for new disadvantages. Perhaps the alien princess will start hunting them for stealing her gems, or perhaps the PC's reputation will grow. (Or maybe they'll acquire a new "friend.")

Alternately, these rates can reflect a character's expenses/income, not just current wealth. Thus a poor character not only lacks money, but is probably also an inveterate gambler or has a large family with associated expenses. Even if such an individual falls into a great deal of money, he will soon again be poor, unless the character buys off the disadvantage. Conversely, a wealthy character who suffered a financial reverse would likely eventually regain his wealthy status through family connections, good credit, or an old (wealthy) friend.

On the listings below, savings are defined as money in the bank or easily liquidated assets.

INCOME LEVELS FOR PLAYER CHARACTERS

Destitute: Income less than 3 KCr/year. The character has no job, savings, fixed address, and often no money for food. The character cannot borrow money from any reputable bank. This is a 5 point disadvantage.

Poor: 3-10 KCr/yr. The character has a job, but it is erratic or underpaid. Perhaps the character writes games for a living. He or she lives without fear of starvation, but cannot afford luxuries like travel or entertainment. The character has total savings about 500 Cr., and cannot normally borrow more than 200 Cr. from a bank. This is a 3 pt. disadvantage.

"Middle" Class: 10-30 KCr/yr. This will be the standard income level for most PCs; it ranges from just above the poverty level to reasonably well off. The character has a steady good job and can afford good clothes, hobbies (like photography), vacations, and substantial savings. (about 5,000 Cr/yr). He or she can borrow 10,000 Cr easily from a bank, and up to 50,000 Cr more if the character has some useful skill (Persuasion or Bureaucratics). This is the normal state of most PCs. Cost: 0 pts.

Well Off: 30-100 KCr/yr. The character has an excellent job or an inheritance. He may have a spaceship, but probably has borrowed the money to pay for it. He or she has savings of 20,000 Cr/yr and can borrow 50,000 Cr from a bank easily (up to 250,000 Cr with collateral, such as a house). This costs 5 pts.

Rich: 100-1000 KCr/yr. The character has no need for a job. He or she has struck it rich earlier in life, or inherited a business. The character may own a small spaceship free and clear or have a large spaceship on borrowed money. The character has savings of 75,000 Cr/yr, and can borrow 200,000 Cr from a bank easily, or up to 1,000,000 if the character mortgages his or her source of wealth. Rich costs 10 pts.

Richer individuals may exist, but they are usually NPCs.

MONEY SYSTEM

Name	Income per year	Cost or Bonus	Savings
Destitute	less than 3 KCr	5 pt Bonus	none
Poor	3 to 10 KCr	3 pt Bonus	500 Cr
Middle class	10 to 30 KCr	0 pts.	5000 Cr
Well Off	30 to 100 KCr	5 pt Cost	20,000 Cr
Rich	100 to 1000 KCr	10 pt Cost	75,000 Cr

SAMPLE HUMAN CHARACTERS



The following sample human characters have been provided as examples on how to build characters and possible characters for players to play. There are other sample characters in the "Instant Roleplaying" section and scenarios section.

AVERAGE INDIVIDUALS

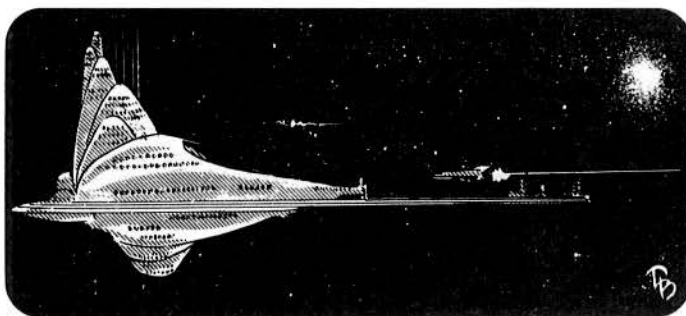
The following characters are average people, not heroic PC types. They start with a different number of character points (-20 for the Incompetent character, and 0 points for the Normal). The GM may use these for typical individuals the PCs will meet on the street.

INCOMPETENT

Val	Char	Cost	Cost	Skill	Roll
8	STR	-2	2	KS: own profession	11-
8	DEX	-6	2	KS: hobby	11-
8	CON	-4	-2	-1" Running	
8	BODY	-4			
8	INT	-2			
8	EGO	-4			
8	PRE	-2			
10	COM	0			
2	PD	0			
2	ED	0			
2	SPD	2			
4	REC	0			
16	END	0			
16	STUN	0			
Costs:					
	Char.	+	Skills	Total	
	-22	+	2	=	-20
OCV: 3 DCV: 3; ECV: 3 Phases: 6, 12					

NORMAL

Val	Char	Cost	Cost	Skill	Roll
10	STR	0	2	KS: own profession	11-
10	DEX	0	2	KS: hobby	11-
10	CON	0	1	Familiarity with 1 skill	
10	BODY	0			
10	INT	0			
10	EGO	0			
10	PRE	0			
10	COM	0			
2	PD	0			
2	ED	0			
2	SPD	0			
4	REC	0			
20	END	0			
20	STUN	0			
0+ Disadvantages					
	5			1 Disadvantage such as Age, Discrimination, Physical or Psychological Disadvantage.	
Costs:					
	Char.	+	Skills	Total	Disadv. Base
	0	+	5	= 5	= 5 + 0
OCV: 3 DCV: 3 ECV: 3 Phases: 6, 12					



ILA

Ila is a scientist. She is a Phychi native (human), and often goes on deep space exploration missions. Ila has an unquenchable thirst for knowledge about new alien races. She believes the solutions to many questions, such as the origin of the universe and the human race, lie within alien knowledge. The government and some businesses frequently hire her to go on exploration missions. She is diplomatic and deals well with aliens.

Ila has a professional rival named Jenkn. He is a conservative scientist who believes aliens should be approached as potential enemies. He dislikes her friendliness towards aliens, and prefers an atmosphere of suspicion and hostility when dealing with creatures from other planets.

ILA						
Val	Char	Cost	75+ Disadvantages			
15	STR	5	8	Scientific curiosity: Common, strong		
14	DEX	12	3	Distinctive looks: 1 eye brown, other is blue: concealable with disguise		
9	CON	-2	3	Professional Rival		
10	BODY	0	3	Age 40+		
23	INT	16				
8	EGO	-4				
15	PRE	5				
14	COM	2				
3	PD	0				
2	ED	0				
3	SPD	6				
5	REC	0				
20	END	0				
21	STUN	-2				
Cost		Skill				
3	Xenobiology (INT) 14-					
3	Sociology (INT) 14-					
3	Biochemistry (INT) 14-					
3	Planetology (INT) 14-					
3	Pharmacology (INT) 14-					
3	Physics (INT) 14-					
5	Inventor 14-					
3	Persuasion 12-					
3	Bureaucratics 12-					
3	Computer programing 14-					
3	Mechanics 11-					
3	Electronics 11-					
3	Starship sensors 11-					
2	KS: Kindred culture 11-					
	Languages:					
4	Kindred					
0	Phychi (native)					
3	Tradespeak					
3	Shadu					
	Combat:					
2	Familiarity with all small arms					
Costs:	Char.	Skills	Total	Disadv.	Base	
	38	+	54	=	92	= 17 + 75
OCV: 5 DCV: 5 ECV: 3 Phases: 4, 8, 12						

OWIK

Owik is a rogue. He has his own spaceship, takes any jobs offered him as long as the pay is good, and hangs out at seedy spaceport bars. He is a Phychi native, and has occasionally done spy work for the Phychi secret service. He shipped contraband to a Shadu world, was caught, and just managed to escape.

OWIK						
Val	Char	Cost	75+	Disadvantages		
13	STR	3	5	Curious: common, irrational		
18	DEX	24	4	Overconfident : Common, irrational actions (x1/2)		
10	CON	0	5	Watched by Phychi government: Large group, 8-		
10	BODY	0	11	Hunted on/Exiled from Shadu worlds, Strongly punished for return, 11-		
13	INT	3	4	Discriminated against by Kindred, Denied minor privileges, Occurs sometimes		
10	EGO	0				
18	PRE	8				
16	COM	3				
3	PD	0				
2	ED	0				
3	SPD	2				
5	REC	0				
20	END	0				
22	STUN	0				
Cost	Skill					
5	Pilot 14-					
2	Navigation 11-					
3	Starship sensors 11-					
3	Mechanics 11-					
3	Lockpicking 13-					
3	Security systems 13-					
5	Stealth 13-					
3	Carousing 13-					
3	Streetwise 13-					
10	Luck 2d6					
	Languages					
3	Translation					
2	Tradespeak					
0	Phychi (native)					
4	Kindred					
	Combat:					
2	Familiarity with all small arms					
1	Familiarity with Ship to ship weapons					
1	Familiarity with Zero G combat					
	<i>Phychi Speed Fighting:</i>					
3	Nerve blow					
2	Flip					
3	Block/Strike					
Costs:	Char.		Skills	Total	Disadv	Base
	44	+	55	= 99	= 24	+ 75
OCV: 6; DCV: 6; ECV: 3; Phases: 4, 8, 12						

THE CHARACTER SHEET

Look at the copy of the character sheet. On this sheet are recorded all the Skills, Characteristics, Disadvantages, equipment, and other things that make up a character. There's a Cost column next to the Characteristics and the Skills. That's because players get a certain number of Character Points to use to build a character. The player may spend those points on whatever Characteristics or Skills he or she wishes.

Value	Characteristics	Max Cost	Base Pts
	STR	x1	
	DEX	x3	
	CON	x2	
	BODY	x2	
	INT	x1	
	EGO	x2	
	PRE	x1	
	COM	x1/2	
	PD (STR)	x1	
	ED (CON)	x1	
	SPD	x1/2	
	REC (STR)	x2	
	END (CON)	x1/2	
	STUN (BODY)	x1/2	
	Characteristics Cost		

Maneuver	Phase	OCV	DCV	Effects
Block	1-2	-1	+0	stops one attack
Brace	0	+1	zero	x2 Range Mod
Covered	1-2	-2	+0	larger hit
Disarm	1-2	-3	-1	target disarmed
Dodge	1-2	-3	+0	vs all attacks
Flying Tackle	1	-2	-3	x1 + knockdown
Grab	1-2	-2	+0	grab do x1 STR
Hold	1-2	-2	-2	bot. hit stopped
Killing Blow	1-2	-2	-2	(STR) 15/d6
Set	1	+1	+0	x2 Range Mod
Stale	1-2	-1	+0	by weapon type

Hit Location Chart	Location	Stun	Body	Normal	OCV	Armor
3-5	Head	x5	x2	x2	-8	
6	Hands	x1	x1/2	x1/2	-6	
7-8	Arms	x2	x1/2	x1/2	-5	
9	Shoulders	x3	x1	x1	-5	
10-11	Chest	x3	x1	x1	-3	
12	Stomach	x4	x1	x1/2	-7	
13	Visals	x4	x2	x1/2	-8	
14	Thighs	x2	x1	x1	-4	
15-16	Legs	x2	x1/2	x1/2	-6	
17-18	Feet	x1	x1/2	x1/2	-8	

PER Roll	DEX Roll	INT Roll	EGO Roll
9 + (INT/5)	9 + (DEX/5)	9 + (INT/5)	9 + (EGO/5)

Running	Swimming	Jumping
14	14	14

maneuver. A more complete description of all of these maneuvers can be found in the Combat section. Space is left at the bottom for writing in any special combat maneuvers the character has (see Martial Arts).

- Record here a character's Disadvantages. The column furthest right lists the points which the Disadvantages grant the character.
- This box is where the character's Experience is recorded.
- This box lists a character's Skills and Alien Powers. The left-hand column is where the points spent on the Skill or Power are recorded. The center column is where the name of the Skill or Power is recorded, and the right-hand column is where the Skill Roll for Skills are recorded (here you may wish to put END cost for Alien Powers). Some Skills, called Everyperson Skills, are possessed by all human characters at an 8 or less chance; these Skills should also be listed here (see the Skills section).
- This is where equipment is listed, its parameters, and location. A separate sheet has also been provided for a more extensive list of equipment.
- Record here the character's name and player's name.
- In this area list a character's Offensive Combat Value (OCV) and Defensive Combat Value (DCV). The formula for these values is DEX divided by 3 (rounding up).
- Record (once again) the character's DEX and SPD scores for easy reference. Blacken in the boxes corresponding to the segments when the character may act. This is based on SPD, and may be found by consulting the Speed Chart in the Combat section.
- This box is a handy area for listing Endurance, Stun, and Body which are used during combat and other activities. Record here temporary changes during play.
- The Hit Location Table is an optional guide that can be used to determine where an attack hits by rolling three six-sided dice. The first column shows the number rolled on 3D6, the second column gives the location, the third column shows the STUN multiplier to use (instead of rolling a d6), the fourth column shows the amount that the BODY done by the attack is multiplied by, the fifth column shows the amount to multiply a normal attack by for STUN damage, and the sixth column shows the OCV modifier to take if aiming for a specific location. If the character is wearing armor, record the armor value in the locations covered in the column to the far right.

Aliens will use the same Hit Location Table, unless they are radically different than humans. In this case, either do not use the Hit Location Table, or the GM will have to create a different Hit Location Table for that specific race.

- In this box record the character's physical description and any notes about personality or dress. This description is chosen entirely by the player, although it should reflect the Characteristics of the character. This can also function as an overflow area for extra skills or equipment.
- This area is for a character's Perception roll, Intelligence, Dexterity, and Ego rolls.
- This is the character's Movement record, to keep track of how fast a character runs, swims, and how far he or she can jump. All characters have a base 6" of running, a jump distance based on STR, and a base 2" of swimming. Running and swimming may be increased by spending Character Points (see the Skills section).

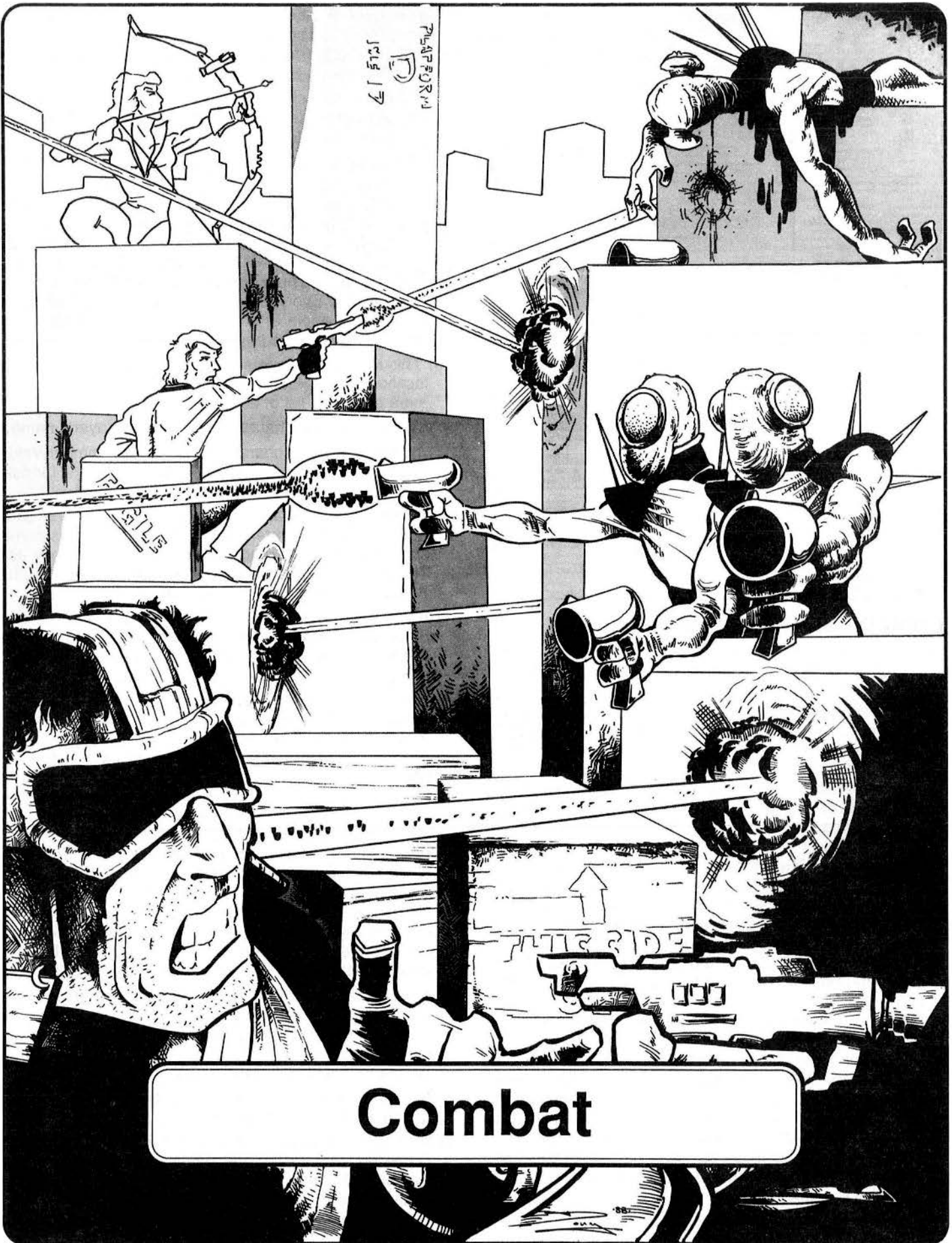
HOW TO USE THE CHARACTER SHEET

- This area is for listing a character's Characteristics. Characteristics are the attributes like strength, intelligence or dexterity that everyone has.

A completely average human being starts with a base score of 10 in primary Characteristics (Strength through Comeliness). The left-hand column of this box shows the final value of a specific Characteristic — the level the player has bought the Characteristic. The next column to the right gives the name (in abbreviated form) of the Characteristic and in the case of secondary or figured Characteristics, shows what formula is used to calculate the Characteristic. The next column to the right shows how many Character Points each increase of the Characteristic costs. For example, DEX (Dexterity) with a listed cost of "x3", and will cost 3 Character Points per point of DEX; thus, to raise a DEX from 10 to 12 would cost 6 Character Points (12 - 10 = 2; 2 x 3 = 6 pts). The next column over shows the Base score the character starts off with in any given Characteristic, and the column furthest right shows how many Character Points have been spent on a Characteristic.

Alien character sheets have the Base cost left blank for the the primary characteristics. This is because aliens may have different starting values. List starting value here, and buy it up or down if you wish. Aliens have another column added, called "Max", this is for listing the maximum a characteristic can become (after that value they must pay double price). List Alien Maxima here.

- This box lists the common Combat Maneuvers that any character may perform, along with how long each takes, their OCV and DCV modifiers, and an abbreviated description of the result of successfully performing the



Combat

COMBAT

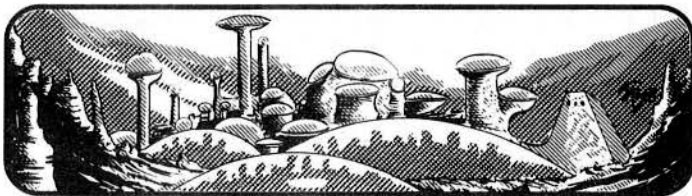


Combat can be anything from throwing a punch to drawing a laser pistol. The rules allow for all types of combat with a set of simple rules. As you gain experience with these rules, there are optional rules you can add to give even greater realism to combat.

Combat has been broken down into several steps. Each step is explained thoroughly, and usually some examples are included.

The chapter is arranged as follows:

- 1) Noncombat time and how to start a combat
- 2) Perception (how to spot someone)
- 3) Entering Combat, including the Order of Combat (who strikes when) and Action Phases
- 4) Movement and the game scale
- 5) Combat Value and Attack Rolls (how to hit)
- 6) Combat Modifiers
- 7) Combat Maneuvers (how to strike an opponent)
- 8) Determining Damage
- 9) Taking Damage
- 10) Recovering from Damage
- 11) Effects of Damage
- 12) Optional Effects of Damage
- 13) Endurance
- 14) Presence Attacks
- 15) Characteristic Rolls
- 16) Breaking Things
- 17) Experience Points



NONCOMBAT TIME

In any roleplaying game, there are two types of time: combat and noncombat. Combat time is usually very precise, measured second by second, with exact actions and results. Because so much can happen in only a few seconds of combat time, there are extensive rules for playing it out. It often takes a couple of hours (real time) to play out a couple of minutes (game time).

Noncombat time, on the other hand, isn't as exact. This is when the GM sets the scene for the players, and tells them what's happening to their characters, and begins the plot of the evening's adventure. Hours, days, or weeks of game time can pass in a few minutes of real time as the GM describes what's happening. This tremendous variation in time is similar to what happens in stories and novels. Within a story, weeks may pass in one paragraph or sentence, or a whole chapter may describe a fight that lasts for a minute.

The GM should think of the play session as the telling of a story with the help of the players. First, the GM describes where the characters are, perhaps dealing with each one individually, or starting with a group. As the setting is described, the characters will probably want to do things. For example, the GM says, "Reynolds, you hear the high-pitched whine of a laser pistol shot. It sounds like it's right around the corner." The player responds (as Reynolds) "I'll run around the corner to see what's happening." The GM shouldn't worry about exactly how far it is to the corner, or how long it takes Reynolds to get there, because this is still noncombat time. What's important to the adventure is that Reynolds gets to the corner, looks around, and sees an alien assassin shooting an ambassador.

Thus, unless it looks like there's going to be a fight (or detailed chase sequence), there's no need to be exact about things like time or distance. It is not really important exactly how long it takes Reynolds to eat his breakfast, fly to work, or talk to his boss. The GM starts the adventure by telling the characters' current locations and activities. Then there may be some investigation, conversation between the players and NPCs, perhaps even some nice, mood-setting emotional scenes. All this happens in noncombat time.

Usually, the event that marks the change from noncombat to combat time is Perception, when the player characters spot their enemies (or vice-versa).

PERCEPTION

Characters may not always be aware of everything that's going on around them, especially during combat. Whenever something is obvious, the GM will tell the player about it ("You see the starship in front of you"). The character may be required to make a Perception Roll to notice something inobvious, or to notice something while in a combat situation. Every character's base Perception Roll is equal to 9 plus the character's Intelligence divided by 5.

Perception Roll = 9 + (Intelligence/5)

To make a Perception Roll, the character should roll this number or less on 3d6. Range or conditions can modify a character's Perception Roll; the GM decides what modifiers will apply.

Situation	Range Modifier for Perception Roll
Daytime	-1 per 3"
Nighttime	-1 per 1"

OPTIONAL PERCEPTION MODIFIERS

For GMs who want to be more exact about perception in their campaign, this optional set of modifiers is presented.

The specific Sight and Hearing Perception Modifier tables show modifiers for specific objects or conditions. The GM should add up all of the modifiers; if the total is positive, then the character will notice the noise or object without making a Perception Roll. If the total is zero or negative, the character will have to make a Perception Roll with those modifiers to notice the object.

If the character is trying to spot someone who is using Stealth, use the system described in Skill versus Skill. The amount the character makes a Stealth Roll by is subtracted from the other character's Perception Roll.

SIGHT PERCEPTION MODIFIERS	
Situation	Modifier
A lighted object in darkness	+5
Telescope	+3
Binoculars	+2
Long look (full phase, DCV 0)	+2
Looking (half phase)	+1
High contrast object (black on white)	+1
Moving object	+1
2 hex object	+1
8 hex object	+2
32 hex object	+3
125 hex object	+4
500 hex object	+5
2,000 hex object	+6
Low contrast	-1
Night	-2
Dark night	-4
1/2 hex object	-1
1/4 hex object	-2
1/8 hex object	-3
1/16 hex object	-4
1/32 hex object	-5

HEARING PERCEPTION MODIFIERS

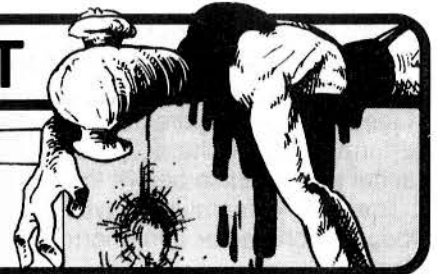
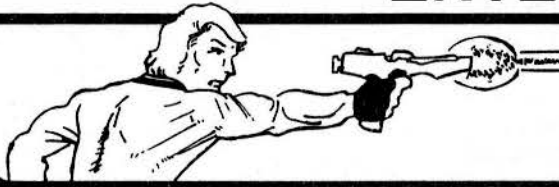
Situation	Modifier
Grenade	+6
Laser Rifle	+5
Submachine gun	+4
Laser Pistol	+3
Parabolic microphone	+4
Truck	+3
Hovercar	+1
Spaceship taking off	+5
Whistle	+3
Shout	+2
Loud conversation	+1
Breaking glass	+1
Sneeze	+1
Punch	+0
Body hitting ground	+0
Run (6"+)	+0
Fast walk (3")	+0
Normal walk (2")	-1
Careful walk (1")	-2
Whisper	-3
Open a door	+0
Slowly open a door (1 phase)	-2
High contrast sound	+1
Foggy weather	-1
Listen (half phase)	+1
Listen close (1 phase, DCV 0)	+2
Echoes	+3
Locating source of echoes	-3
Downwind	+1
Upwind	-1
Quiet area	+3
Noisy area	-3

As a general rule of thumb, use the modifiers for Attack Rolls on the Perception Rolls. For example, a character looking at an object for two full phases might get the "Set" modifier which would add +1 to the Perception Roll and x2 to the range modifier. A character trying to sight something very small would use modifiers for target size.

Normally a sight Perception Roll allows an object's position to be known well enough to allow combat with no modifiers. A hearing Perception Roll will normally only allow the general position of an object to be known, so accurate combat is very difficult.



ENTERING COMBAT



Once that the GM decides to begin combat, time becomes important. Exact combat time is used to make play easier.

COMBAT SEQUENCE

A fire fight can be over very quickly if the opponents are unequal, but a fair fight can last much longer. Because of its importance, combat is divided into very small fragments of time. There are three separate time increments: Turn, Segment, and Phase.

SPEED CHART												
Segment	Character's Speed											
	1	2	3	4	5	6	7	8	9	10	11	12
	1	-	-	-	-	-	-	-	-	-	-	X
	2	-	-	-	-	X	X	X	X	X	X	X
	3	-	-	-	X	X	-	X	X	X	X	X
	4	-	-	X	-	X	X	-	X	X	X	X
	5	-	-	-	-	X	-	X	-	X	X	X
	6	-	X	-	X	-	X	X	X	X	X	X
	7	X	-	-	-	-	X	-	X	-	X	X
	8	-	-	X	-	X	X	-	X	X	X	X
	9	-	-	-	X	-	X	X	-	X	X	X
	10	-	-	-	-	X	X	-	-	X	X	X
	11	-	-	-	-	-	X	X	X	X	X	X
	12	-	X	X	X	X	X	X	X	X	X	X

TURN

The basic time frame of combat is called a Turn. Each Turn is equal to 12 seconds of real time. Each Turn a character gets to perform a number of actions equal to his or her Speed. A Turn is divided into 12 Segments.

SEGMENT

Each Turn consists of 12 Segments that are approximately 1 second long. Any characters who can perform an action in a given Segment do so in order of their DEX values. The character with the highest DEX score goes first, the second highest goes next, and so on. Two or more characters with the same DEX that act in the same Segment should each roll 1d6. The characters then act in order of their roll on the 1d6, from high to low. Ties should roll again.

PHASE

Each character can perform a certain number of Action Phases in one Turn, equal to the character's Speed. For instance, a Speed 5 character has five Action Phases; each Phase the character gets to perform an action. Each Phase begins on a Segment; the Speed Chart determines the Segment a character's Phase begins.

Each time a character's Segment comes up, he or she may execute a Phase (perform an action). Find the charac-

ter's Speed on the top line of the chart, and look at the column below it. Every Segment marked with an "X" in that column is a Segment where the character may begin a Phase. For instance, a character with a SPD of 4 has Phases that begin on Segments 3, 6, 9, and 12.

BEGINNING COMBAT

Combat always begins on Segment 12. This gives everyone a chance to act and then take their post-Segment 12 Recovery (see Recovery). If combat begins with a surprise attack, then the targets don't get to act on that Segment 12 – giving the attackers a free action.

The character with the highest DEX of those acting in that Segment goes first; the GM should then count down the DEXes until there's no one left to act on that Segment ("DEX 17, 16, 15, 14 ... okay, Chiron, your action").

DELAYING A PHASE

This is also called *Holding an Action*. Characters may choose not to act when their DEX value indicates that it's their Phase. They may delay until a lower DEX value or until some action occurs ("I wait until he strikes"; "I wait until he comes around the corner"). A character may even delay his or her Phase until another Segment, but a character may never take two actions in one Segment. The character loses any Phases saved when his or her next Phase occurs because a character can only have one saved Phase at a time. Even a character who waits a whole Turn without acting still has only one Phase saved.

A character may also choose to perform a half-Phase action and then reserve the second half of the action. The character is considered "ready", and may perform a half-Phase action at any time. If someone runs up to a "ready" character, the ready character may attack first, even if the attacker has a higher DEX.

ACTION PHASES

The actions a character can perform in an Action Phase are listed on the Action Phase table. Any actions not listed must be judged by the GM as to how much time they take. The GM should compare unusual actions to the ones listed.

Example: *Ethan wants his character to run to a pedestal and grab a mind-control helmet. The GM might call that a half move and a Grab maneuver.*

Any attack action such as firing a gun or throwing a punch takes a half Phase, but **must** be the last action performed in the action Phase. A character can half move and then attack, but can't attack and then half move. The zero (0) Phase actions can be done at the beginning or the middle of a Phase, as many different ones as wished, but not after an attack action. Similarly, Skill Levels are shifted only at the beginning of a Phase.

CANCELING A MOVE

This is also called *Aborting an Action*. The character's next action may be canceled to perform a defensive Combat Maneuver. This requires the character's next full Phase to perform. Once a character has attacked, he or she can't cancel to any action before the next segment.

The usable maneuvers when canceling are Block and Dodge. A character can't normally cancel to a movement action.

ACTION PHASE TABLE		
Action	Time required	Move required
Bracing	0	-
Drawing a weapon	1/2	-
Firing a gun	1/2*	-
Flying Tackle	1	1"
Full move	1	Full
GM asks you to make a roll	0	-
Half move	1/2	Half
Leaping	1	-
Making an Attack	1/2*	-
Making a Skill Roll	Variable	-
Maneuvers	1/2	-
Open a door	1/2	-
Preparing a grenade	1/2	-
Presence Attack	0	-
Recover from being Stunned	1	-
Set and brace	1	-
Speaking	0	-
Starting a vehicle	1/2	-
Take a Recovery	1	-
Throwing a grenade	1/2	-
To "set"	1	-
*The character may not perform another action after these actions, but may perform a half phase action before these actions.		

MOVEMENT AND GAME SCALE

You can play without using a map or a board, but this means that the GM has to tell everyone how far they are from everything else. This can get tiring and very complicated. The game is best played on a floor or tabletop. The GM can then lay out exactly where each character is in relation to the surroundings and the other characters.

Whenever an "inch" is referred to in the game, it's equal to an inch on a playing surface. Each inch represents 2 meters (approximately 6 1/2 feet) in real life. This scale allows the GM and player to use 25 mm (1/72 scale) miniatures to represent characters.

One map inch = 2 meters = 6 1/2 feet

RUNNING

MOVEMENT DURING COMBAT

Every character has a base running distance of 6" per phase. A character does not have to move the full 6" per phase. A character may move any portion of his or her movement per phase. A full move is defined as moving greater than half of a character's movement distance. A character who has made a full move can't perform any other action.

All movement costs END at the rate of 1 END per 5 inches of movement distance used, except when out of combat (see Endurance).

NONCOMBAT MOVEMENT

Out of combat a character's movement is increased. A running character out of combat moves twice as far (multiply the Combat Running distance by 2). "Out of Combat" is defined as starting and ending a phase not in combat. When running into or out of combat, the character does not double the Running distance. Noncombat movement does not increase the END cost.

A character who makes a noncombat move is considered to have an OCV and DCV of zero. The character can still fight, but with the lowered combat values.

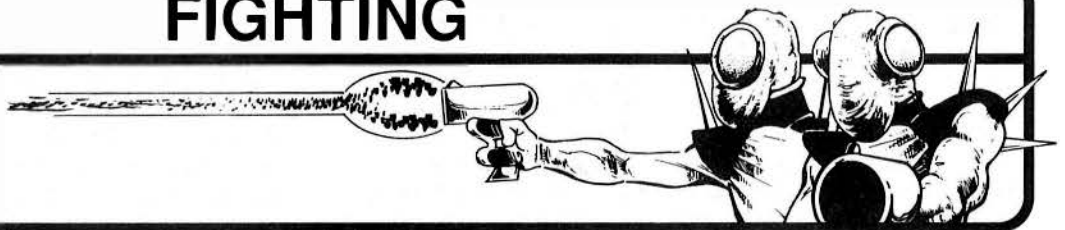
Players may buy extra inches of running. Running costs 2 Character Points per inch, up to four extra inches; thereafter, the cost doubles (4 points per inch).



SWIMMING

Most characters can swim a base distance of 2" per phase. Characters may buy extra inches of swimming. Swimming can be increased by 1" for 2 points, up to 2 more inches; after that, the cost doubles (4 points for 1 inch). The GM may rule that some aliens (like Heavyworlders) can't swim.

FIGHTING



This section will deal with all aspects of fighting, starting with how to hit a target. Different modifiers to combat will be discussed next. The following section describes how to determine damage, how to take damage, and the effects of taking damage. Finally, the Endurance cost for fighting will be explained.

There are many optional rules for fighting that can be used. Ignore these when you're just learning the game and concentrate on the basic rules. Also, the more players you have, the fewer optional rules the GM should use (combat will go faster). With six or more players (unless they're very familiar with the rules), no optional rules should be used.

HOW COMBAT WORKS

Combat in the game is really quite simple. The player decides what action to perform on the character's Phase. To hit someone or something, the character rolls an Attack Roll. If the Attack roll is missed, the character's Phase is over. The GM goes on to the next character's action Phase. If the character makes the Attack Roll, then the damage to the target is determined. Then the character's Phase is over, and the GM goes on to the next character's action Phase.

Below is the checklist of events to follow for combat. If a character attacks someone, these steps take place in that Phase. The steps will be explained in the following sections.

COMBAT SEQUENCE CHECKLIST

- 1) Determine the attacker's Offensive Combat Value (OCV).
- 2) Determine the defender's Defensive Combat Value (DCV).
- 3) Attacker makes an Attack Roll (3d6). The chance to hit is $11 + \text{attacker's OCV} - \text{defender's DCV}$.
- 4) If the Attack roll is missed, the attacker's Action Phase is over. Go to the next character's Phase.
- 5) If the attacker hits, determine the damage and any effects of damage. Then go to the next character's Phase.

Optional rules add to this Combat Sequence. The GM may use any or all of the Optional rules. If the GM does use all of them, combat will go much slower, but will be much more realistic. Normally, the GM would only want to do this for very special battles — perhaps a single combat.



OPTIONAL COMBAT SEQUENCE CHECKLIST

- 1) Determine the attacker's OCV.
- 2) Determine the defender's DCV.
- 3) Attacker makes an Attack Roll (3d6). The roll required is $11 + \text{attacker's OCV} - \text{defender's DCV}$.
- 4) Pay the END cost for using the weapon.
- 5) If the Attack roll is missed, the attacker's action Phase is over. Go to the next character's Phase.
- 6) If the attacker hits, determine the damage and any effects of damage. Then go to the next character's Phase.
- 7) To determine the additional effects of the damage:
 - a) Roll on the Hit Location chart to find where the attack hit (this will affect the damage result).
 - b) Check for Knockback: target may be knocked back or down.
 - c) Check for a Wounded result; target makes Ego Roll to keep fighting next phase.
 - d) Target may be Bleeding; keep track of blood loss.
 - e) Check for severity of wound; target may be Impaired or Disabled.

COMBAT VALUE AND ATTACK ROLLS

Whether or not an attack actually hits a target is determined by an Attack Roll of 3d6. If the character is attacking with punches, small guns, or such (not including grenades, which will be explained later), the attack roll is determined as follows:

Attack Roll = $11 + \text{Attacker's OCV} - \text{Defender's DCV}$

Where OCV means Offensive Combat Value (DEX/3). DCV means Defensive combat Value (DEX/3).

The Attack Roll is determined by adding 11 plus the attacker's OCV and subtracting the defender's DCV.

Example: If the attacker's OCV is 8 and the defender's DCV is 6, then the Attack Roll is $11 + 8 - 6 = 13$ or less. If the attacker has an OCV of 7 and the defender has a DCV of 10, then the Attack roll is $11 + 7 - 10 = 8$ or less.

Whenever a character attempts any roll of 3d6, a roll of 3 will always hit or succeed; a roll of 18 on 3d6 will always miss or fail. This applies not only to Attack Rolls, but also to Skill Rolls, Perception Rolls, and Characteristic Rolls. The GM should consider giving a character some advantage for rolling a 3 (perhaps some extra dice of damage), and some disadvantage for rolling an 18 (perhaps reducing the character's DCV for a phase).

FIGURING OCV AND DCV

Base OCV and DCV are figured as follows:

Base OCV = DEX/3

Base DCV = DEX/3

It's called **Base** OCV and DCV because OCV and DCV can be modified by Skill levels, Range, Combat modifiers, and Combat maneuvers. If the result of the formula is a fraction, round to the nearest whole number (for a DEX of 20, OCV is $20/3 = 6.66$, which rounds to 7). This formula also appears on the Character Sheet.

COMBAT VALUE (CV)

Sometimes a general term "Combat Value" or CV, is used. CV reflects how good the character is at combat. $CV = DEX/3$. The term CV may be used to discuss modifiers to OCV and DCV.

The steps in determining a character's OCV and DCV are given on the following checklist. It may look complex but actually figuring OCV and DCV is quite easy. These steps will be explained in the following sections.

OCV CHECKLIST

- 1) Determine base OCV (character's DEX/3).
- 2) Add any applicable Skill Levels.
- 3) Apply any modifiers for the particular weapon being used.
- 4) Apply any modifiers for the particular Combat Maneuver being used.
- 5) Apply any Combat Modifiers.
- 6) Apply any Range Modifiers.

DCV CHECKLIST

- 1) Determine base DCV (character's DEX/3).
- 2) Add any applicable Skill Levels.
- 3) Apply any modifiers for the particular weapon being used.
- 4) Apply any modifiers for the particular Combat Maneuver being used.
- 5) Apply any Combat Modifiers.

COMBAT LEVELS

Combat Levels can modify the character's OCV, DCV or both. Combat Levels are bought with character points, and are listed and described in the Skill List. Combat Levels may increase the character's OCV, DCV, Range Modifier, Damage, BODY or STUN done in an attack. Usually, one Combat Level will add +1 to a character's OCV (and sometimes DCV). The player must state how the Combat Levels are being applied before making the Attack Roll. See the Combat Levels explanation in the Skills section.

Combat Levels with melee weapons may also be used to increase damage or STUN. Two Combat Levels can be used to increase the weapon's damage one Damage Class (see Added Damage), up to the maximum damage of the weapon (see Weapons). Two Combat Levels will also increase the weapon's Stun Modifier by +1; no more levels may go to increasing the Stun Modifier.

Combat Levels do not apply to DCV in all cases. Combat Levels with ranged attacks (like small arms) can't be used for defense, and only the 8 point Combat Levels with All Combat can be used for DCV against ranged attacks. Five point Combat Levels with melee combat may be applied to DCV only against hand-to-hand attacks, not against ranged attacks. Any DCV modifiers from Combat Modifiers also apply to DCV versus all attacks.

RANGE MODIFIERS

When a character attacks a target at a distance, the attack is given a Range Modifier. The Range Modifier is normally -1 per 3 inches, or $-1/3$ " (remember that an inch on a small scale map represents 2 meters or 6 1/2 feet). This means that if the character attacks a target from 0 to 3 inches (0 to 6 meters) away, the attacker's OCV will be normal. If the target is 4 to 6 inches away the attacker's OCV will be -1. For each additional multiple of the attack's Range Modifier, the character's OCV is reduced by another -1.

Example: If the Range Modifier was $-1/3$ ", a target from 0 to 3" away would be -0, a target from 4 to 6" away would be -1 OCV, and so on.

Skill Levels with a ranged attack (like a pistol) can be added directly to OCV (see Skill Levels), or used to increase the Range Modifier. Each Skill Level will increase the Range Modifier by +1; this happens **before** the Range Modifier is doubled or halved by any Combat Modifiers.

Example: A $-1/3$ " Range Modifier is $-1/4$ " when 1 Skill Level is used to increase it.

COMBAT MODIFIERS

Where and how combat takes place should affect the characters' Attack Rolls. Combat Modifiers are used to describe situations like attacking someone by surprise or ducking behind cover. The table below describes the situation where each Combat Modifier is used, and exactly how it works.

During play, many situations will occur that aren't covered in the Combat Modifiers, like firing upside down from a Hovercraft at midnight during a thunderstorm. In such cases, the GM should apply a modifier that seems reasonable. Try to find similar things on the Combat Modifiers Table to compare with the unusual situation. Always remember, though, that this is a game that simulates fiction, and incredible feats are often possible. In fact, give players a bonus for especially creative and exciting maneuvers, since they make things more fun for everybody.

The Combat Modifiers table summarizes the information about the Combat Modifiers. A dash on the table means no change in the indicated value.

COMBAT MODIFIERS				
Modifier	OCV	DCV	RMod	Notes
Autofire	+4	-	x1/2	10 rds, 1 hit/2
Concealment target	-	-	x1/2	half hidden
	-	-	x1/4	target head only
Multiple Attackers.	+1	-	-	+1 OCV/each H-to-H attacker after the first
Off Hand	-3	-	-	using off hand
Prone	-	x1/2	x1/2*	lying flat
Surprise Move	+1to+3	-	-	GM decides
Surprised	-	x1/2	-	in combat:
	-	is 0	-	not in combat, take 2x Stun
Target Size	-	-	x2	fills 1 hex
	-	-	x4	fills 2 hexes
	-	-	x8	fills 4 hexes
	-	-	x1/2	1/2 human sized
	-	-	x1/4	1/4 human sized
	-	-	x1/8	1/8 human sized
Throw	-	-	-1/1"	unbalanced
	-	-	-1/3"	balanced
Throw at a hex	-	is 3	-	DCV of hex
Unfamiliar weapon	-3	-	-	use new weapon

*The Range Modifier is halved for attacks on a Prone character.

EXPLANATION OF THE COMBAT MODIFIERS

AUTOFIRE

Some of the listed Weapons have the Autofire Advantage. Autofire weapons shoot a stream of bullets with one pull of the trigger; thus, they can hit one target several times, or several targets with one attack. Just to simplify matters for game terms, each Autofire attack uses up 10 rounds from the magazine of the gun. Exceptions to this rule (5 shot and 3 shot bursts) will be discussed later.

A character Autofiring at one target gets +4 OCV, but the Range Modifier of the weapon is halved (rounding up). For every 2 points the Attack Roll is made by, the attacker hits the target one time. A single target can never be hit more than 10 times, since only 10 bullets are fired from the gun in any phase.

Example: Zakul fires his Autofire laser blaster at Zo, an alien agent, at a range of 3". Zakul has a base OCV of 4, and Zo has a DCV of 5. The laser has a Range Modifier of -1/3", which halves to -1/2". Zakul's OCV is 4, +4 for Autofire, -1 for Range Modifier, for a total of 7.

Zakul's Attack Roll is $11 + 7 - 5 = 13$ or less. He rolls a 9, hitting the agent three times (at 13, 11, and 9).

A character may spray Autofire at several targets. When doing this, the character doesn't get the +4 OCV, and there is a -1 OCV penalty for each hex fired into. Each target can only get hit once. The attacker declares the targets and counts the number of continuous target hexes.

Example: Satora fires at two rock creatures 4 hexes apart. She takes a -5 on her OCV for firing at each target (-1 for the hex of the first target and -4 for the other hexes). Satora

has an OCV of 6. Each rock creature has a DCV of 4. Satora's Attack Roll is $11 + 6 - 4 - 5 = 8$ or less. Satora rolls a 5. One rock creature gets hit once. Satora rolls to hit the second rock creature and gets a 9, missing the creature altogether.



CONCEALMENT

Targets that are partly concealed are harder to hit from a distance. If a target is half concealed (like a person behind a table or leaning around a corner), the Range Modifier is halved ($\times 1/2$). If only a person's head is showing (like someone peering out of a door), the Range Modifier is quartered ($\times 1/4$). However, this does not affect Hand-to-hand combat, as no Range Modifier is used.

MULTIPLE ATTACKERS BONUS

If there is more than one attacker on one target in Hand-to-hand combat, the attackers get the Multiple attacker bonus. The bonus is +1 OCV per attacker beyond the first one. The bonus is totaled, and all the attackers get the bonus. The Multiple Attacker Bonus is given only if the attackers attack all in the same phase (they do not have to attack on the same DEX). The maximum number of attackers on one target is six. The GM may rule that the maximum number is less (like when the target is backed up against a wall) or more (like when the target has attackers on all sides and more attackers flying above).

Example: *Xil is being attacked by 5 Vegans. On phase 4, the Vegans all opt to attack hand-to-hand. All 5 Vegans receive +4 OCV.*

OFF HAND

A weapon used in the character's "off" hand will take a -3 OCV penalty. If the character is right-handed, this applies to weapons held in the left hand, vice-versa for left handed characters. Ambidexterity Skill will eliminate this penalty.

PRONE

Characters who are lying flat (prone) have half their normal DCV, because their movement is so restricted. They can't use any melee weapons from this position, but any small arms may be used. Characters attempting to shoot at a prone target have a $\times 1/2$ Range Modifier, or $\times 1/4$ if the prone character has some concealment.

SURPRISED

This Modifier applies when the character is attacked from behind, above, by an invisible attacker, and so forth. A character who is surprised while not in combat has a DCV of 0 and takes 2x STUN from the attack; moreover, the penalty for any Placed shots are halved (see optional effects of Damage). The target must be not be expecting any attacks. A character who's running at "noncombat" speed toward a fight is expecting trouble, and isn't totally unaware. In this situation the character wouldn't take 2x STUN, although would have a zero DCV because of using noncombat speed.

The DCV of a character who is in combat and is attacked by surprise is halved; the damage he takes is normal.

SURPRISE MOVE

A Surprise Move is when a character startles an opponent (by smashing a control panel, faking unconsciousness, etc.). The GM should reward such inventiveness on the part of the players with a bonus, for this type of playing adds great interest to the game. Of course, the villains also get their chance to pull Surprise Moves on the characters. The Bonus for a Surprise Move is +1, +2, or +3 OCV (sometimes even greater).

TARGET SIZE

Targets larger or smaller than normal human size affect the Range Modifier. Big objects are easier to hit at a distance; if the object fills one hex, it's $\times 2$ Range Modifier; if it fills 2 hexes, it's $\times 4$ Range Modifier; if it fills 4 hexes, it's $\times 8$ Range Modifier, and so on. Targets smaller than human size have the opposite effect. Something half human size is $\times 1/2$ Range Modifier, something one fourth human size is $\times 1/4$ Range Modifier, etc.

THROW

An unbalanced object like an acceleration couch or oxygen tank will have a $-1/1$ " Range Modifier. Throwing a balanced object like a round rock, a throwing knife, or a pole has a $-1/3$ " Range Modifier. The Throwing Table in the "Throwing Things Around" section describes how far a character can throw different types of objects.

THROW AT A HEX

If a character wants to throw an object at a particular hex, that hex has a DCV of 3. This reflects the fact that, at a distance, a spot on the ground is hard to aim for. Hexes directly adjacent to the character (and the character's own hex) should have a DCV of 0. When throwing an object, take the Range Modifier as explained for Throw. To find the distance a character can throw an object, see the "Throwing Things Around" section (at the end of the Combat section).

UNFAMILIAR WEAPONS

A character must buy Familiarity with a weapon to use it, otherwise the character has a -3 OCV penalty when using the unfamiliar weapon.

COMBAT MANEUVERS

Although the number of different ways to strike someone in combat is nearly infinite, the differences between the vast majority of these maneuvers are minimal. Combat maneuvers have been reduced to several maneuvers that cover most of the possibilities. These Basic Combat Maneuvers can be used by any character, provided the character has the necessary weapon (if any) or meets other special conditions listed. Alternatively, Martial Arts Maneuvers cost Character Points to learn; these are listed in the Combat Skills section (see the character creation section), and don't appear on the Combat Maneuvers table.

A few definitions are in order before we begin:

Hand-to-hand (H-to-H) combat in the game means fighting without ranged weapons. Melee is included in hand-to-hand combat. Melee combat refers to fighting with weapons close-up, without using missile weapons.

Missile weapons are hand weapons used at a distance (like thrown daggers, or arrows).

Small Arms refers to guns such as lasers, tasers, pistols, needlers, and autofire blasters.

Other weapons include things like ion cannons.

Combat Maneuvers can modify the character's OCV, DCV, damage done, or other qualities. Any modifiers from the Maneuver are in effect when the character performs the Maneuver until the beginning of the character's next phase.

A character can elect to use any of these Combat Maneuvers, according to the restrictions listed on the Combat Maneuvers Table. However, the player must state what Combat Maneuver the character is using before rolling the dice. Attacking ends the character's phase. Any Combat Maneuver (except Brace) takes either a half phase or a full phase action; in either case, it must be the last action the character performs in a phase. A character can half move and Strike, but cannot Strike and then half move.

Characters are free to try any action they want, even if it's not listed on the Combat Maneuvers table. The GM should interpret this action in relation to the Combat Maneuvers listed. If the action is sufficiently odd, the GM should give the character a Surprise Move bonus.

Usually actions players suggest consist of several parts, and may take them more than one phase to accomplish.

Example: Logan says: "I'll pull out my pistol, shoot the guard, smash the window, and leap outside!" Analyzing this action, it consists of: half phase (draw weapon), half phase (shoot the guard, which is a Strike maneuver), half phase (smash the window; treat as a Strike maneuver, but it's an easy target, so no Attack Roll needed) and half phase (leap out of the window). Since Logan can logically smash the window by jumping through it (doing her STR damage to the window), the GM decides that the character can jump through the window in a half phase.

COMBAT MANEUVERS				
Maneuver	Phase	OCV	DCV	Effects
Block	1/2	-	+0	stops one attack, cancel
Brace	0	+1	0	x2 range mod
Covered	1/2	-*	+0	target held at gunpoint
Disarm	1/2	-3	-1	target disarmed
Dodge	1/2	-	+3	vs. all attacks, cancel
Flying Tackle	1	-2	-#	x1 STR and knock down
Grab	1/2	-1	-2	grab, do x1 STR
Hold	1/2	-2	-2	both stopped
Killing Blow	1/2	-2	-2	(STR/15)d6 killing
Set	1	+1	+0	x2 range mod
Strike	1/2	-	+0	by weapon type

* Use OCV mod for Hit Location
Both are prone (see Combat Modifiers)

EXPLANATION OF TERMS:

Phase: This column explains how long it takes to perform the maneuver.

OCV (Offensive Combat Value): This number tells the player the modification for performing the maneuver. For example, a +1 OCV means that Xil has +1 addition to his roll (or his OCV) to hit.

Dash ("-"): A dash on the table means that column is not relevant.

DCV (Defensive Combat Maneuver): This number tells the person performing the maneuver the modification to the attacker's DCV. For example, performing a disarm maneuver decreases the attacker's DCV, making it more likely for the character to be hit.

Damage: This number is the damage done by the attack. x1 STR means that the attack does STR/5 in d6.

Cancel: A character can forfeit the next Action phase to do this maneuver out of phase. For a more detailed explanation, see the section on Action Phases.

EXPLANATION OF THE MANEUVERS

BLOCK

This action blocks an opponent's attack and sets the blocking character up to deliver the next blow. Block is done as defender's OCV vs. the opponent's OCV. If the character successfully Blocks, he or she takes no damage (and no Knockdown, if the GM is using that optional rule). If these two characters both have their next action Phases in the same Segment, the character who blocked automatically gets to strike first, regardless of relative DEX.

If the defender is bare handed, and the attacker has a weapon, the defender suffers a -1 OCV penalty. Blocks have no effect on ranged attacks.

Example: Zakul tries to punch Owik. Owik attempts to Block. Zakul's OCV is 6, and Owik's OCV is 5. Owik needs an 11 + 5 - 6 = 10 or less. Owik rolls a 10, and successfully Blocks. Next phase, Owik gets to strike first.

BRACE

This action doubles the character's Range Modifier with a missile weapon or a small arm and adds +1 OCV, but reduces the character's DCV to 0. Doubling a Range Modifier means that a -1/3" weapon becomes a -1/6" weapon when braced. Bracing is a zero phase action, and so it's possible to Brace and Set in the same phase, but the character will have to wait until the next phase to attack. Bracing has no effect on melee weapons.

COVERED

This maneuver deals with the common situation of holding someone at gunpoint. Instead of shooting, an attacker may elect to cover a target. To do this, the attacker chooses a location to cover and attempts to make an attack roll with the modifiers for that location. If the attacker makes the roll (but doesn't shoot) the target is covered. If the attacker doesn't make the roll, the target is not covered. The attacker may choose to use the general locations as well as the specific locations, like using "high shot", or "head shot".

Example: Despa shouts "Freeze!" at Zakul and points her laser carbine at him. She chooses the location "Chest shot" (-3 OCV). Her OCV is 6, and Zakul's DCV is 5. Her roll to hit is 11 + 6 - 5 - 3 = 9 or less. Despa rolls a 9, but does not pull the trigger of the laser. Despa has successfully "covered" Zakul.

If the target attempts to escape, the attacker automatically gets to do damage to the target (since, in essence, the attacker has already successfully made the attack roll).

How does the defender get out? The character waits for (or arranges for) a distraction. Any 1x Presence Attack will do the trick, but note that the defender is at -3d6 for any Presence Attack (after all, he is at a **big** disadvantage). If the attacker is successfully distracted, then make a DEX versus DEX Roll (target first). If the attacker wins, the defender is Covered again. If the attacker fails, the defender gets a free phase (combat begins at Segment 12, if it wasn't already in progress). If combat was in progress, the defender gets a phase to act (like a held move) and the attacker must wait until the next phase to act. The former attacker is usually Surprised by this (the GM may give the former defender a Surprise bonus).

DISARM

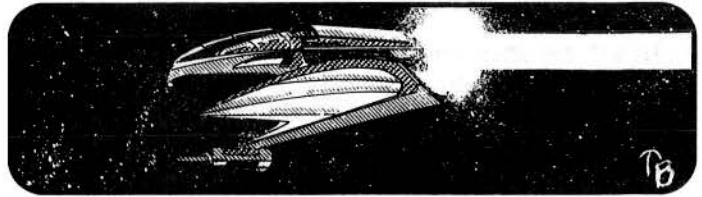
A character who successfully performs a Disarm maneuver knocks the weapon from an opponent's grasp. This maneuver only works against weapons or items held in one hand; things grasped by both hands must usually be Grabbed. The Disarmed character's object goes flying 1/2d6 hexes in the direction of the strike (player's choice, within reason).

This maneuver is more difficult for an unarmed person to use against an armed opponent. Apply an additional -1 OCV penalty.



DODGE

A character performing a Dodge can't attack, but is much harder to hit. The dodging character adds +3 DCV against all attacks.



FLYING TACKLE

This maneuver allows the character to attack at the end of a full move. The character simply runs and jumps right onto an opponent. An attacker who misses the target ends up prone on the ground in the target's hex. If the attacker hits the target, the target takes the attacker's normal STR damage (1d6 for every 5 points of STR) and will fall down. If the attacker rolled exactly what was needed to hit, the target takes the damage and stops, but hasn't fallen down. The attacker always ends up Prone, whether or not the Attack roll is made successfully.

GRAB

A character who successfully performs a Grab maneuver can catch hold of a gun or an opponent. A grabbed character can be thrown or squeezed in the same phase. These maneuvers do the attacker's normal STR damage (STR/5 in d6). The attacker and defender both occupy the same hex when Grabbed.

When a character tries to escape from being held, use STR versus STR Rolls (see Characteristic Rolls). A character who is Grabbed can still use weapons or attack. The DCV of a grabbed character is halved.

HOLD

This maneuver can only be done when the attacker is not holding anything (including hand-held weapons). Successfully performed, a Hold means that the defender's arms are immobilized. The held character cannot attack until the Hold is broken. However, both of the attacker's arms are tied up in doing this, so the attacker is also unable to attack until the Hold is broken. Breaking out of a Hold requires a STR versus STR roll (see Characteristic Rolls). Breaking free takes a full phase unless the STR Roll is made by more than 5, in which case it takes a half phase.

KILLING BLOW

This maneuver allows the character to do killing damage to the target without using a weapon. It includes things like breaking bones, throat punches, kidney strikes, and so on. The number of dice of damage done by the Killing Blow is equal to the character's STR divided by 15. Like any other killing attack (such as bullets or knives), the character struck by a Killing Blow does **not** subtract PD from the BODY or STUN damage done.

SET

Characters use this maneuver to double the range modifier and add a +1 OCV to their small arms and missile weapons. It takes a full phase to Set, and the character must have picked out the target (or a target spot). A character who loses sight of the target will have to Set again to regain the bonus. A character may Brace and Set with a small arm, giving the character +2 OCV, 0 DCV, and x4 Range Modifier. Characters may Brace and Set in the same phase (since Brace is a zero phase action). This maneuver may only be performed with small arms or missile weapons.

STRIKE

This is the basic attack maneuver, and includes attacks such as punches and kicks. The OCV modifier and the damage vary by the weapon type. A Strike performed with a fist (or foot, elbow, or knee, for that matter) has an OCV modifier of +0, and the damage is the character's STR/5 in normal dice (1 Damage Class for every 5 points of STR). A STR 20 person could do up to 4d6 normal damage with a Strike. The GM may well award a particularly creative Strike with a Surprise Move bonus. For instance, a sudden head butt or back kick may be worth an OCV bonus.

OPTIONAL GUN COMBAT MANEUVERS

The following optional maneuvers add more options for gun combat. These rules aren't necessary for playing the game, but will better simulate gun combat as well as making it more interesting. When the players become used to the basic combat rules and are looking for more, start using some or all of these advanced rules.

OPTIONAL GUN COMBAT MANEUVERS				
Maneuver	OCV	DCV	RMod	Notes
Double Fire	-2	1/2	same	Shoot twice
Snap Shot	-1	—	x1/2 or	Affects attacker's x1/4 RMod
Suppression	-2	—	same	Fires on hex(es)
Tracking	+1	—	x2	Takes a phase

"RMod" means Range modifier.

DOUBLE FIRE

Normally, a character may only fire a gun once in a phase. This Combat Maneuver allows a character to fire twice in a phase. However, characters may not double fire with Autofire. It takes a full phase to Double Fire. The character's DCV is halved, and the character also takes a -2 OCV on both shots.

The character may take both shots at the same target, or at two different targets, as long as the attacker is already aware of both targets' positions.

SNAP SHOT

This maneuver allows a character to move after firing (which is normally not allowed). Using this maneuver, a character ducks out from concealment, fires a shot, and then ducks back under cover.

The character must start fully concealed near a corner, edge, or opening in whatever the character is hiding behind. The opening or edge must be in the same hex as the character. The character ducks out (on the character's Phase and DEX) and shoots.

The character may make a Perception Roll to spot a target, or fire at a target already spotted. After this combat action, the character is exposed to enemy fire for one segment. On the segment after the Snap Shot the character may duck back under cover (on the character's DEX order in that segment).

A character performing a Snap Shot takes a -1 OCV, and gets full DCV plus a Range modifier. A right-handed character firing around a corner to the right will expose head and shoulders only, and someone attacking this character takes a x1/4 Range modifier. Firing around a corner to the left, the character's body is even more exposed, and someone attacking this character takes a x1/2 Range modifier.

SUPPRESSION FIRE

This is a Combat Maneuver that may only be used with weapons capable of Autofire. Basically, a character uses this maneuver to "hose down" an area with bullets so that anyone coming into that area is automatically attacked. To use Suppression Fire, the player defines a hex or group of hexes that the character firing at. Find the character's OCV at that hex, or hexes, taking into account all of the normal modifiers for Autofire, Range Modifiers, and Autofiring at a group of hexes (if the character is firing at more than one hex). Remember that for each hex fired into there is a -1 OCV (see Combat Modifiers section). Also, there is a -2 OCV penalty to character's OCV for performing Suppression Fire. The Suppression Fire maneuver takes a half phase and is a combat action. The Suppression Fire can last up till the character's next action phase. The character will expend 5 rounds for every segment of Suppression Fire.

Anyone (or anything) that enters the area covered by Suppression Fire is automatically attacked. There is no way to "sneak" through the hex, move through the hex on the character's off phase, or run through the hex without getting attacked. Note that several targets may take damage, even if they enter the area on different segments. The target's DCV is as normal. The number of hexes being fired into determine the character's OCV, as explained above, including the -2 OCV penalty. Use the normal Autofire rules to determine how many times they've been hit, although no more than 5 hits can occur on any given segment.

TRACKING

This allows a character to follow a moving target while "setting". A character may "set" a phase to aim at a target. The character gains +1 OCV and his or her Range Mod is doubled (x2). The character who continues to track the target (firing or not) keeps the +1 OCV and 2x Range Mod. If the character ever loses sight of the target, or does anything but track the target, the tracking bonuses are lost.

RELOADING

Each gun holds a certain number of shots, either bullets or charges in a power pack for energy weapons. Once all of the shots have been used, the gun must be reloaded to be used again. Each weapon in the Device List specifies its reload time (usually 1 phase).

MELEE WEAPONS

Melee weapons are hand held weapons like swords. These weapons are used in hand-to-hand combat. Even in a High Technology campaign melee weapons are used ("With the laser blaster knocked out of his hand, Xil reached for a nearby wine bottle.").

DETERMINING THE CHANCE TO HIT WITH A MELEE WEAPON

The character's chance to hit with a melee weapon is the same as with guns or fists ($11 + \text{OCV} - \text{target's DCV}$). The character's OCV is determined the same way (DEX/3, plus any levels, etc.). Some melee weapons add or subtract from the attacker's OCV or DCV.

DETERMINING THE DAMAGE CAUSED BY A MELEE WEAPON

Each weapon does the amount of damage listed next to it on the chart. These weapons have a STR minimum to wield them. The character takes -1 OCV for every 5 STR below the STR minimum. A character can also add 1 damage class for every 5 STR above the STR minimum up to a maximum of twice the weapon's Damage Class (Damage Class is explained later).

To use these weapons costs END (endurance): 1 END for every 5 STR used to wield them.

Melee Weapon	Damage	Credit Cost	STR Minimum
Knife	1d6 K	30	9
Laser Knife	1 1/2 d6 K	200	10
Sword	2d6-1 K	400	11
Laser Sword	1d6+1 K AP	640	10
One handed Club	3d6	—	9
Two handed Club	5d6	—	11

K means Killing Damage, otherwise assume the damage is normal.

Example: Logan with STR 15 hits a giant scorpion with a laser knife. Logan does 1 1/2 d6 K plus added damage because her STR of 15 exceeds the weapons STR minimum by 5. The laser knife's damage is increased by 1 damage class, making the damage 2d6-1 K.

EXPLOSIVES AND GRENADES

Explosions are similar to Area Effect attacks, but the damage falls off gradually with distance.

DETERMINING THE CHANCE TO HIT

The Attack Roll is made against a hex (as opposed to a person's DCV). A hex has a DCV of 3, plus any modifiers for range. If the attack roll is made, the hex is hit. If the attack roll is missed, the grenade will miss the target hex by 1" for every 1 the attack roll was missed by. A grenade which misses its target hex might miss in any of 6 directions. Roll 1d6 to determine which direction the grenade goes. The grenade is considered to arrive at its target in the same segment it was thrown.

DETERMINING THE EXPLOSION'S DAMAGE

The full damage a grenade or explosive does is listed next to it in the Device List section. The full damage is done only in the central hex (the hex hit by the grenade). The damage decreases the further away from the central hex. The damage decreases at the rate of -1d6 normal per hex (inch), or -1d6 K per 2 hexes. That is, a killing explosion does full damage in the central hex, -1d6 K 1 or 2 hexes away, and -2d6 K to objects 3 or 4 hexes away. Subtract off the highest dice first.

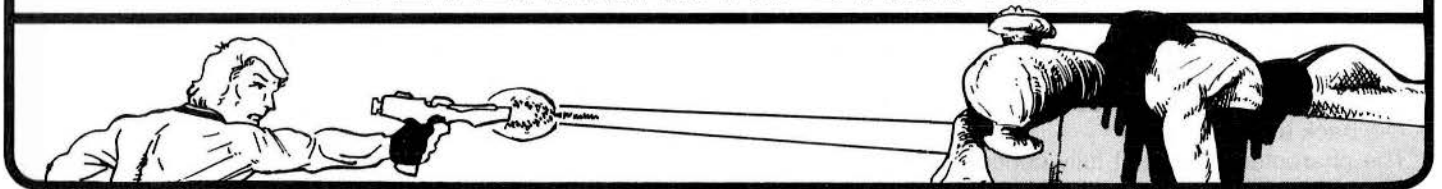
Example: Zakul explodes (by remote control) a bomb 3 hexes from Chiron. The bomb does 7d6 damage. Zakul rolls the damage and gets a 6, 5, 5, 3, 3, 2, and 1. Since Chiron is 3 hexes away, the top 3 dice are subtracted (the 6, 5 and 5). Chiron takes 3 BODY.

Prone characters take only 1/2 damage from an explosion, unless they are in the central hex of the explosion. Characters in the central hex of an explosion always take full damage.

A heroic character could dive on top of a grenade to cover it and save the other people in the blast radius. In this case, the grenade only hurts the diving character. The character will take twice the usual grenade damage.

For a list of explosives, see the Device List in the Technology section

DETERMINING DAMAGE



Attacks may do damage; the amount is determined by rolling dice. This means that the damage done by any attack is variable. The variation in damage from rolling dice makes combat more interesting.

There are two different types of attacks: Normal attacks and Killing attacks. This is explained in more detail below, but basically, a normal attack, like a punch, is intended to stun an opponent, while a killing attack, like a knife or a bullet, is intended to kill the victim.

ROLLING DICE OF DAMAGE

For weapons, the number of dice of damage is listed next to the weapon type. For unarmed combat, the number of dice of damage is determined by the character's STR (strength), plus any extra dice listed next to the maneuver. Divide the character's STR by 5 to get the number of dice of normal damage done by the character. A character with a STR of 20 could roll up to $20 / 5 = 4\text{d}6$ of damage. An amazingly strong human or alien with a 25 STR could roll up to 5d6.

TAKING DAMAGE

Now that you know how to dish out damage, we'll show how to take it.

TAKING DAMAGE FROM NORMAL ATTACKS

A character's PD (plus any body armor defense) protects the character from damage done by normal physical attacks (punches, kicks, falling, clubs, concussion explosions, or other normal attacks). The character's PD (plus any body armor Defense) is subtracted from the total STUN done by the attack, and again from the total BODY done by the attack.

Example: *Plenias is hit from behind with a club; the attack does 6 BODY and 23 STUN. He has a PD of 8 plus body armor with a Defense of 3, so he takes $23 - 11 = 12$ STUN and $6 - 11 = -5$ or 0 BODY.*

TAKING DAMAGE FROM KILLING ATTACKS

Killing Attacks are applied differently from normal attacks. First, find the BODY, apply the STUN multiple, and determine the STUN done by the attack, then apply the character's relevant defenses. A character's PD or ED does not subtract from either the STUN or the BODY damage done by a Killing Attack (like guns), **unless** the character has body armor or resistant defenses.

The character gets the body armor's defense (or other resistant defenses) against the BODY of the Killing attack. Against the STUN of the attack, the target gets the body armor's defense plus his normal PD. However, a character takes a minimum of 1 STUN for every 1 BODY that gets through his defenses.

Resistant defenses are things such as bullet proof vests, armor, resistant alien skin and force fields.

TAKING DAMAGE FROM ENERGY ATTACKS

A character's ED works the same way as PD, but against energy attacks (electricity, lasers, fire, or other such attacks). Body armor and resistant defenses work for Killing energy attacks the same way.

Example: *A Vegan hauls out his maser (which does 2d6 K) and shoots Plenias. The GM uses the optional Hit Location rules, and finds that Plenias was hit in an area not covered by his body armor. The Vegan rolls 6 BODY and 12 STUN. Since Plenias has no body armor in that area, he takes 6 BODY and 12 STUN.*

The Vegan, flushed with victory, tries again. This time his maser blast does 8 BODY and 24 STUN. Unfortunately for the creature, he hit Plenias' body armor this time. Plenias subtracts his body armor's ED of 6 from the BODY done: $8 - 6 = 2$ BODY gets through. Plenias totals his ED of 4 and the body armor ED of 6 and subtracts that from the STUN: $24 - 10 = 14$ STUN gets through.

DAMAGE CLASS

The text occasionally refers to the term "Damage Class". Damage Class simply refers to the amount of dice of damage done. Increasing the damage by one Damage Class simply means to move up one on the chart. This increases the damage an attack done by an attack.

Of course, STR can be bought in totals that are not multiples of 5. If the hero's STR is over half way to the next multiple of 5 (3, 4, 8, or 9) then the hero can add 1/2d6 of effect. For instance, someone with a STR of 23 would do 4 1/2d6 of damage with a punch ($23/5 = 4.6$).

Killing attacks are three times as expensive as normal attacks. A hero gets 1d6 for every 15 Points of STR when using the Killing Blow maneuver. If the hero has one third (5-9 Points) more than a multiple of 15 STR, add +1 to the character's damage roll. If a hero has more than two thirds (10-14 Points) more than a multiple of 15 may add +1/2d6 to the character's damage roll.

Example: *Satora has a STR of 20. Her damage is 1d6 + 1 K. Plenias has a STR of 25. His Killing damage is 1 1/2d6 K.*

A character is not required to use full strength damage in an attack.

NORMAL ATTACKS

Punches, weapons like clubs, and concussion explosions are "normal attacks". This type of damage tends to knock people out (cause STUN damage) rather than kill them (cause BODY). For normal damage, the total of the dice rolled is the number of STUN done to the target. Each die also does some BODY damage: any die that rolls a "1" does 0 BODY, any die that rolls "2 to 5" does 1 BODY, and any die that rolls a "6" does 2 BODY. The number of BODY done will thus usually be close to the number of dice rolled.

Roll on die for Normal Attack	Body done
1	0 (zero)
2-5	1
6	2

Example: *Plenias uses his 25 STR to hit an intelligent plant creature, and decides to do his full damage. Plenias rolls $25/5 = 5d6$ for damage. He rolls the dice and the following numbers come up: 2, 6, 3, 5, 4. The total of the dice is 20, so 20 STUN are applied to the creature. The 2, 3, 5 and 4 do 1 BODY each, for a total of 4 BODY; and a single "6" among the dice, which does 2 BODY. The total BODY damage is $4 + 2 = 6$ BODY.*

If a character needs to roll a 1/2d6 then damage is determined differently. The half die should be rolled separately or segregated by color to identify it as the 1/2d6. The face value of the die is multiplied by one half and rounded up to get the number of STUN done. The 1/2d6 does 1 BODY only if the roll is a 6.

KILLING ATTACKS

Damage for Killing Attacks (most weapons, or a Killing Blow) is determined differently than normal attacks. The total of the dice is the number of BODY applied to the target. To determine the STUN done, the character then rolls 1d6-1, and multiplies the result by the amount of BODY done. The minimum STUN multiplier is 1.

If the GM is using the Hit Location Table, use the STUN multiplier listed on the chart, instead of rolling 1d6.

Example: *Servalin shoots the plant creature with her laser pistol, doing a 2d6K Killing Attack. The dice rolled are 4 and 1, for a total of 5 BODY. Servalin then rolls 1d6, rolling a 5. Since the multiplier is 1d6-1 for this pistol, she subtracts 1 from the 5 she rolled for a STUN multiplier of 4. The total STUN damage done is $5 \times 4 = 20$ STUN.*

DAMAGE CLASS

Damage Class	Killing Damage	Normal Damage
1	1 pip	1d6
2	1/2d6, 1d6-1	2d6
3	1d6	3d6
4	1d6+1	4d6
5	1 1/2d6, 2d6-1	5d6
6	2d6	6d6
7	2d6+1	7d6
8	2 1/2d6, 3d6-1	8d6
9	3d6	9d6
10	3d6+1	10d6
11	3 1/2d6, 4d6-1	11d6
12	4d6 etc.	12d6

EFFECTS OF DAMAGE

There are three major effects of damage: in order of severity, they are Stunning, Knockout, and Death.

STUNNING

If the STUN done (after subtracting defenses) is less than or equal to the character's CON, there's no effect (other than the loss of the STUN, of course). If the STUN done by a single attack (after subtracting defenses) exceeds the character's CON (constitution), the character is Stunned.

A Stunned character's DCV instantly drops to zero. The character remains Stunned and can take no action until the next Phase. A character who is Stunned or recovering from being Stunned can take no action, no Recoveries (except a free post-Segment 12 Recovery), and is unable to move.

Recovering from being Stunned requires 1 full Phase. The character must lose one full phase to recover. If Zil, a SPD 3 character, was Stunned by an attack on Segment 6, he would use his Phase on Segment 8 to recover. Zil wouldn't be able to take any action until his next Phase on Segment 12. Immediately after the character's DEX rank, the character recovers from being Stunned, regaining full DCV, even though the character can't act until the next action Phase. The character can act normally the phase after recovering from being Stunned. There is no limit to the number of times that a character can be Stunned and recover.

KNOCKOUT

If a character's STUN total is reduced to zero or below, he is Knocked Out.

A character who is Knocked Out should be considered to be lying on the ground. The character's OCV and DCV are instantly reduced to zero. The character cannot do anything. Characters who are Knocked Out take recoveries until their STUN total is greater than zero. When the STUN total is positive, the character wakes up.

The body of an unconscious character puts its entire energy reserve into waking up. Because of this, upon waking, the character's END equals the current STUN total.

Example: *Plenias was Knocked Out by a plant creature with a stun rod; he was taken to -4 STUN. He has a REC of 7, so he'll have 3 STUN at the end of his next action Phase (when unconscious, the body automatically tries to recover, since it can't do anything else). Since Plenias was Knocked Out, he awakens with the same END total as STUN, so he wakes up with only 3 END.*

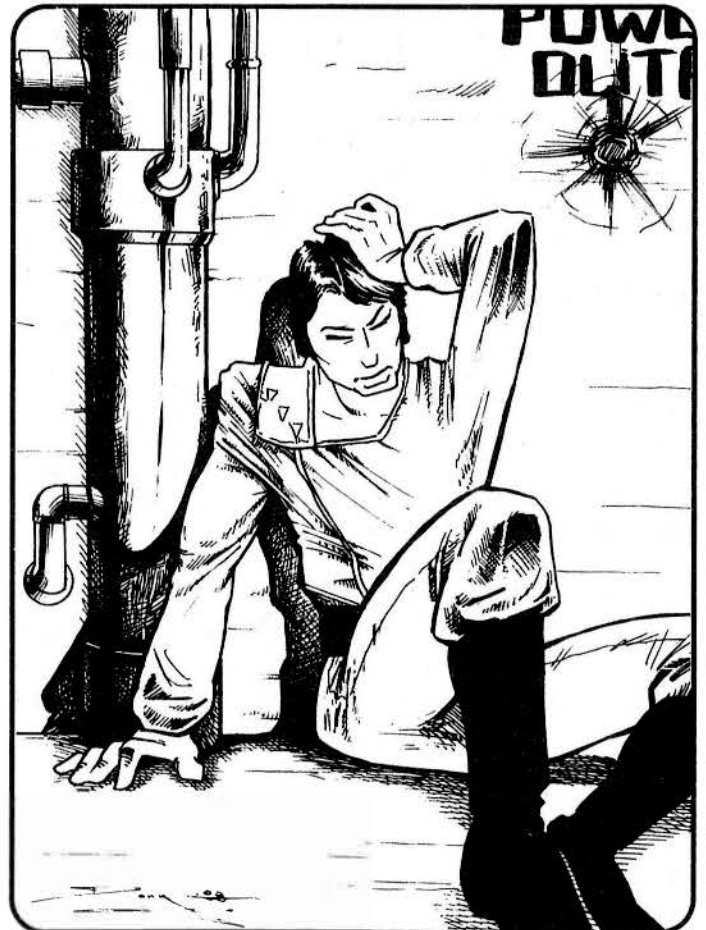
A character who is both Stunned and Knocked Out by the same attack spends the next Phase recovering from being Stunned and does not get a Recovery that Phase.

A character who is Knocked Out by a lot won't get to Recover every Phase. The character's recovery time is related to a multiple of the characteristic REC (recovery). Compare the Knocked Out character's STUN total to the Recovery Time table below to find out how often the character Recovers.

RECOVERY TIME

STUN Total	Take a Recovery
-0 to -1x	Every Phase and post-Segment 12
-1x to -2x	Post-Segment 12 only
-2x to -3x	Once a minute only
-3x to -4x	GM's option (a long time)

Example: *Since the Stun total is compared to multiples of Recovery; then Plenias' chart, with a REC of 7, would be -0 to -7; -8 to -14; -15 to -21; -22 and over.*



A character can Recover one level better on the chart if someone is helping by slapping his face, splashing water on him, or similar aid). Helping someone requires a full Phase, and the unconscious character only gets the Recovery benefit as long as someone is helping.

DEATH

A character at or below 0 BODY is dying. The character loses 1 BODY each turn (at the end of segment 12). Death occurs at negative the character's usual body total.

Example: *If a character who had 10 BODY before taking any damage reaches negative 10 BODY, he or she is dead. Characters with a lower BODY, say 8, would only have to reach -8 BODY to die. Characters with higher BODY, like 12, would not be dead until they reached -12 BODY.*

SAVING A DYING CHARACTER

This unpleasant fate is not inevitable. A character can be saved from death with a successful Paramedic Skill Roll, -1 for every negative 2 BODY. This doesn't give the wounded character back any BODY. This just stabilizes the patient's condition so that the character doesn't lose any more BODY. The GM should modify this number for circumstances. With good medical care, good food, rest, and warm and dry conditions, the character's chances are greatly improved (up to +8 or more; high tech medical care is pretty amazing). Poor conditions, such as dirt, additional shocks, and extreme cold would be a -1 to -3 penalty.

OPTIONAL EFFECTS OF DAMAGE

The rules in this section are all optional. They all take more time and effort to use during play, adding realism at the expense of slowing down the action. It's a good idea to avoid using these rules if there are a lot of players (more than five or six). If the GM and players are just learning the game, then it's an even better idea to leave these optional rules for later.

BLEEDING

This optional rule means that a character can continue to take damage after being wounded because of blood loss. Primarily, this rule allows the GM to state that NPCs may bleed to death if untended (sometimes useful for plot purposes). In situations where the characters can get immediate medical care, there's no need to use the Bleeding rules. Generally, this rule should be applied when a character gets shot and yet wants to keep going.

Whenever a character loses BODY, he or she will bleed, thereby losing STUN and occasionally some extra BODY. The table below lists bleeding damage. The column marked "No. of Dice/Turn" is the number of dice of STUN the wounded character takes. Wounded characters should roll the dice Segment 1 of each new turn. The STUN lost from bleeding may be recovered normally (see Recovery). Whenever the character rolls a six on any of the dice, he will lose an additional 1 BODY. This may push the character over into a higher rate of bleeding. However, even if several sixes are rolled, the maximum BODY lost from bleeding is 1 BODY per turn.



The following table shows the STUN taken each turn by a wounded character:

BLEEDING		
BODY Lost	No. of Dice/Turn	Stop Bleeding
1-5	1d6	1
6-10	2d6	2-5
11-15	3d6	3-9
16-20	4d6	4-13
21-25	5d6	5-16
26 and up	6d6	6-20

Thus, a character who has lost 3 BODY due to a wound would lose 1d6 STUN every turn.

There is, however, a chance for the bleeding to stop on its own accord. If the character is unconscious or is not engaging in hand to hand combat or making a full move in any phase of that turn, the bleeding will stop if the character rolls the number shown in the third column. This is the total of the dice rolled to determine how much STUN damage the character took. Characters will still take the indicated STUN damage on the segment the bleeding stops.

Characters with Paramedic Skill may attempt to stop the bleeding. All characters have Paramedic Skill with an 8 or less roll, so anyone may try to stop the bleeding from a wound. Note that appropriate tools (bandages, pressure packs, artificial skin, sterilizer lamp) can add up to +3 to the roll, as can taking additional time. The bleeding stops if a successful paramedic roll is made as per the rules in the section "Death".

Wounds that have stopped bleeding can reopen if the character exerts energy. Check Segment 1 if the character exerted STR or made a full move in the previous turn. Roll 9 + (No. of dice character would bleed), minus the amount the Medic Roll was made by (if indeed a Medic Roll was made to stop the bleeding). If that number or less is rolled, the wound reopens.

Example: *Logan has lost 6 BODY. She will take 2d6 of STUN per turn. Logan stops to rest. On segment 1, she rolls the 2d6 of STUN and gets a 2 and a 1, totalling 3. Because she did not exert herself, and rolled within the numbers listed under the "Stop Bleeding" column, she stops bleeding.*

Logan stops resting and runs toward her the villain's spaceship. To check to see if her wound reopens, she rolls 3d6. She rolls a 13. Since the chance for her wound to reopen was $9 + 2 = 11$, she does not start bleeding again.

Blunt weapons or normal damage are less likely to induce bleeding. Such damage is -1 level on the bleeding chart. Thus, a character who has taken up to 5 BODY from normal damage only will not bleed; 6-10 BODY, 1d6 per phase, and so on.

HIT LOCATION

The Hit Location optional rule can be used to determine where a particular weapon or blow hits a character.

To use the Hit Location table for Killing attacks, do the following: once the character has hit a target, roll 3d6. Consult the first and second columns of the Hit Location table to find out where the blow struck the target. Then roll the BODY damage done (for Killing Attacks, the total on the dice). Multiply the BODY done by the STUNx instead of rolling a STUN multiplier. The result is the amount of STUN the target receives.

Subtract the target's body armor PD or ED, whichever is appropriate, from the BODY of the attack to determine the BODY done. Then multiply the BODY total by the BODYx to find the number of BODY the target receives.

The remaining two columns are for different circumstances. Use the N STUN column when using normal attacks; multiply the STUN done by the multiplier listed. Then subtract the target's total PD (including armor) from the remaining STUN done by the attack.

The BODY done by a normal attack is not affected by Hit Location.

HIT LOCATION					
3d6 Roll	Location	STUNx	BODYx	N STUN	To Hit
3-5	Head	x5	x2	x2	-8 OCV
6	Hands	x1	x1/2	x1/2	-6 OCV
7-8	Arms	x2	x1/2	x1/2	-5 OCV
9	Shoulders	x3	x1	x1	-5 OCV
10-11	Chest	x3	x1	x1	-3 OCV
12	Stomach	x4	x1	x1 1/2	-7 OCV
13	Vitals	x4	x2	x1 1/2	-8 OCV
14	Thighs	x2	x1	x1	-4 OCV
15-16	Legs	x2	x1/2	x1/2	-6 OCV
17-18	Feet	x1	x1/2	x1/2	-8 OCV

If necessary, roll 1d6 to determine left or right side (hands, arms, shoulders, thighs, legs, feet). If you roll a 1, 2, or 3, the left side is hit; if you roll a 4, 5, or 6, the right side is hit.

PLACED SHOTS

Use the To Hit column to determine the OCV modifier for trying to hit a particular area. If an attacker makes an Attack Roll (including the OCV modifier), he hit the area listed, doing the BODYx and STUNx listed, plus any of the special effects possible.

Example: Zakul wants to hit Logan in the arm. He will take a -5 on his OCV to hit, including any other modifiers for range, concealment, and so on.

Important Note: Whenever the target is not "in combat" or is (taken by total surprise), the placed shot modifiers are halved. For instance, shooting at the head becomes a -4 OCV shot instead of a -8 OCV shot. This rule also applies when holding someone at gunpoint (the Covered maneuver).

A character may place a weapon against some specific portion of the target's body by taking an extra phase and if the target is immobile (a bound or unconscious person). In such a case, the attacker does not need to make an attack roll to hit the target in a specific location.

SPECIAL HIT LOCATIONS

Sometimes a character may want to take a placed shot at a group of areas on the target, and not just one area. Or perhaps the target is partly concealed, and only certain areas of his or her body could be hit. In such circumstances, the attacker should use Special Hit Location tables. These tables list the different circumstances, the OCV modifier of the attacker, and the dice roll to consult the main Hit Location Table.

SPECIAL HIT LOCATION		
Circumstances	OCV	Dice Roll
Head Shot (Head-Shoulders)	-4	1d6+3
High Shot (Head-Vitals)	-2	2d6+1
Body Shot (Hands-Legs)	-1	2d6+4
Low Shot* (Shoulders-Feet)	-2	2d6+7
Leg Shot (Vitals-Feet)	-4	1d6+12
* Count 19 as Feet		

Consult the Hit Location table normally. Use the number from the dice roll (indicated in the third column on the Special Hit Location) as the number on the first column of the Hit Location Table.

IMPAIRING

Whenever the BODY damage done to an area (before or after the BODYx) is more than half the character's total BODY, that area is considered impaired. Consult the following table to determine the effects of impairment on different areas. The impairment effect for head and torso areas should occur if the character fails to make a CON Roll (see Characteristic Rolls), or at the GM's discretion.

These effects are optional, and the GM should use judgement concerning the nature of the attack that caused the wound and the situation. Sometimes using these effects strictly is not the way to have the most fun. Feel free to alter the effects according to specific circumstances.

Each area is listed, and possible effects of impairment are discussed after each listing.

IMPAIRMENT TIME	
1d6	Time condition lasts
1	1 turn
2	1 minute
3	10 minutes
4	1 hour
5	1 day
6	Several days

HEAD: The character may be unconscious at the GM's discretion, and upon waking, could suffer from temporary amnesia, dizziness, double vision, or impaired speech. The GM could apply a -1 to -3 penalty on the character's CV, Perception, and all Skill Rolls to reflect this. Roll 1d6 on the Impairment Time table to see how long this condition could last.

The GM may also decide that an NPC who has taken an Impairing shot to the head is dead, dying, or at the very least out of the fight. This is a good tool for getting unimportant ruffians out of the way. Used wisely, this rule can add to the drama of an adventure. Player characters would almost never be killed by an Impairing blow to the head. The GM should only do that to a player character in extreme circumstances (for example, if a PC is trying to commit suicide with a small dagger).

HANDS, ARMS, AND SHOULDERS: The character loses the ability to perform delicate actions with that hand, including a -3 OCV with any attacks using that arm, and -3 with any Skills involving that arm. Striking someone with that arm would cause the character to take 2d6 STUN with no defense.

CHEST, STOMACH, AND VITALS: The character no longer receives his post-segment 12 Recoveries (see Recovery). An Impairing shot to the Vitals may leave an NPC dead or dying, if the GM so decides (as for head wounds).

THIGHS, LEGS, AND FEET: The character's movement is cut in half. The character is -2 DCV because of this reduced mobility.

DISABLING

Whenever the BODY damage done to an area (before or after the BODYx) is more than the character's total BODY, that area is considered disabled. Consult the following list to determine the effects of disabling on different areas.

The disabling effects should occur at the GM's discretion. Generally, unimportant ruffians and NPCs could be considered dead for the sake of faster game play. Player characters should be given the benefit of the doubt; after all, they're the important ones.

If the character makes a CON Roll, the long term effects should be less severe, and possibly only temporary in nature (roll on the Impairment Time table). A character who fails a CON Roll may have to buy back any lost Characteristics, movement, or Perception, depending on the GM. All these are bought back at the normal price.

The GM should apply disabling effects as plot devices. The roleplaying possibilities are legion for characters suddenly blinded, losing an arm, or being paralyzed. Remember, though, don't spoil the players' fun for the sake of rules. Keep in mind that technology can usually fix any disability a character has. Bionics might be used, or a new body part regrown, depending on the campaign.

Each area is listed below with the possible effects of Disabling.

HEAD: The character will probably suffer a long term effect such as amnesia, impaired speech, partial paralysis, hearing loss, or impaired vision. The GM may decide to reduce some characteristics such as INT, EGO, or COM to reflect this damage. Roll 1d6 on the Head Disabling Chart to determine the type of damage. This could be a useful plot twist. Perhaps the character forgets which side he or she was working on!

HEAD DISABLING

1d6	Effect
1	Lose 1d6 EGO
2	Lose 1d6 INT (amnesia, impaired speech)
3	Lose 1d6 COM
4	-1/2d6 to Perception Rolls (hearing or vision loss)
5	-1/2d6 to all Skill Rolls
6	Limb paralyzed (see next listing)

HANDS, ARMS, AND SHOULDERS: The character may have decreased STR or DEX in that limb (-1d6 of STR or DEX to that limb only). The arm may be totally severed depending upon the nature of the attack and the GM's judgement. If the limb is ruled to be still attached, the character may try to make a CON Roll. If the character fails the roll, the arm will be permanently impaired, with the same effects as Impairment. A character who makes a CON Roll can retrain the arm to normal by taking several months of therapy, and possibly paying character points.

CHEST, STOMACH, AND VITALS: Long term effects could be loss of various Characteristics. Roll on the Chest Disabling Table.

CHEST DISABLING

1d6	Effect
1	Lose 1d6 STR
2	Lose 1d6 CON
3	Lose 1/2d6 BODY
4	Lose 1/2d6 REC
5	Lose 2d6 END
6	Lose 1d6 STUN

THIGHS, LEGS, AND FEET: The character may have decreased movement, and/or a distinctive limp. The limb may be totally severed depending on the nature of the attack and the GM's judgement. If the limb is ruled to be still attached, the character may try to make a CON Roll. If the character fails the roll, the limb will be permanently impaired, with the same effects as Impairment. If the character can make a CON Roll, then the limb can be retrained to normal as discussed in the *Hands, Arms and Shoulders* section above.

KNOCKDOWN

Weapons, especially big ones, can knock people down. This knockdown system works with the Hit Location Table. Whenever a character takes an Impairing wound (the weapon does half the character's BODY before or after the BODYx is calculated), the character must retreat one hex and make a DEX Roll. If the roll is failed, the character falls down. Whenever the character takes a disabling wound (the weapon does the defender's full BODY before or after the BODYx is calculated), then the character is automatically knocked down, going back one hex for every 2 BODY over the character's BODY total.

Example: *Lem, a giant amoeba with a 2d6K blaster does 12 BODY to Zil who only has 9 BODY. Zil goes flying back two hexes.*



WOUNDING

This useful option prevents characters from totally ignoring wounds. A character who takes BODY damage for any reason should try to make an EGO Roll (see Characteristic Rolls), -1 for every 2 BODY done to the character. Since you always round in favor of the character, a 1 BODY wound would be no minus to the EGO Roll.

If the character makes this roll, then there's no effect beyond whatever damage is normally done by the injury (including Bleeding). If the EGO Roll is failed, the character can't take any offensive action in the next phase (the character can't shoot, strike back, or use any offensive Combat Maneuver). The character may still move to cover, dodge, or use any other neutral or defensive Combat Maneuver. This is intended to simulate the instinctive response to being wounded (saying "ouch!", clutching the wound, and perhaps ducking back behind a wall).

This rule is more applicable to NPCs than to player characters. Player characters are assumed to be tough. Sometimes the NPCs don't have the drive or motivation that the players have. The GM should apply this rule sparingly for best effect.

USING ARMOR AND RESISTANT DEFENSES

The term Resistant defenses (or DEF) simply refers to defenses that work against Killing attacks similar to the way a character's PD works against a normal attack. Resistant defenses include bulletproof jackets, force fields, power armor, and armored alien skin.

To use resistant defenses, subtract the DEF from the BODY and STUN done by an attack, whether it is a Killing or Normal attack. Resistant defenses like normal defenses are categorized into resistant PD or ED. If it's a physical attack, the resistant PD counts. If it's an energy attack, the resistant ED counts.



Some armor may cover the character's whole body, while other armor may cover only certain locations. This may be reflected in two ways. If the GM is not using the Hit Location Table, it is reflected by an activation roll on the armor. If the GM is using the hit location rules, the armor will have a locations covered number listed next to it (such as locations 9-12). This number corresponds to the Hit Location Table.

Aliens do not automatically have Resistant Defenses. They must wear armor like a human, or buy armored skin (see the Alien Powers section).

RECOVERY

During a battle, a character may lose both STUN and END. To reflect the body's recuperative capacity, each character has a Recovery (REC) Characteristic. After segment 12 each turn, all characters get to Recover. This segment 12 Recovery is free, and places no requirements on the character. When a character Recovers, add his or her REC to current STUN and END totals.

Example: At the end of segment 12 Ila has 4 END and 13 STUN left. Ila has a REC of 5, so after she recovers she ends up with $13 + 5 = 18$ STUN. Ila also recovers 5 END, and now has $4 + 5 = 9$ END pips. At the end of the turn, Ila is has 18 STUN and 9 END.

A character may also Recover during any of his or her action phases. A character who takes a Recovery during an action phases may do nothing else. The character may do nothing that costs END while Recovering, and the character's DCV is zero.

The character may be hit while taking a Recovery. If any STUN or BODY gets past the character's defenses, the character does not get to Recover, and does not get back any END or STUN. A character who Recovers during segment 12 also gets the post segment 12 Recovery.

HOLDING BREATH AND DROWNING

A character holding his or her breath does not get to recover, even after segment 12. The character also expends a minimum of 1 END per phase. A character may lower his or her SPD to 2, and only act as SPD 2, thus reducing the amount of END used. The player may only declare the SPD change at the end of segment 12.

A character who runs out of endurance while not breathing expends STUN as END (see Endurance section). A character who runs out of STUN then loses BODY, drowning at -1 BODY/phase.

RECOVERING BODY

Generally, a character will recover a number of BODY in one month equal to his or her REC characteristic. For instance, Ila of the preceding example could recover 5 BODY in a month, or approximately 1 BODY every 6 days. This rate of healing assumes that the character is taking it easy.

If the character is running around, fighting, traveling, and so forth, the healing rate is halved. If the conditions are very poor, unsanitary, overly cold or hot (in jail, perhaps), then the time for healing is also doubled. Hospital care can halve the time needed to heal. Impairing or disabling wounds can mean double the normal healing time, at the GM's discretion.

Of course, devices such as robotic doctors and regeneration devices may greatly speed up the character's healing rate. Look in the equipment list for more details.

ENDURANCE



Normally, it's not necessary to keep track of END, unless the characters are doing a lot of running and hand to hand fighting. The GM should not require the characters to keep track of END until they are more familiar with the game system, and even then only when the situation demands it. It's better to keep things simple when the added complexity doesn't add to the fun.

Action requires some energy, and this is reflected in the game by requiring characters to use END. The general rule is that 5 points of STR costs 1 END each phase to use. Thus, a character using 10 STR would use 2 END. A character does not have to use full STR. Some actions don't have a STR listed; in such cases, a character will spend 1 END. This includes such maneuvers as Block, Dodge, or firing a weapon. Characters also expend END for movement (see Movement), at the rate of 1 END per 5" traveled.

END that has been expended is regained whenever a character gets to Recover (see Recovery). A character who runs out of END and still wishes to take action may use STUN as END. The character takes 1d6 STUN damage for every 2 END used, and no defense is allowed against this damage. Yes, characters can knock themselves out using this rule. Isn't it wonderful to be heroic?

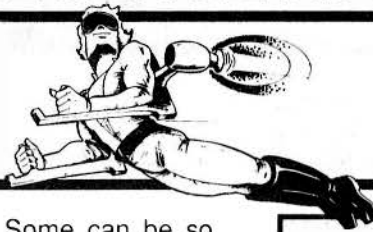
PUSHING

Occasionally a character may need to exceed the normal limits of his or her STR to perform a heroic action. A character may push STR up to 5 points with a successful EGO Roll. Also, the character may Push 1 point more than 5 for every 1 point the EGO roll is made by. The character expends 1 extra END for every 1 point the STR is pushed in additional to the normal END expenditure.

The GM may provide a bonus or a minus to the character's EGO Roll, depending on how important the Push is. If Satora can save the planet Theris from being disintegrated by the giant amoeba, the GM should give her a bonus to her EGO roll. However, casual use of Pushing should be discouraged by applying a minus to the character's EGO Roll.

The player must declare that the character is Pushing before attempting to make an Attack Roll, not after. If the Attack roll is missed, the character must still expend the END.

PRESENCE ATTACKS



Powerful individuals are impressive. Some can be so overwhelming as to cause people to stop and listen, or even obey commands. A Presence Attack is an attempt to instill awe or fear in the targets, and can have very useful effects.

Presence Attacks affect all people that can hear (or sometimes just see, depending on the Presence Attack) the character performing the attack. However, the Presence Attack will be reduced one level of effect for those the attack isn't directed against. If one member of a group of player characters performs a Presence Attack on some villains, the other PCs will not be as affected as the villains.

To perform a Presence Attack, a character rolls 1d6 for every 5 points of PRE he or she has. The total of the Presence Attack is compared to the defender's PRE according to the Presence Attack table.

PRESENCE ATTACK

Presence Attack is	Effect of Attack
1x Target's PRE	Target is impressed; will hesitate enough so that the attacker may act before the target this Phase.
2x Target's PRE	Target is very impressed; will hesitate as above, and only performs a half phase during the next phase. The target will consider very deeply what the attacker says.
3x Target's PRE	Target is awed; will hesitate for 1 full phase. Target has half DCV, and will possibly do as the attacker commands.
4x Target's PRE	Target is cowed and may surrender, run away, or faint. Target has DCV 0, and will nearly always follow commands.

The character may get extra dice for a Presence Attack depending on the circumstances. The Presence Attack Modifiers table lists some modifiers the GM can apply.

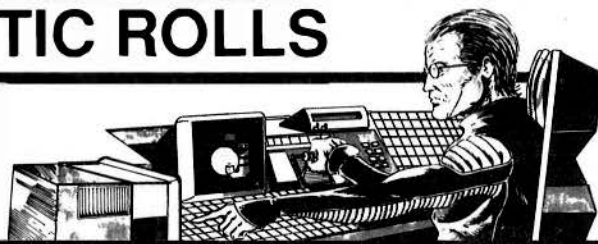
PRESENCE ATTACK MODIFIERS	
Modifier	Situation
-2d6	Very inappropriate setting
-1d6	Inappropriate setting
-1d6	In combat
-1d6	At a disadvantage
-1d6	Reputation weak
+1d6	Reputation strong
+1d6	Surprise
+1d6	Exhibiting a Terrifying Alien Power
+1d6	Exhibiting superior technology
+2d6	Exhibiting Vastly Superior technology
+1d6	Violent Action
+2d6	Extremely violent action
+3d6	Incredibly violent action
+1d6	Good soliloquy
+2d6	Excellent soliloquy
+3d6	Incredible soliloquy
+1d6	Appropriate setting
+2d6	Very appropriate setting
+2d6	Targets in partial retreat
+4d6	Targets in full retreat



In addition, characters should receive a 1d6 bonus if they make a roll for an appropriate PRE based skill (Bureaucratics, Carousing, etc.). Presence Attacks can represent different emotions. The character may perform a Presence Attack to terrorize the targets, to impress them, or to convince them. The Presence Attack tends to reinforce emotions that are already present. Presence Attacks that go against the moods already present are -1 to -3d6. The nature of the Presence Attack is dependent on what the character says.

Example: *Plenias, surrounded by 4 giant rock people, shouts "Surrender or die!" and smashes a nearby tree. Plenias has a PRE of 15 (15/5 = 3d6). He is exhibiting a violent action (+1d6), but is at a combat disadvantage with 4 opponents (-1d6). Plenias has a previous reputation of being a tough fighter (+1d6). He gets a total of 3 + 1 - 1 + 1 = 4d6 for a Presence attack. Plenias rolls, and gets a total of 17. The rock people all have PRE of 10. Plenias gets 1x their PRE, the rock people hesitate, and Plenias can act first.*

CHARACTERISTIC ROLLS



In certain situations, it may not be clear whether or not a character can perform a given action. For example, Lem is falling out of a building and tries to grab for a passing ledge. Will he make it? The GM asks the character to make a DEX Roll. Generally, Characteristic Rolls are equal to 9 plus the Characteristic divided by 5. The roll is made on 3d6.

Characteristic Rolls = 9 + (Characteristic/5)

A DEX Roll would be, therefore, 9 + (Dexterity/5) or less. For example, Chiron with a DEX of 20 would have a base DEX Roll of 9 + 20/5 = 13. He would be successful if he rolled a total of 13 or less on 3d6.

DEX ROLLS

These are used when an individual is trying to perform a major feat of physical agility. DEX Rolls can also be used when a hero is attempting a feat that requires a very fine touch and a steady hand.

INT ROLLS

These are used when the character tries to use knowledge not specifically represented by a skill, or when attempting to remember something. INT Rolls can also be used to see if a character remembers some bit of information that the player does not.

EGO ROLLS

These might be made when a character has a test of will. An individual may have to make an EGO Roll to keep going against the odds, to resist temptation, or to overcome a psychological disadvantage.

Characteristic Rolls should not be required too often, as they tend to slow the pace of play. Be careful that the characteristic rolls do not rob the player of control over his or her character.

THE STRENGTH TABLE

The Strength characteristic determines how much the character can lift (in kilograms, in the table below), damage done in Hand-to-Hand combat, and how far the character can jump (the table below is in meters and presumes a running broad jump). The last column in the table gives examples of items for the weights listed. For example, if Tessa has a Strength of 10, she may under most circumstances pick up a human.

A human-sized character needs at least a strength of 0 to stand up and walk around. Characters may exceed their Strength scores to perform remarkable deeds by "pushing" their Strength.

STRENGTH TABLE

Strength	Lift (kg)	Damage	Jump (m)	Example
-25	.8	-	-	Grenade
-23	1.0	-	-	Laser Pistol
-20	1.6	-	-	
-18	2.0	-	-	
-15	3.2	-	-	
-13	4.0	-	-	Laser Rifle
-10	6.4	-	-	
-8	8.0	-	-	Shotput
-5	12.5	-	-	
-3	16.0	-	-	
0	25.0	-	-	FTL Radio
3	37.0	1/2d6	1	
5	50.0	1d6	2	
8	75.0	1 1/2d6	3	
10	100.0	2d6	4	Human
13	150.0	2 1/2d6	5	
15	200.0	3d6	6	2 Humans
18	300.0	3 1/2d6	7	
20	400.0	4d6	8	Motorcycle
23	600.0	4 1/2d6	9	
25	800.0	5d6	10	
28	1200.0	5 1/2d6	11	
30	1600.0	6d6	12	Small car or Hovercraft
35	3200.0	7d6	14	Truck
40	6400.0	8d6	16	

Jump: Running broad jump distance in meters.
Lift: Lift capacity in kilograms.
Damage: Normal damage in hand to hand combat.
 Note 1Kg = 2.2 pounds

JUMPING

Rules:

- 1) +1" of running adds +1 meter to the jump distance.
- 2) A standing jump is only 1/2 the distance listed on the Strength Table.
- 3) Leaping straight upward is only 1/4 the distance listed on the Strength Table.

The leaping distances in the STR Table above are based on the running broad jump. A character runs a full move and then leaps, and a second later (one game-segment later, as described under Combat) lands at the indicated distance. Fast-moving characters may leap further: For every +1" of Running a character has over the base 6", add +1 meter (1/2 inch in game terms) to the jump distance. A character who is performing a standing jump leaps only half the listed distance, and running bonuses don't count. A character may leap straight upward one-fourth of the distance he or she may jump forward. Remember that the game scale is one hex equals 2 meters, so a character who can jump 4 meters will actually be jumping 2 game inches.

THROWING THINGS

Three factors come into play when a character is throwing an object: how strong the character is; how heavy the object is; and how the character throws the object.

Find the character's Strength (STR) and compare this to the STR necessary to pick up the object. Subtract the latter from the former; the result is used with the Throwing Table.

The Extra Strength the character has (the amount the character's STR exceeds the STR needed to pick up the object) determines how far the character can throw the object. Look on the Throwing Table below:

THROWING TABLE

Extra Strength	Running Throw	Standing Throw	Prone Throw
0	0"	0"	0"
5	4"	2"	1"
10	8"	4"	2"
15	12"	6"	3"
20	16"	8"	4"
25	20"	10"	5"
30	24"	12"	6"
35	28"	14"	7"
40	32"	16"	8"
45	36"	18"	9"
50	40"	20"	10"

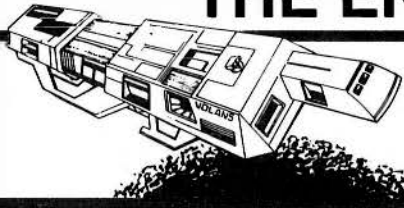
Example: Servalin, with STR 10, decides to throw a grenade. The grenade requires a STR of -25 to pick it up. Therefore, Servalin has 35 STR more than she needs to pick up the grenade. Consulting the chart above, she finds out that if she performs a running throw (i.e., she runs half her movement score and then lobbs the device) she can toss the grenade 28", or 56 meters. If she is merely standing and throwing it she can lob it 14", or 28 meters. If she's lying prone, she can't throw at optimum performance, and so can only heave the thing 7", or 14 meters.

HOW SHAPE AFFECTS THE RANGE MODIFIER

Range Modifier for Thrown Objects	
Object is	Range Modifier
Balanced and aerodynamic	-1/3"
Balanced only	-1/2"
Aerodynamic only	-1/2"
Neither balanced nor aerodynamic	-1/1"

The shape of an object will affect the range modifier for throwing it. An object that is both balanced and aerodynamic (such as a boomerang or baseball) takes a -1/3" modifier. Items that are merely balanced or aerodynamic, but not both (balanced: lasers, ungainly rocks; aerodynamic: paper planes, jetpacks) suffer a -1/2" modifier. Thus, at range one to two inches, there is no minus; at 3 to 4" the character takes a -1; at range 5 to 6", -2; and so on. Items that are both singularly unbalanced and nonaerodynamic (such as struggling ducks, bales of hay, tentacled horrors from the planet Indus, etc.) receive a -1/1". The GM is the final arbiter of whether a particular object is balanced or aerodynamic.

THE ENVIRONMENT



The environment is often a source of danger for daring characters. The perils of falling are discussed in this section in some detail. How characters affect the environment is also detailed here. It's not possible to cover all the objects and circumstances that could occur in a campaign. The GM should compare the situation to the tables provided.

FALLING

Occasionally a character may suffer the misfortune of falling from a great height. Falling itself does no damage whatsoever to a character, but hitting the ground can be extremely painful.

Falling objects have a velocity down and move every segment, at the DEX that they started to fall. The object falls its velocity in inches each segment. On planets with a gravity near Earth's, an object's velocity increases by +5" each segment due to the acceleration of gravity. The object accelerates, and then moves. Hence, when an object begins to fall, it starts with a velocity of 5".

FALLING ON A PLANET NEAR EARTH'S GRAVITY

Segment	Velocity	Distance fallen
1	5"	5"
2	10"	15"
3	15"	30"
4	20"	50"
5	25"	75"
6	30"	105"
7	30"	135"
8	30"	165"
9	30"	195"
10	30"	225"
11	30"	255"
12	30"	285"
	etc.	

SHORT FALLS

A character who falls 10" or less takes 1d6 damage per 1" fallen. For example, a character falling off a 4 story building 8" high would take 8d6 normal physical damage.

LONG FALLS

Characters who fall 10" or more take 1d6 normal physical damage for every 1"/segment of velocity they have at the time they strike the ground. The speed is shown in the Falling table. For example, a character hitting the ground at a velocity of 25" would take 25d6 of damage.

The damage taken by a fall may be considered killing damage if the character falls on jagged stones or similar broken ground. The damage would then be 1d6 of killing attack for every 3" of velocity. Conversely, falling into softer surfaces such as tree branches or snowbanks could decrease the damage done to the character by several or many dice.

GMs who want to be particularly nasty about a fall could use the Hit Location Table to find out what part of the character's body strikes the ground first, and give the majority of the damage to that body part.

FALLING ON OTHER PLANETS

If a planet has a different gravity than earth's, the falling speed will be higher or lower proportionally. Similarly, the maximum falling velocity will be affected by the density of the planet's atmosphere. Since few characters will survive a long fall in any case, GMs should set the value that seems to fit the situation.



Example: While skulking about Alpha Talos VII, Zakul is pushed off a kilometer-high atmosphere reprocessing center. Since the planet has an extremely high gravity, the GM decides that Zakul will accelerate downwards at 6" per segment. Moreover, since the atmosphere is very thin, the GM declares that Zakul's maximum velocity will be 40" per segment (which would inflict 40d6 if Zakul hit the ground). Zakul earnestly hopes he remembered to recharge the battery on his jet pack.

BREAKING THINGS

What would a barroom brawl be without smashed chairs? The following section describes how to determine when things are broken.

Each object has a Defense value and a Body total. The object's DEF works like a character's PD and ED. When an attack is made against the object, the Defense value is subtracted from the BODY done. If the remainder is 0 or less, no damage is done to the object; any amount left is subtracted from the Body total. The Defense value is considered fully resistant, so it makes no difference if the attack is a normal attack or a killing attack. The Defense value is the same versus both energy and physical attacks.

Only the BODY done matters in breaking an object; ignore STUN.

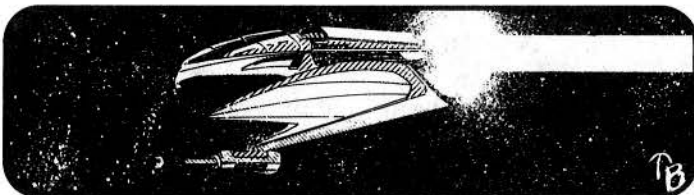
Example: Logan tries to cut through a wall with a laser sword. She slices into a DEF 9, 6 BODY wall, and rolls 10 BODY of damage. The wall's DEF of 9 is subtracted from the 10 BODY, yielding 1 BODY. The wall takes 1 BODY. Since the wall has a total of 6 BODY, it is still standing, and not yet cut through.

The number of BODY an object has is dependent upon how much the object weighs and how fragile it is. A machine can have a heavy steel casing but weak insides, so it would have a high DEF but few BODY.

The BODY and DEF of an object can change depending on how high a technology world you're on. Generally, the higher the technology, the more BODY and DEF the object has. This is to reflect the fact that more materials are available, and high tech worlds would avoid fragile materials for the practicality of sturdier ones.

The Object List covers some common items that characters will try to break. This list is just suggested DEF and BODY for these items; the GM should change them to fit the particular adventure. The same type of object may have different DEF and BODY (Altarian spacesuits are sturdier than Denebian ones. They have 1 more DEF and BODY).

Note that if characters use an object as a weapon, the maximum amount of damage that can be done with the object is equal to the combined DEF and BODY — any additional damage and the object simply breaks.



OBJECT LIST

Material or Object	DEF	BODY
Bushes	2	3
Control console (per hex)	4	4
Dirt (per hex)	0	16
Doors:		
Airlock door	8	7
Interior wood door	2	3
Interior Spaceship door	6	4
Exterior wood door	4	3
Metal fire door	7	5
Safe door	10	9
Large vault door	16	9
Flag pole (breakaway)	4	2
Furniture:		
Light wood furniture	3	3
Heavy wood furniture	4	5
Plastic furniture	2	3
Steel reinforced furniture	5	5
Glass	1	1
Lamp post (breakaway)	5	3
Locks:		
House door lock	3	2
Magnetic lock	5	3
Padlock	4	3
Machinery:		
Light machinery	5	4
Medium machinery	7	6
Heavy machinery	9	8
Rock	5	3
Boulder	5	13
Spacesuit	2	3
Telephone pole(wooden)	5	4
Trees:		
Small tree (less than 1")	4	5
Medium tree (less than 5")	5	8
Large tree (5" or more)	5	11
Vehicles:		
Armored car	10	11
Automobile	4	9
Bicycle	4	2
Helicopter	4	9
Hovercraft	5	9
Jetpack	4	4
Motorcycle	4	7
Light plane	4	9
Twin engine plane	4	11
Multi-engine plane	4	14
Submarine	10	19
Tank (front armor)	19	
(side, top, rear, bottom)	14	14
Truck or bus	4	10
Walls:		
Armored wall	13	7
Brick wall	5	3
Concrete wall	6	5
Home inside wall	3	3
Home outside wall	4	3
Reinforced concrete wall	8	5
Spaceship interior wall	8	6
Weapons:		
Heavy weapon	6	8 or 9
Pistol	4	3 or 4
Rifle	4	5 to 7
Very large heavy weapon	6	12

CONCEALMENT

There are many things that a character might want to conceal: lasers, equipment, papers, microfilm. A character uses the Concealment Skill to hide objects in a room or on his body. The Concealment Skill is used vs. searcher's Perception roll in a skill vs. skill. First the character makes a Concealment roll, then the other individual makes a Perception roll at minus whatever the first character made the Concealment roll by.

Modifiers may be applied to Conceal an object. The size and shape of an object affects the ability to hide it, in addition to the clothing the character is wearing.

SIZE TABLE FOR CONCEALING OBJECTS ON THE BODY

Mass	Concealment	Description roll modifier
0.2 kg	+2	Earring, hairpin
0.4 kg	+1	
0.8 kg	+0	Small knife
1.6 kg	-1	Small laser pistol
3.2 kg	-2	Laser pistol
6.4 kg	-3	Laser rifle
	etc.	

OTHER MODIFIERS FOR CONCEALING AN OBJECT ON THE BODY

Situation	Concealment Roll Mod.
Object is built into clothes, or under fake skin+2 (belt buckle, bracelet)	
Object is bulky or an awkward shape-2 (telescope, spacesuit helmet)	
Object is malleable+1 or +2 (putty, plastique, giant amoebas)	
Character is wearing heavy clothing+2 (winter coat, trench coat)	
Character is wearing light clothing (swimsuit)-2	

Successful Perception Rolls will tell a character that someone's carrying an object, but the Perception Roll won't tell them what the object is. So long as clothing still covers an object, the object's exact identity will remain hidden. However, some information about the object should be available. If the observer has noticed a bulge under the character's left armpit, it's probably a gun. But the exact type of gun wouldn't be known until the object comes out into view.

A character may specifically tailor a suit for pieces of equipment or weapons. In a high tech world characters may have a myriad of places to hide things. They may hide objects under fake skin, in surgically added marsupial

pouches, or in bionic limbs. Some items may require a strip search and a Concealment versus Concealment Roll. Objects weighing 1 Kg or less will require especially intensive searches. Such items are considered so small that they can fit behind belt buckles, in shoe heels, or inside specially created pockets.

SEARCHING A PERSON

Whenever a character gets captured, he or she will probably get searched. There are three kinds of searches: a fast patdown, a thorough patdown, and a strip search. All three work on the Concealment roll vs. Perception roll system.

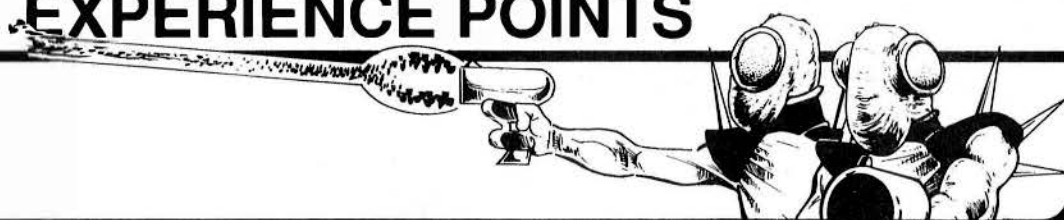
A fast patdown only takes 1 phase and will find most large items hidden on a character's torso. The searcher rolls a Perception roll. The searcher finds each item if he or she makes a Perception roll, taking into account the minuses for the victim's successful Concealment roll. The chance is pretty good for the searcher to find a gun, but there's still a small chance to miss one.

A thorough patdown takes a full turn and will find most large items hidden all over a character's body. The searcher still must make a Perception roll with +2, and can now find objects hidden anywhere on a character.

A strip search is exactly what it sounds like. It takes at least one minute and often five or ten minutes, or even longer. The searcher removes all of a character's clothing, sometimes even systematically destroying the clothing to make sure everything is found. The searcher can then search the character's clothing at leisure and will find anything not hidden with Concealment Skill. The searcher will have a good chance to spot items hidden under fake skin, in the character's hair or in a bionic appendage. A Strip search gives +3 to +5 the searcher's Perception roll.



EXPERIENCE POINTS



As the players continue to play their characters in the campaign, the characters should be improving by learning from their experiences. The GM should give them Experience Points to reflect their time spent improving their physical condition, learning new Skills, improving old ones, or buying off disadvantages.

Experience Points act as Character Points in all ways. Experience Points are just Character Points that the character obtains from adventuring.

Characters usually spend Experience points between adventures. However, sometimes a character learns a new skill during an adventure (Hadrian learns to fly a spaceship as it's crashing). Some skills may require a fair amount of time in the campaign (at least a couple of weeks, game time) to learn, while others would require that the character be trained under an instructor, like a computer, sleep teacher, or person. The character may have to go off the beaten path to find a teacher in some of the more esoteric Skills.

The GM must carefully consider how many Experience Points to give out after each adventure. If the GM gives out too few points, then the characters and the campaign become stagnant. If the GM gives out too many points, then the PC may become unrecognizable and overpowered in a very short amount of time.

The following table should help the GM decide how many Experience Points to give out to the characters. This table is a set of guidelines, and should not be taken as absolute. A very large adventure may be worth many small adventures that were swiftly resolved.

EXPERIENCE POINTS	
Situation	Experience
Base experience points for being in a scenario.....	1 pt.
Characters were on a very long, involved adventure	2 pts.
Adventure ran more than one evening	+1 pt.
The adventure was difficult.....	+1 pt.
Characters were heavily outnumbered	+1 pt.
Optional Guidelines:	
Characters were clever, inventive, subtle or roleplayed well	+1 pts
Characters solved a mystery	+1 pt.
The adventure was a resounding success	+1 pt.
Characters role played very poorly	-1 pt.
The adventure was a terrible failure	-1 pt.

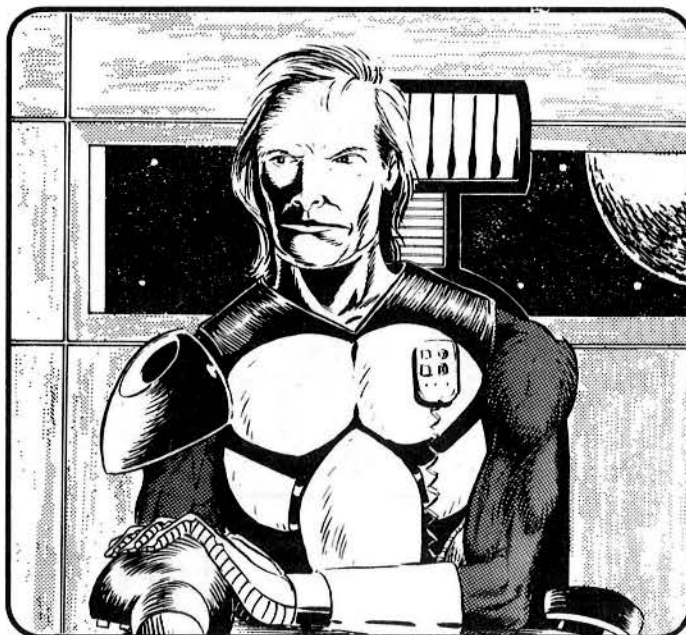
Usually, a one night adventure is worth 2 experience points. If an adventure takes more than one session, add +1 experience point for each session beyond the first (a 3 session adventure would give you 4 experience points).

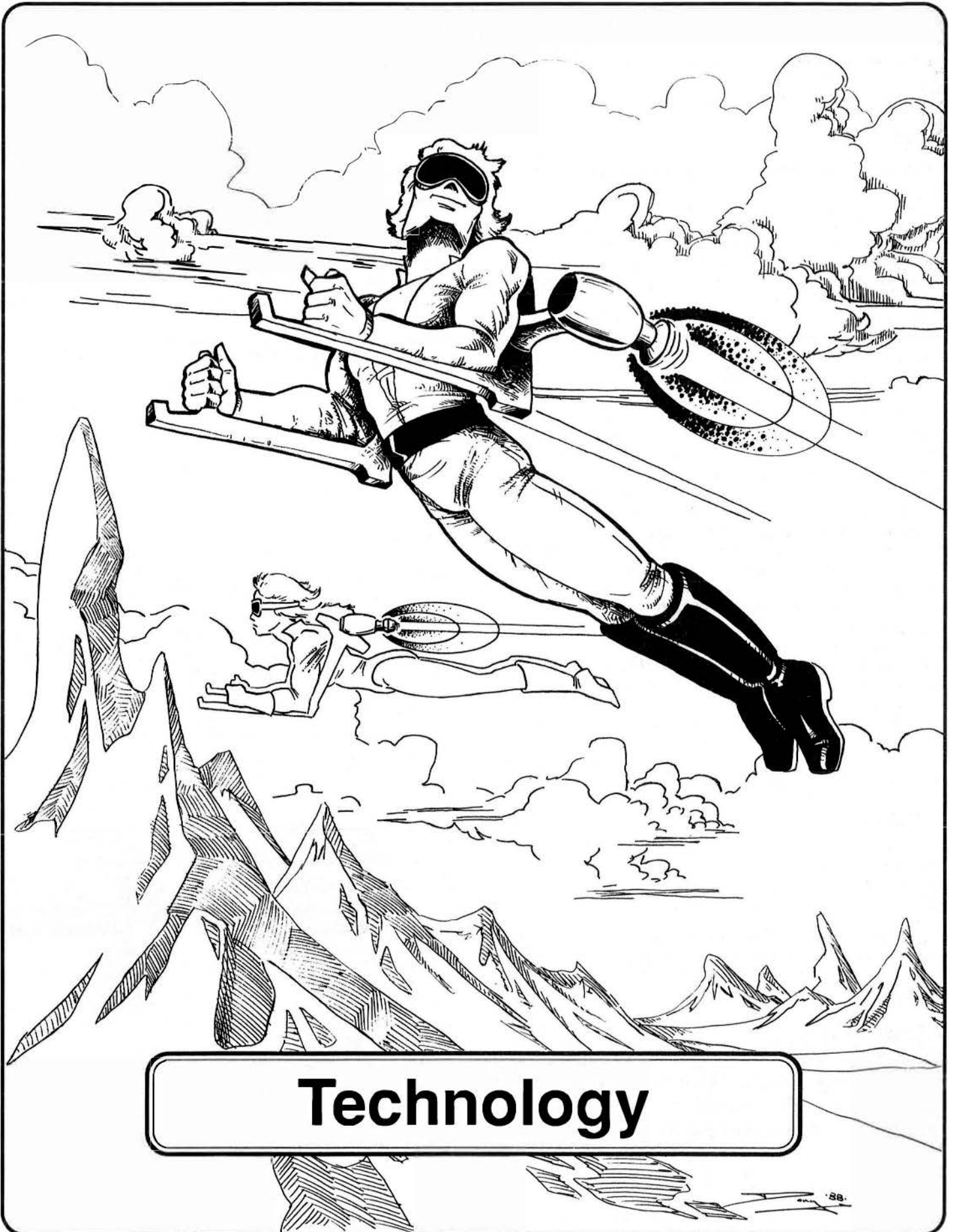
The GM never takes Experience Points away. Player characters should always get a minimum of 1 point of experience if they play a scenario.

ASSIGNED EXPERIENCE POINTS

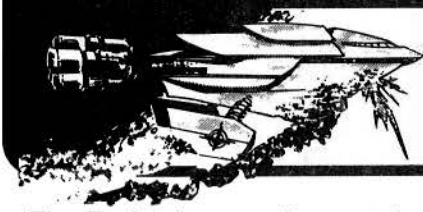
The GM can also give out Experience Points for specific Skills or attributes that the characters used during the adventure. Each player may state at the end of the adventure one Skill (new or old) his or her character used a great deal during that particular adventure. The GM then can decide to give the character an Experience Point to be used only for that specific Skill. The Assigned Experience Points are like a bonus, over and above the Experience Points given out for the adventure.

Assigned Experience Points are usually given to Knowledges, Languages, Contacts, and Favors. Occasionally the GM may give a character 1 Experience Point towards a +1 with some Skill. The GM may well choose to give out more than one or two Experience Points by assignment, thus helping the character grow in the direction indicated by his or her actions on the adventure. However, characters should always have some Experience Points that can be spent anywhere.





TECHNOLOGY



The Technology section contains rules for devices and starships. It also contains Alien Powers, as these often use the same effects, Advantages, and Limitations as devices. One of the differences between the two is whether character Points are paid or not. For Alien Powers, the character pays Points and that power is part of his or her physiology. Although devices and starships may be built with construction Points, no character Points are paid — the only thing a character pays is money (in Credits). Also, a device or starship can be taken away from the character, while an Alien Power can't.

Sometimes a device description will refer to the Alien Powers. If this is the case, use the rules for Alien Powers, including the Point costs. Sometimes minor changes to the Alien Power will be mentioned in the Device section. Note that there is **not** an intrinsic bonus for devices (a focus bonus); devices do not cost fewer points than Alien Powers.

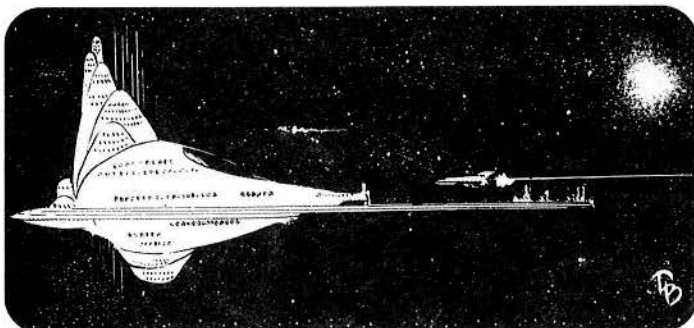
Once a character has completed buying Alien Powers, the Points can't be shifted around. The Points used to build starships and devices cannot be shifted around except with the GM's permission and a good repair shop.

In addition to the base price for a device, starship or Power, there are Advantages and Limitations. These make the device or Power more or less effective, and change the price paid for them (for example, Xil's telepathy only works on humans, hence his telepathy has a Limitation). More details on this are given later.

Occasionally, a player will come up with a conception that doesn't fit directly into the rules. Together, the GM and player should see if a combination of Powers, Advantages, and Limitations fulfill the concept.

AVAILABILITY OF TECHNOLOGY

The GM must decide what devices and Power are permissible. For example, does the GM allow FTL, Force Fields, Robot Doctors, and Teleporters? To aid the GM, a Device Availability sheet has been provided. It lists specific device capabilities and gives room for the GM to comment. A filled-out form is provided for the sample universe (The Universe of the Alliance). For a discussion of technology levels see the Gamemaster's Section: *Defining a Society's Technology*.



SPECIAL EFFECTS

The Powers, starships, and devices are explained thoroughly in game terms. What the descriptions **don't** say is how a Power works, what it looks like, or any sound effects that go with it — in other words the Special Effects. Special Effects are those properties which don't change game terms (damage done, END cost, and so forth), but which are needed for a complete description of exactly how a device or Power works. The HERO system omits Special Effects deliberately; by leaving the Special Effects undefined, the system is more flexible.

For example, Logan knows her Flight device gives her the ability to fly 5 hexes per phase. Is Logan's flight device an anti-gravity belt or a jetpack? Logan is free to define any Special Effects she chooses, subject to the GM's approval.

Special Effects may lead to minor advantages and disadvantages not described by game Advantages and Limitations. For example, Logan's jetpack leaves a glowing trail which can be useful by alerting friends to her presence, or it can be annoying when it alerts her enemies. If the Special Effects cause major advantages or drawbacks, the device should have Advantages or Limitations (see the section on Advantages and Limitations).

Sometimes the technology level of a society will limit the choice of Special Effects. For instance, if Logan buys a flight device on a world that hasn't developed anti-gravity, she can't have that as a Special Effect — perhaps the only Flight device available is a jetpack.

ENDURANCE COST

INSTANT AND CONSTANT

Each Alien Power and device description states whether it is Instant or Constant. Instant Powers and devices have their full effect in one Segment, and cost END each time they are used. For example, weapons and teleporters are Instant. Constant Powers and devices are usually left on for extended periods of time, and cost END each Turn (12 seconds) they are used. Life Support, Invisibility and Force Fields are all Constant.

END Cost for Alien Powers: Alien Powers are powered by the alien's body, and thus use up the character's END. The normal END cost is (Active Points) / 5. Active Points are defined below. The END cost of an Alien Power may be reduced in two ways; with the Reduced Endurance Advantage or the Limited Uses Limitation. Alien Powers may not use the Stored Power Advantage. Reduced Endurance (a +1/4 Advantage) halves the END cost of a Power as described under "Reduced Endurance" in the Advantages

section. Limited Uses reduces a Power's END cost to zero, as described under "Limited Uses" in the Limitations section.

END Cost for Personal Devices: Personal devices include handguns, personal computers, spacesuits, and all other devices not built into starships. Personal devices have the same END cost as Alien Powers: (Active Points)/5. However, the END cost of devices is not usually drawn from any character's body (except for Melee Weapons). Instead, personal devices must either draw power from an external source such as an electric outlet, or have the Stored Power Advantage, which functions like a battery. Personal devices may also have Limited Uses, which reduces their END cost to zero. Personal devices may not have the Reduced Endurance Advantage.

END Cost for Starship Devices: Starship devices include weapons, Artificial Gravity, and other devices built into starships. Starship devices cost END at the usual rate: (Active Points)/5. This END must come from the starship's Power Plant or the device's Stored Power. Starship Devices may also have Limited Uses, which reduces their END cost to zero. Starship devices may not have the Reduced Endurance Advantage.

ACTIVE POINTS

The Active Point cost of a Power or device is figured from the following formula.

Active Points = Base Point Cost x (1 + Advantages)

Limitations do not change the Active Point cost of a Power or device. Unless otherwise stated in the Advantages section, all Advantages are included in the formula for computing Active Points.

DEVICE MASS

The Active Point cost of a device determines its mass and BODY, as shown in the Device Mass Table. The mass of a device determines how easy that device is to conceal (see the Combat section). If a device (like a weapon) is so heavy that a character cannot lift it at all, it cannot be used as a hand-held device. The BODY of a device determines the amount of damage a device can take before being destroyed: when a device is at zero BODY it is destroyed. All devices have 4 DEF unless they have bought Armor.

Active Points are different from the total Point cost of a device. Active Points include the base Point cost of a device and all Advantages (except Miniaturization), but no Limitations. A fuller discussion of Advantages, Limitations and Active Points is given in the Advantages and Limitations section.

This table also determines the mass and BODY of individual starship devices, which are shown in a separate column. Starship devices are devices built into a starship; they are larger and more powerful than personal devices. The BODY of starship devices determines how much damage is needed to destroy the device with attacks made directly at that device, but does **not** affect the chance of a device being damaged by shrapnel in starship combat.

Do not use the Device Mass Table to determine the overall mass of an entire starship. A starship's mass is determined by its BODY as discussed in the starship construction section.

CREDIT COST OF A DEVICE

Once the total Point Cost of a device is determined, including the Base Point Cost, Advantages and Limitations, the Credit Cost can be found on the Credit Cost Table. One Credit is approximately equal to 1 dollar in modern America. The amount of Credits a character has to start with is determined by the GM, or by using the optional Income Rules in the Character Creation section.

If a device has a Point Cost between the entries on the table, just round the Point cost off to the nearest table entry. The Credit Cost Table may be extended using the following rule: doubling the Point Cost increases the Credit Cost by a factor of 10. So it costs 10 Credits for a 10 Point weapon, but 100 credits for a 20 point weapon, 1000 Credits for a 40 Point weapon, and so forth.

These Credit costs reflect the availability of devices to characters, organizations and governments, assuming a technology in the early years of faster-than-light space travel. If the GM's society is more advanced, all these Credit costs should be decreased by a factor of 5, 10 or even more. This lower Credit cost would reflect an extremely advanced society in which characters can afford 50 DEF armor or a fleet of starships. Normally such devices are so expensive that individuals cannot obtain them, and they may not exist at all.

Example: A polymer bodysuit of Armor providing 6 PD and 6 ED costs 20 points. Consulting the Credit Cost table, the device costs 100 Cr, and from the Device Mass table it weighs 0.8 kg.

CREDIT COST FOR STARSHIPS

For starships, use the totalled Point cost of everything on the starship to determine the Credit cost. For example, a 500 point starship would cost 4 million credits. The starship equipment is not bought separately with Credits because it needs supporting braces, power cables, control lines and so forth. The only exception to this rule is if the equipment is removed from a starship and sold as salvage. Individual salvaged starship devices cost 64x the Credit Cost shown.

SCALE CHANGE MODIFIER

Ranged devices start out with a Range Modifier of -1/3". This Range Modifier may be increased in two ways: by taking the Increased Range Advantage, or the Scale Change Modifier. The Scale Change Modifier multiplies the Range Modifier of a device by x64, the Mass of the device by x64, and the Credit cost by x64. The Point cost of a device is not changed by the Scale Change Modifier.

The Scale Change Modifier is the best way to make large changes in a device's Range Modifier. In general, starship devices are personal devices with one level (x64) of Scale Change. This mass change has already been taken into account on the Device Mass table.

DEVICE MASS TABLE

Active Points	Normal Mass	Device BODY	Starship Device Mass	Device BODY
0	0.2 kg	1	12.5 kg	7
10	0.4 kg	2	25.0 kg	8
20	0.8 kg	3	50.0 kg	9
30	1.6 kg	4	100.0 kg	10
40	3.2 kg	5	200.0 kg	11
50	6.4 kg	6	400.0 kg	12
60	12.5 kg	7	800.0 kg	13
70	25.0 kg	8	1.6 tons	14
80	50.0 kg	9	3.2 tons	15
90	100.0 kg	10	6.4 tons	16
100	200.0 kg	11	12.5 tons	17
110	400.0 kg	12	25.0 tons	18
120	800.0 kg	13	50.0 tons	19
130	1.6 tons	14	100.0 tons	20
140	3.2 tons	15	200.0 tons	21
150	6.4 tons	16	400.0 tons	22
160	12.5 tons	17	800.0 tons	23
170	25.0 tons	18	1.6 Ktons	24
180	50.0 tons	19	3.2 Ktons	25
190	100.0 tons	20	6.4 Ktons	26
200	200.0 tons	21	12.5 Ktons	27
210	400.0 tons	22	25.0 Ktons	28
220	800.0 tons	23	50.0 Ktons	29
230	1.6 Ktons	24	100.0 Ktons	30
240	3.2 Ktons	25	200.0 Ktons	31
250	6.4 Ktons	26	400.0 Ktons	32
260	12.5 Ktons	27	800.0 Ktons	33
270	25.0 Ktons	28	1.6 Mtons	34
280	50.0 Ktons	29	3.2 Mtons	35
290	100.0 Ktons	30	6.4 Mtons	36
300	200.0 Ktons	31	12.5 Mtons	37
etc.				

1 kg. = 2.2 pounds

1 ton = 1000 kg. = 2200 pounds

1 Kton = 1000 tons

1 Mton = 1000 Ktons

CREDIT COST TABLE

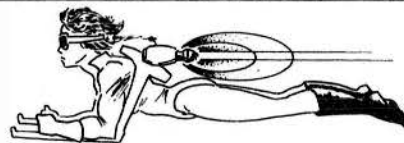
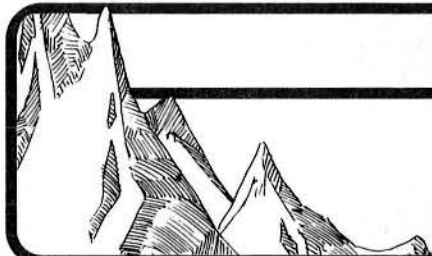
Final Point Cost	Credit Cost	Final Point Cost	Credit Cost	Final Point Cost	Credit Cost
5 or less	5 Cr	120	40 KCr	360	1500 KCr
10	10 Cr	130	50 KCr	380	1750 KCr
15	30 Cr	140	64 KCr	400	2 MCr
20	100 Cr	150	80 KCr	450	3 MCr
25	200 Cr	160	100 KCr	500	4 MCr
30	400 Cr	170	120 KCr	550	6 MCr
35	640 Cr	180	150 KCr	600	8 MCr
40	1000 Cr	190	175 KCr	650	10 MCr
45	1500 Cr	200	200 KCr	700	13 MCr
50	2000 Cr	220	300 KCr	800	20 MCr
60	4000 Cr	240	400 KCr	900	30 MCr
70	6400 Cr	260	500 KCr	1000	45 MCr
80	10 KCr	280	640 KCr		
90	15 KCr	300	800 KCr		
100	20 KCr	320	1000 KCr		
110	30 KCr	340	1200 KCr		

Cr means credits.

KCr means kilocredits or 1000 credits.

MCr means megacredits or 1,000,000 credits.

DEVICES



The following is a list of capabilities for both starship and hand held devices. Sometimes a device description will refer you to the Alien Powers section. Simply look in that section and follow the rules outlined there.

SUMMARY OF THE DEVICE CAPABILITIES

- Armor
- Artificial Gravity
- Communicators
- Communication Jammers
- Computers and Artificial Intelligence
- Damage Control
- Detectors and Sensors
- Drugs
- EGO Defense
- Entangle
- Flight
- Healing
- Invisibility
- Life Support
- Light Illusions
- Mental Illusions
- Mind Control
- Missile Deflection
- Robot Doctors
- Secondary Starships
- Suspended Animation
- Telepathy
- Teleporters
- Tractor Beams

ARMOR

Armor gives a character resistant PD and/or ED, and is bought like the Alien Power "Armor" (See page 82). Personal Force Fields are bought as Armor with Limited Uses. For each 5 points, the character gets 3 resistant PD or ED. If a character wears two suits of Armor, the defenses do not add. Instead, the character gains DEF from only one of the suits, and the other one is ignored. Armor costs no END and is Constant. Cost is 5 points for +3 resistant PD or ED.

Armor for starships is bought differently (see "Building Starships").

Devices may also be Armored, which makes them harder to break. Devices start with 4 resistant PD and 4 resistant ED, and pay +5 Points for each +3 PD or +3 ED. Points spent on Armor add to the base Point cost of a device.

ARTIFICIAL GRAVITY

Artificial Gravity devices are used primarily on starships. Artificial Gravity maintains normal gravity in the living quarters, even when the ship is moving at high acceleration. Starships with Artificial Gravity can use large amounts of thrust without harming passengers and crew members (see Starship Combat section). Characters not in acceleration

couches can take a G-force up to their CON/5 before taking damage. Characters in acceleration couches may take a G-force up to 3 + CON/5 before taking damage.

Artificial Gravity may be bought in 3 categories: for an individual, for a room or for the whole starship. The Point cost is 1 pt. for every 1 unit of G-Force cancelled out for one person, 5 pts. per G for one room, and 10 pts. per G for the whole ship. Note that the G-Force exerted on passengers aboard a starship may exceed that starship's "Average Gs" statistic if the pilot chooses to use a lot of THR in a single Phase, as discussed in the Starship Combat section.

The Artificial Gravity generator must be put into a High-Tech room. One possible Special Effect for Artificial Gravity for one person is a suit filled with water.

The GM should note that Artificial Gravity will change starship combat, as ships will be able to move much faster.

Example: For 20 points, 2 Gs could be cancelled for an entire starship, so that occupants of a ship using enough THR to cause a G-force of 6 would experience only 4 Gs.

Artificial Gravity, in addition to being used to decrease G forces from acceleration, may also be used to increase Gs to simulate normal gravity. The player pays only one price for both adding or canceling Gs (for 10 pts you may increase or decrease G-force by 1).

Artificial Gravity costs END and is Constant.

Cost: 1 point to cancel out 1 G for one person. 5 points to cancel out 1 G for one room. 10 points to cancel out 1 G for the whole ship.

COMMUNICATORS

Communicators are used to contact others in space or on planets. The cost depends on the complexity of the communicator. A character needs a FTL communicator to contact a person in another solar system (it would take years for a message from a regular communicator to arrive). Normal communicators, such as radio or TV, are useful for communication from planet to orbit, or between two planets in the same solar system. For radio and TV, there may be a delay time of several minutes, increasing with longer distances. The maximum speed of FTL messages is up to the GM; in any case, FTL messages should travel at least twice as fast as the fastest starship. This speed can be doubled for every 5 pts. spent.

When used in space or the atmosphere, communicators do not have a maximum range; the messages travel forever, gradually becoming weaker. In cities, caves, or other restricted terrain the maximum range of a Communicator is 5 x Active Pts. in game inches.

Directional Communicators broadcast messages in one direction only, otherwise Communicators broadcast messages in all directions.

On starships, Communicators must be in a High Tech room. Communicators cost END and are Constant.

COMMUNICATOR COSTS

Communicator	Cost
Radio, sound only	3 pts.
Video transmitter & receiver, sound & picture	5 pts.
FTL Radio, sound only	8 pts.
FTL Video	10 pts.
Directional Communicator	+5 pts.

FTL Distress Beacons: Distress Beacons may be bought as a +1 Limitation on a communicator (most ships have sound only, FTL distress beacons). Distress beacons automatically turn on when the ship is destroyed or badly damaged, or they may also be turned on manually. They broadcast a single recorded message, which can be changed with a Sensors Operation or Electronics skill roll.

Jamming Defense: Communicators may have jamming defense. For each +1 Point the strength of a jammer being used on the communicator drops by 1. For example, a communicator with 1 Point of Jamming defense could send a message through a -2 Jamming field with a Sensors Operation roll at -1 instead of the usual -2 penalty. One possible Special Effect of Jamming Defense is a laser beam communicator, which uses visible light to send messages.

COMMUNICATOR JAMMER

This device puts out a constant stream of static which interferes with communications into or out of the affected area. A character in the affected area must make an Electronics or Sensors Operation roll with a negative modifier, to send or receive messages. For example, a -2 Jammer gives a -2 to Electronics and Sensors Operation rolls for sending messages.

The cost of the Jammer depends on the minuses to the target's Sensors Operation skill roll to send and receive messages. The base cost is 5 Points to force the targets to make a roll to send or receive a message, and -1 to the target's roll for every +5 Points.

The strength of Jammers falls off with the usual Range Modifier of -1/3", which may be changed with the Increased Range Advantage and the Reduced Range Limitation. For example, a Jammer which gives a -3 penalty with a range of -1/3" will only give a -2 penalty to a starship 4 hexes away, -1 for a starship 7 hexes away, a starship at 10" away would make an unmodified roll to send or receive messages, and a starship 13" distant would not be affected.

Special devices may be used to communicate with persons in the vicinity of a Jammer, such as laser beam communicators (see Jamming Defense under Communicators). Also note that a directional communicator can be used to determine the source of a jammer with a successful Sensor Roll.

Cost: 5 Points for the target to make a normal sensor or electronics roll, and -1 to the target's roll for +5 Points.

COMPUTERS

Computers on starships are useful for reference, navigation, entertainment, and operation of some ship's systems. For each 1 Point spent, the computer has 2 "computer" Points to spend on skills, statistics, and programs. Skills for computers are bought at the same price as for characters, and computer programs are bought at the cost of 1 computer Point per program. When characters use computers to help



them, the computer's skills can be used as complementary skills.

There are two different types of computers: normal and artificially intelligent (AIs).

SUMMARY OF COMPUTERS

Normal Computers have	AIs have
1) Statistics: INT, DEX, SPD	1) Statistics: INT, EGO, DEX, SPD
2) Skills	2) Skills
3) No disadvantages	3) Only Psychological Disadvantages
4) Programs (1 pt. each)	4) Programs (1 pt. each)
5) No self will	5) Self will: can initiate actions with EGO roll.

NORMAL COMPUTERS

Normal computers do not think for themselves. They have skills, programs, and three statistics, INT, DEX and SPD. Normal computers are immune to all mental Powers and they cannot have Disadvantages. All they can do is execute a program, such as "Fly from planet A to planet B" or "Test all ship's systems" or "Attack and destroy that ship". Once a computer starts a program, it will continue doing the same thing until it reaches a logical conclusion (such as arriving at its destination), or the program is stopped by someone, perhaps by pressing a button. Normal computers have no common sense, instincts, or self-will: they will follow their program regardless of the consequences.

For example, once instructed to "Attack", a normal computer will continue to attack until the target is destroyed, even if doing so results in the destruction of the ship and the computer itself.

However, this lack of self-will does not necessarily make computers stupid: they may have very sophisticated programs. The general sophistication of a computer's program is determined by the computer's INT: whenever a computer is faced with a problem in achieving its goal, it must make an INT roll, with modifiers as determined by the GM. If the INT roll succeeds, the computer comes up with a clever action (the best idea the ship's owner can think of). If the INT roll fails, the computer reacts in a very simple way.

For example, a computer autopilot is fighting an enemy ship which suddenly turns invisible. The computer makes an INT roll. If it succeeds, it will realize that the enemy is using an Invisibility device, and will hunt for it with all available detectors. If it fails, it may conclude that the enemy has been destroyed and stop fighting. A badly failed roll may even lead to the Computer choosing another nearby ship at random to attack.

A computer may run several programs simultaneously if its INT is high enough; the maximum number of programs that can run at once is equal to the Computer's INT/5. The programs can be modified or erased and replaced with new ones by a character with Computer Programming skill, although this usually takes at least a few hours.

PROGRAMS AND SKILLS

There is a difference between programs and skills. Computers with skills but no programs are powerful but not "user friendly." Such computers can only be used by characters who make a successful Computer Programming skill roll. Computers with both skills and programs are easy to use — they can often be used by anyone, and may even respond to voice commands.

For example, a computer with Pilot skill and no program can pilot a starship, but requires constant supervision by a computer programmer. A more "friendly" computer with both Pilot skill and the program "Fly from A to B" can be used by anyone for routine transportation, and does not require supervision (the program can handle that).

If a Computer and a character have the same Skill, they may complement each other, but not when making Pilot rolls in combat. If a starship has computer-aided piloting which makes Pilot easier, buy Maneuverability; Computers cannot be used to aid a character's combat piloting. However, a computer may serve as the Pilot **instead** of a character, if it has the appropriate programs.

Most programs require one or more skills to be useful. Here is a list of example programs and required skills; players and GMs should make up more programs as needed.

EXAMPLE PROGRAMS

Program	Required Skill(s)
Attack and Destroy Target	Pilot., Fam. Weapons
Diagnose Ship Malfunction	Mechanics
Diagnose Character's Disease	Knowledge: Medicine
Evade Enemy and Flee	Pilot
Fly from Point A to Point B	Pilot
Search Nearby Space for Space-	
ships (alerts crew if any found) ...	Sensors Operation
Search Planet with Sensors	
(energy, certain minerals, etc.) ..	Sensors Operation
Search Reference Material for	
Information on a Topic	Knowledge Skills
Show Entertainment	Knowledge Skills
All programs cost 1 Point each.	

Since they have no self-will, Normal computers are immune to all mental powers and cannot be reasoned with. They only accept commands to switch from one program to another, or to change the operation of the current program.

Als

Artificially intelligent devices (Als) can think, and may have instincts and a personality. They may have skills, statistics and Psychological Limitations. Als have the same statistics as normal computers, and also EGO. The minimum EGO for an AI is 10, which costs 20 Points. This Point cost is usually offset by an AI's Psychological Limitations. Als are vulnerable to mental attacks. Als have programs just like Normal computers, but they may also initiate their own actions if they make a successful EGO roll. Als may have Psychological Limitations, which are governed by the same rules as for characters. They may not have any other Disadvantages.

For example, an AI with the "Self-Preservation Instinct" Disadvantage may decide to run away from combat even if it has been ordered to fight. Attempts to persuade a stubborn AI make great roleplaying, and may be decided by a Skill vs. Skill roll, with the AI using an EGO roll to resist Persuasion or Computer Programming skill.

Common AI Psychological Limitations

Cost

Self-Preservation Instinct: common, strong	8 pts.
Code vs. Killing Humans: very common, strong ..	11 pts.
Obedient to Owners: common, strong	8 pts.
Obedient to All Humans: very common, strong ...	11 pts.
Protective of Humans: very common,	
total commitment	13 pts.
Curiosity: common, total commitment	10 pts.
Secretly Hates Organic Life: common, strong	8 pts.
Considers Mission Goals More Important	
Than Crew's Lives: common, total commitment ..	10 pts.
Secret Programmed Goals Crew Doesn't	
Know About: uncommon, total commitment	8 pts.

GENERAL COMPUTER INFORMATION

Statistic	Starting Value	Cost	Max
INT	0 (zero)	1	20
EGO	0 (zero)	2	20
DEX	0 (zero)	3	20
SPD	1 + (DEX/10)	10	4
The minimum allowed EGO for Als is 10.			

Notice that computers have different starting values than a human's. The same maximums apply as for human characters. For example, to buy DEX above 20 costs 6 points per +1 DEX.

Skills for computers cost the same as for characters. A starship computer that has Familiarity with Starship Weapons is automatically linked into the ship's guns and can fire them. Its OCV and DCV are equal to its DEX/3. Computers can also be linked into ship's systems, such as doors, airlocks, lights, life support, force fields, sensors and engines. Computers get phases according to their SPD and DEX just like characters. If a computer is running more than one program at once, such as Pilot and Gunner, each program may act on each of the computer's phases. However, a computer which performs both Piloting and Gunnery on the same phase takes the same -2 OCV modifier a character does.

The Active Point cost of a computer is equal to the real Points spent plus Advantages, not the "computer" Points. For example, a computer with a real Point cost of 20 Pts. would have 40 Pts. worth of statistics, skills and programs, and 20 Active Points. The mass and Credit cost of personal computers are figured from the Personal Devices column of the Device Mass table in the Technology Introduction section. Starship computers are larger and more expensive than personal computers because of the added power and hardware needed to connect them to starship engines, weapons, and so forth. The mass of starship computers is figured from the Starship devices column of the Device mass table.

Computers cost END and are Constant.

Cost: 2 Points of computer skills and statistics per 1 Construction Point. Programs cost 1 point.

EXAMPLE COMPUTERS

The Generic Computer (a General Starships product)

This is a basic, no frills computer. This computer can drive the ship on routine flights, as long as no emergencies arise. Its SPD of 1 may seem too slow for safe piloting, but it maintains a held move for emergencies. If some emergency arises, the computer will try to continue towards its destination with the best plan its 10- INT roll can come up with. Since it may only run one program at a time, it turns off all entertainment when landing, checking its position, or making course corrections. The 8- entertainment programs represent a dreary, small selection of movies, music, and games: it has only an 8- chance of having any particular item.

THE GENERIC COMPUTER		
Val	Char	Cost
3	INT	3
0	DEX	0
1	SPD	0
Cost Skill		
Autopilot Skills		
2	Navigation	11-
1	Sensors Operation	8-
1	Pilot	8-
1	Tradespeak (for voice commands)	
Entertainment Skills		
1	Popular Movies	8-
1	Popular Music	8-
1	Video Games	8-
Programs		
1	Drive Ship from A to B (A and B must be on the Navigation Maps)	
1	Show Entertainment	
Total Cost: 13 Points of Characteristics and Skills for 6 Construction Points.		

DAMAGE CONTROL

This device is only used on starships. For 5 points, the ship has automatic repair systems which can repair damaged equipment on the ship on a roll of 11-. Repairs take 1 Turn (12 segments) to complete, and the system under repair cannot be used until the repairs are complete. This does not restore any BODY to the ship, but may restore function to a

system such as the weapons or the engines if they are damaged in combat. The roll may be attempted only once per system each time it is damaged. If the roll fails, the system may not be repaired until replacement parts are installed, which requires proper equipment and a Mechanics roll.

There is a Damage Control "brain" which coordinates the Damage Control. The "brain" is a piece of equipment which must be placed in a High Tech room, and it may be damaged by shrapnel from explosions. If the Damage Control "brain" is damaged, no Damage Control rolls may be made until the "brain" is repaired by some means, such as a character with Mechanics. A Damage Control Brain may not fix itself.

Damage Control costs END and is Instant; the time spent is preparation time and the END is paid on the same Segment the device is repaired.

Cost: 5 Points for a roll of 11-; +1 to the Damage Control roll costs +2 Points, +5 Points to work in 6 segments, +10 Points to work in 3 segments, +15 Points to work in 1 segment.

DETECTORS (SENSORS)

Detectors indicate the presence of an object, such as a starship, by receiving some sort of energy it emits (like a telescope gathers light). Detectors may also indicate the presence of a substance, like air. The cost of detectors depends on the types of energy detected and how much information about the source is obtained. Not all detectors are available in every campaign, and uncommon detectors usually require the approval of the GM. Detectors can be jammed just like normal communicators. All starship detectors must be put in a High-Tech room.

TYPE OF ENERGY OR SUBSTANCE DETECTED

Common: Common energies or substances are ones which are easy to detect by modern Earth standards. Common detectors cost 5 Points.

Uncommon: Energies or substances which are harder to detect by modern Earth standards. Uncommon detectors cost 10 Points.

EXAMPLES OF COMMON ENERGIES AND SUBSTANCES

Electromagnetic Waves: There are 5 types of Electromagnetic (EM) waves, each of which counts as 1 Common group.

Very Low Frequency EM: Radio waves, Microwaves, emissions from Active Radar.

Low Frequency EM: Infrared Light

Visible Light:

High Frequency EM: Ultraviolet light

Very High Frequency EM: X-rays, Gamma rays, Cosmic rays

Charged Particles: Protons, electrons, muons, pions; these are emitted from fission power plants, stars, and radioactive elements such as uranium.

Gases: air or other atmosphere

Mass: detects any heavy object, such as moons, asteroids, and very large or very close starships.

Sound: does not work in vacuum, may be used to detect Sonar

EXAMPLES OF UNCOMMON ENERGIES AND SUBSTANCES

Mental Energy: Emitted by sentient beings, especially those using Mental Powers.

Life Force: Emitted by all living things.

Neutral Particles: Neutrons and neutrinos, which are emitted by fusion power plants and stars.

Force Fields: Force Field Detectors with the Analyze Advantage can determine the exact strength of a starship's Force Fields, and details about it such as its Arc of Defense, Activation Roll, etc.

Detector Advantages: Unless a Detector has Advantages, it only indicates the presence of the energy or substance, but not the exact location or details of the source. (It functions like a geiger counters or air pressure gauge.)

Locate: Detectors with this Advantage indicate the location of a target precisely, usually by forming an image on a video screen. For example, Radar, Telescopes, and Sonar are all Common Detectors with the Locate Advantage. In combat, objects found with a Locating Detector may be attacked with full OCV. Locate costs +5 Points.

Analyze: Detectors with this Advantage give additional details about the energy or substance, such as its chemical composition, spectral analysis, a 3-dimensional image, and so forth. For example, an atmosphere Detector with Analyze would give a chemical analysis of a planet's atmosphere, determining whether the atmosphere was suitable for humans to breathe. Other Analyzers include deep radar (which finds caverns and other interior features of asteroids and starships) and spectrographs (which analyze light from a star and identify the precise star type). Analyze costs +5 Points.

Example: A normal telescope detects visible light and gives an image of the light pattern; it is a Light Detector (5 Points) with the Locate (+5 Pts.) Advantage, so it costs 10 Points.

As with all devices, the Range Modifier is -1/3" to locate normal objects (such as starships with their engines off). For very large or very bright things, the GM may increase the Range Modifier (perhaps by multiplying it by a factor). For example, a starship with its engines going at full blast would be very bright (see the starship combat section), and very large objects, like entire cities, may also increase the Range Modifier.

The maximum range of a detector on planets or inside spaceships is 5 x Active Pts. in inches; this range can be increased by x2 for each 5 pts spent. In space there is no maximum range, but only very bright or strong sources of energy may be detected at long ranges.

COMBINATION DETECTORS

Often, a single Detector can detect many Common energies or substances. Adding Common energies or substances to a Common detector is cheaper; each additional energy or substance costs +2 Points. For example, a telescope which Detects and Locates visible light costs 10 Points (5 for one Common energy, +5 for Locate). An improved telescope which Detects and Locates all 5 types of electromagnetic waves costs 18 Points, since the four added Common energies cost 2 Points each.

Combination Uncommon Detectors get no such bonus; the cost is +10 Points for each additional Uncommon energy or substance detected.

Detectors are Constant and cost END.

Detector Summary	Cost
Detects common substances or energy	5 Pts.
Detects uncommon substances or energy	10 Pts.
Locate (forms an image)	+5 Pts.
Analyze (3-d image or other details)	+5 Pts.
Each Additional Common substance or energy	+2 Pts.
Double Maximum Range	+5 Pts.

DRUGS

Drugs include truth serum, paralyzing, or illness producing drugs. Drugs work by subtracting or adding dice to a Characteristic. Drugs do not affect figured Characteristics. The cost of drugs depends on the Characteristic; draining (or adding to) a Characteristic costs 10 Points per 1d6 times the cost multiple of the Characteristic affected. For example, a drug which adds 1d6 to DEX costs $10 \times 3 = 30$ Points, because DEX has a cost multiple of 3.

The drained Points return to the character at the rate of 1 Point per segment. For added Points, the reverse is true: the added Points disappear at the rate of 1 Point per segment. This rate may be changed by adding the following Advantages to a Drug. Calculating the Point cost of a Device with Advantages is explained in the Advantages section.

Advantage	Return or Loss Rate
+0	1 Point each Segment
+1/4	1 Point each (victim's) Phase
+1/2	1 Point each Turn (12 seconds)
+3/4	1 Point each 1 minute
+1	1 point each 5 minutes
+1 1/4	1 point each 30 minutes
+1 1/2	1 point each 3 hours
+1 3/4	1 point each day
+2	1 point each week

Example: A 2d6 STR draining drug costs 20 Points. To make the return rate 1 Point per 5 minutes, the cost would be $20 \times (1 + 1/2) = 30$ Points

More complex drugs may affect more than one Characteristic. In that case, simply add up the costs for affecting the Characteristics. For example, a drug which drains 1d6 from both INT and STR would cost 20 Points.

Overdoses: Characters cannot take drugs frequently in order to keep their characteristics at an artificially elevated level. If characters repeatedly take drugs, they may build up tolerances which decrease the effect, or become addicted, at the GM's discretion. Still worse, regular drug use may cause permanent reductions in statistics and skills, as the character's body adjusts to the drugs. Taking more than one drug at once (before the first drug wears off) or large doses of drugs will likely cause an overdose. GMs should regulate drug use to ensure that it does not dominate the campaign.

A character who takes an overdose must make a CON roll or take 1d6 NND damage (STUN only) for every 10 Active Points in the second drug instead of the usual drug effect. If the CON roll succeeds, the drug has its normal effect. The GM may rule that both STUN and BODY are lost for extreme overdoses, or modify the CON roll for particularly dangerous drugs.

Antidotes: An antidote to a drug costs the same number of Active Points as the original drug, but must be found by a character with Knowledge Skill: Pharmacology, Knowledge Skill: Medicine, or some other appropriate skill. If an antidote is administered, the drug wears off immediately, regardless of its usual Return or Loss rate.

Drugs may affect a character in ways other than draining or adding characteristics. For example, a drug that simulates illness may cause a character to break out in purple spots and lose CON. The GM will have to rule on any additional cost for these effects, although they usually count as Special Effects and cost nothing.

Use the mass table normally for drugs, figuring the starting mass from a drug's Active Points. Drugs in the form of tablets, capsules or syringes have many levels of Miniaturization and Limited Uses, as shown below.

Drugs As Weapons: Drugs may be frozen into pellets or placed in needle guns and shot at people. For the base point cost, a drug can be made into a ranged weapon with +0 OCV and a -1/3" range modifier (for example, a needler). There may be other methods for administering the drug, such as dissolving tablets, syringes, coated letters, a spike ring, a fine mist from a perfume bottle or pen, or a kiss from lips treated with a drug (and first protected with wax). Limitations may be put on drugs to describe these methods of administration. For example, to hit someone in combat with a syringe full of a STUN drug, the drug may have a 1/2 OCV (-1/4) Limitation.

SAMPLE DRUGS

All these Drug Examples are about the size of a large medicine capsule and are constructed as follows.

3d6 statistic change30 Pts.

Advantages:

Wears off at 1 Point / 1 min.+3/4

Miniaturization: 7 levels+1 3/4

53 Active Points, base mass 6.4 kg. final mass 0.4 grams

Limitations:

1 Limited Use, no reload.....-2 1/4

1/2 OCV when used to attack-1/4

Total Point cost: 20 Credit cost: 100

EXAMPLES OF DRUGS

Drug Type	Effect
Amnesia producing	3d6 INT drain
Anger inducing	1 1/2 d6 EGO drain
Death simulation	3d6 STUN drain
Hallucinogens	3d6 INT drain
Hypnotic	1d6 INT and 1d6 EGO drain
Illness Simulation	1 1/2 d6 CON drain
Inebriants	2d6 INT and 1/2 d6 EGO drain
Paralyzing	3d6 STR drain
Stimulant	1d6 DEX addition
STR enhancer	3d6 STR addition
Truth Serum	1 1/2 d6 EGO drain

Drugs are Instant and have Limited Uses, and thus cost no END.

Cost: 1d6 per 10 Points times the cost multiple of the Characteristic drained (or added to).

EGO DEFENSE

Ego Defense helps protect a character from the effects of mental Powers like Telepathy, Mental Illusions, Mind Control and Ego Attack. EGO Defense purchased as a device costs 1 point per 1 point of EGO Defense, unlike EGO Defense bought as an Alien Power. For rules on how to use EGO Defense in the game, see the Alien Powers section (Page 86). EGO Defense is Constant and costs END.

Cost: 1 Point for +1 EGO Defense. Minimum cost: 5 Points.

ENTANGLE

Entangle devices trap characters in a force field, netting, glue, or other hindrance. An Entangled character cannot move and has OCV 0 and DCV 0. He cannot usually use hand-held devices (although that depends on the Special Effects of the Entangle).

To Entangle an opponent, the attacker makes a normal Attack Roll against the target, then rolls 1d6 for every 10 Points in Entangle. The dice are read as normal damage, counting the BODY total, (see Determining Damage in the Combat Section), as the BODY total of the Entangle. The Entangle's DEF (both PD and ED) is equal to 1/10 the Points in Entangle. Entangles always have resistant DEF.

Example: Zakul has a 4d6 Entangle gun with the Special Effect: expansion high tension net gun, which costs 40 Points. Zakul shoots Logan, making a normal Attack Roll which succeeds. Zakul rolls 4d6, getting 3, 5, 6, 6 for a total of 6 BODY. The Entangle has 6 BODY and 4 DEF (in other words, 4 PD and 4 ED).

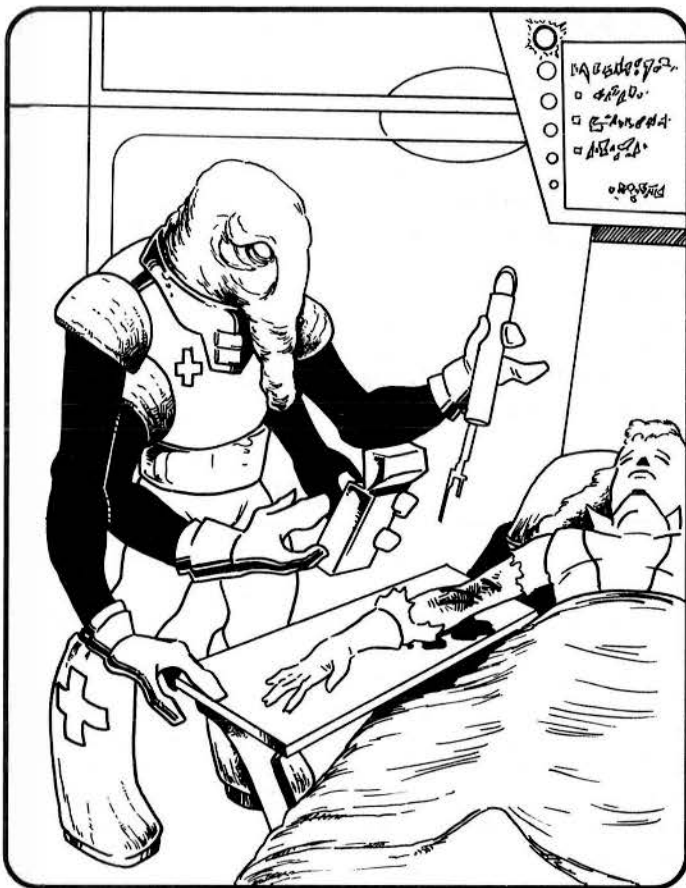
To escape from an Entangle, the trapped character must break the Entangle by doing damage to it. The most common way to break out is using STR, doing STR/5 d6 normal damage. If the BODY done by an attack exceeds the Entangle's DEF, the Entangle loses BODY. When the Entangle loses all its BODY, the Entangled character is free.

If an Entangled character is attacked, the Entangle takes damage first, and the remaining damage is applied to the Entangled character's defenses. Therefore, an Entangled character is protected from BODY damage; no BODY damage can be done to that character without first destroying the Entangle. The Entangle also absorbs an amount of STUN equal to the total of its DEF and BODY; STUN which gets past the Entangle is applied to the character normally.

If several Entangles are thrown onto the same character, just take the largest DEF of all the Entangles as the DEF. Add +1 BODY for each of the smaller Entangles to the largest Entangle's BODY.

Entangle is Instant and costs END only once, when the Attack Roll is made. Entangles persist until destroyed, but most Entangles will wear off naturally after enough time has passed. The exact time the Entangle will last depends on the Entangle's Special Effects and is up to the GM.

Cost: 10 pts for 1d6, 1 DEF Entangle.



FLIGHT

This capability allows a character to fly 5" per Phase for 10 Points. This distance may be increased by +1" for each +2 Points spent. Flight is Instant and costs END each phase used. Flight costs Endurance at a different rate than other devices; the rate is 1 END per 5" of Flight, rather than 1 END per 5 Power Points as for other powers. Other details about Flight are given in the description of the Alien Power "Flight" (See page 83).

Flight cost: 10 Points for 5" per phase, +1" per +2 Points.

HEALING

Devices with healing can treat wounded characters and restore small amounts of BODY and STUN. Healing devices may be things like drugs or artificial skin. Healing is used for hand held devices — to build larger devices use Robot Doctor. Healing costs 10 points per 1d6 and has no range. To heal a character, the device's d6 are rolled; the target gets back STUN equal to the total on the dice, and BODY equal to the BODY rolled on the dice (like rolling normal damage — on a die, 1 = no BODY, 2 to 5 = 1 BODY, and 6 = 2 BODY). Each use of Healing only heals the damage from one wound; if a character has several wounds, each must be Healed separately.

Repeated Healing attempts on the same wound do not have a cumulative effect; instead, the total healing done is equal to the largest amount of BODY and STUN rolled on any single healing attempt. Thus a 2d6 Healing device could never restore more than 4 BODY and 12 STUN lost from a single wound (by rolling two sixes). Many Healing attempts might be needed to gain this maximum effect.

Healing is Instant and costs END.

Cost: 10 points for 1d6 of Healing.

INVISIBILITY

Invisibility allows a character or a starship to become invisible to sight. See the Alien Power "Invisibility" for more details (page 83). For 20 points, a .8 kg device (like an invisibility belt) will make one human sized character invisible. For 20 pts, a 50 kg device will make a whole starship invisible (see the Tech intro). If a ship (or character) shoots a weapon, its position is immediately revealed, unless the weapon has the Invisible Effects Advantage. On starships, the Invisibility equipment must be placed in a High Tech room.

Invisibility is Constant and costs END.

Cost: 20 points for Invisibility to normal vision, +5 points for each additional category (IR, UV, Sonar, Radar, etc.). No fringe effect for +1/2 Advantage (see Alien Powers).

LIFE SUPPORT

Life support enables characters to live in hostile environments, like underwater or in space. See the Alien Power "Life Support" for more details (page 84). Unlike the Alien Power Life Support, Life Support from devices costs END. Life Support is Constant. Starships purchase Life Support differently (see "Starship Building").

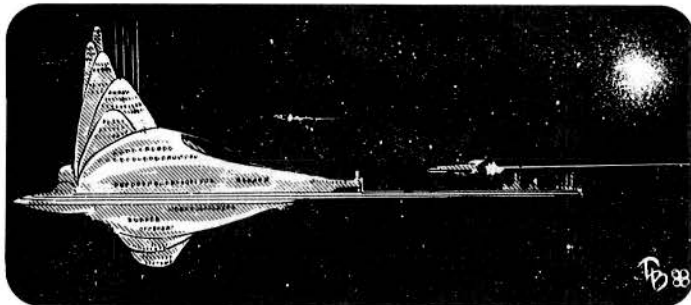
A common Limitation for Life Support suits is "Bulky"; the wearer has -2 to DEX rolls and -2 DCV. Bulky is a +1/2 Limitation.

Life Support suits which take BODY in combat gradually become less useful. Like all devices, Life Support suits have 4 DEF. If the suits have Stored Power, the duration goes down by one level on the Stored Power duration chart (see Advantages) per 1 BODY done. For example, a spacesuit which has Stored Power for 1 day which takes 2 BODY will leak, reducing its duration to 1/2 hour.

LIGHT ILLUSIONS

Light Illusion devices, such as holographic projectors, produce realistic images which can be mistaken for real objects. Light illusions cannot do BODY or STUN damage, pick up objects, or have any other material effects; only a pattern of light is produced. Light illusions are visible to all characters within line-of-sight, and will look more real to those characters with lower INT scores.

When a Light Illusion is produced, the player making the illusion describes the illusion to the GM, and dice are rolled to determine how convincing the Illusion is. 1d6 is rolled for every 5 Points in Light Illusions, and the total is compared to the viewer's INT on the Light Illusions Effects table. If the total rolled on the dice exceeds the INT multiple of a viewer, that character cannot tell the illusion from a real object. If the total is inadequate, that character can detect small flaws in the image and knows that it is an Illusion. More complex illusions require more dice of Effect to be convincing.



LIGHT ILLUSIONS EFFECTS TABLE

INT Multiple Required	Illusion's Complexity
1x viewer's INT	A solid stationary image which fits in 1 hex
2x viewer's INT	Simple moving images, like a door closing, or multiple stationary images filling 1 hex per 5 Pts. in Light Illusions
3x viewer's INT	Complex movements like walking, fighting, etc. or multiple simple moving images
4x viewer's INT	Multiple complex moving images

Light Illusions may also be used to illuminate an area, brightly illuminating 1 hex per 5 Points.

Light Illusions have a maximum range of 5 x Active Points in the Light Illusion — and Light Illusions can only be cast in line of sight of the device.

Light Illusions are Instant and cost END.

Light Illusions cost: 5 Points per 1d6.

MENTAL ILLUSIONS

Mental Illusion devices allow characters to project illusions directly into an opponent's mind. For more details, see the Alien Power "Mental Illusions" (page 86). This device may radically change the campaign, and the GM may want to forbid PCs from having Mental Illusion devices.

Mental Illusions are Instant and cost END.

Cost: 5 pts per 1d6 of Mental Illusion.

MIND CONTROL

This power allows a character to control another character's actions. See the Alien Power "Mind Control" for more details (page 87). This is a device that can radically change a campaign, and the GM should carefully consider whether to allow it or not (see "Defining a Society's Technology" for more discussion).

Mind Control is Instant and costs END.

Cost: 5 points for 1d6 of Mind Control.

MISSILE DEFLECTION

This device deflects incoming missiles and beam weapons from starships. Missile Deflection is for starships only, and characters cannot carry missile deflectors except with GM's permission.

For 10 points, a ship has an 11- chance to deflect meteors, preventing them from doing damage to the ship. For 15 points, the ship may deflect projectile weapons and missiles. For 25 points, it may deflect all ranged attacks, including energy attacks (such as laser beams). There are several special effects for this power, including anti-missile quickfire defense cannons and "slippery" force fields which cause attacks to go off-course.

There is a limit to the size of an attack which can be deflected; the maximum Damage Class which can be deflected with an unmodified roll is equal to the starship's Points in Missile Deflection. Missile Deflection rolls suffer a -1 penalty per Damage Class the incoming attack exceeds this maximum.

Example: Chiron's starship has 25 Points in Missile Deflection and can deflect all ranged attacks on a roll of 11-. When Satora fires an 8d6K (Damage Class 24) laser at Chiron's ship, he has an 11- chance of Deflecting the attack. However, when she fires her 10d6K (Damage Class 30) missile at Chiron's starship, his Missile Deflection roll is reduced by 5 to 6-.

The Missile Deflection roll may be increased by +1 for 5 points.

Missile Deflection will change starship combat significantly, and the GM should determine what level of Missile Deflection is available.

Missile Deflection is Instant and costs END.

Cost: 10 points to deflect meteors. 15 points to deflect meteors and projectile weapons. For 25 points, the ship may deflect all ranged attacks including laser beams. Each +1 to the Missile Deflection roll costs +5 points.

ROBOT DOCTORS

Robot Doctors are for starships only. They are robot surgeons that can replace organs, fix broken bones and so forth. Often, a Robot Doctor is a box the patient is placed in, and then the lid is closed. Robot Doctors are quite large, as shown on the starship device column of the Device Mass table (in the Technology Introduction). To make a hand held device, use Healing.

A Robot Doctor allows characters to recover BODY faster than the normal rate of one BODY per pt. of REC each month. The rate at which BODY is recovered depends on the device. Robot Doctors have no range, and must be in contact with the patient. Robot doctors can fix major wounds, even replacing lost limbs and bringing characters back to health from negative BODY totals. Characters with negative BODY stop losing BODY once they are put into a Robot Doctor, and instead gain BODY at the usual rate of healing. Dead characters (with a negative BODY total greater than their total BODY) cannot be revived with Robot Doctors, unless the GM rules otherwise.

Robot Doctors usually work on only one type of life form, such as humanoids. For each +5 Points, the Robot Doctor is useful for another type of life form (such as insects or reptiles).

Some GMs may not wish to have Robot Doctors in their campaign, since PCs will be healed back to full BODY quickly each time they are injured.

RATE OF HEALING	COST
1 BODY/day	10
1 BODY/12 hours	15
1 BODY/6 hours	20
1 BODY/3 hours	25
1 BODY/ 1 1/2 hours	30
1 BODY/ 45 minutes	35
etc.	

Robot Doctors are Constant and cost END.

Cost: 10 points for a rate of healing of 1 BODY/Day; useful on another life form for +5 points; 2x the rate of healing for +5 points.

SECONDARY STARSHIP

This category is for shuttlecraft, lifeboats, fighters, and other spacecraft carried on a larger ship. For every 1 starship construction Point spent, the player receives 2 Points to spend on building a secondary ship. A maximum of 1/4 of the primary ship's Points may be spent on secondary craft.

Launching a secondary ship normally takes 1 Turn (12 seconds). For +5 Points, the primary ship has a special launching bay which allows the secondary ship to fly out instantly (zero phase action).

Cost: 1 starship Point for 2 Points to build a secondary ship. +5 starship Points for a launching bay.

SUSPENDED ANIMATION CHAMBER

A suspended animation chamber carries humans and other living creatures in cold sleep. Characters in suspended animation stop aging, and are not aware of what is going on around them; they are "asleep".

Normally, characters in Suspended Animation are in no danger. If the Suspended Animation chamber is damaged, has an Activation roll, or if the person reviving the "sleepers" from Suspended Animation does not know how to operate the equipment, there is a danger. Each character in Suspended Animation must make a CON roll. If the CON roll fails, that character does not wake up, and falls into a coma. Reviving a character from a coma requires a Paramedic roll with a -1 modifier for every 1 pt. the CON roll was failed by. GMs may require all Suspended Animation chambers to have an Activation Roll.

In order to know how to operate Suspended Animation chambers, characters should buy the skill "Suspended Animation operation" as a Knowledge skill, or have some sort of medical skill (doctor, paramedic, etc.), depending on the particular Chamber.

Dead or dying characters may be put into Suspended Animation in the hopes of later getting them to advanced medical care. A character in Suspended Animation stops losing BODY. However, once taken out of the Suspended Animation chamber, the character again starts losing BODY.

Suspended Animation costs END and is Constant. A Suspended Animation Chamber stops working if the power fails, unless it has the Stored Power Advantage.

Cost: A 10-person Suspended Animation Chamber costs 5 pts, and the number of "sleepers" doubles for each +5 pts.

TELEPATHY

Telepathy devices allow a character to read and send thoughts. See the Alien Power "Telepathy" for more details (page 87). The ECV of the Telepathy device equals the user's EGO/3, or it may be based on the EGO of an artificially intelligent computer that is hooked up to the telepathy device.

Telepathy is Instant and costs END.

Cost: 5 points for 1d6 of Telepathy.

TELEPORTERS

A Teleporter transports a person from one place to another without traversing the points in between. For example, starship Teleporters are often used to transport ship's crew to the surface of a planet, and personal Teleporters are used for transportation over smaller distances.

A character using a personal Teleporter can teleport 15" to a spot he or she can see for 30 points. Normally, teleporters only transport 100 kgs (1 human mass), but the mass can be doubled for +5 Points. The range may be doubled by preparing a Phase and by paying +5 points. The range may be doubled more than once, but it still only takes one Phase of preparation time.

For starships, the range starts out at 15 starship hexes (2 km), and the equipment is larger, as shown on the Device Mass chart. Starships typically orbit anywhere from 160 km. to 40,000 km. (100 to 24,000 miles) above planetary surfaces, so a surface-to-orbit Teleporter must have many range doublings.

Example: A starship Teleporter which transports one person from surface to a low orbit costs 30 Points for the base range of 2 km. (15 starship inches), + 35 points to double the range 7 times to 256 km.

Starship teleporters can teleport characters only to a location that can be pinpointed accurately with sensors, or one that has pre-determined coordinates. Momentum is not conserved, so that a character teleporting from a moving starship arrives standing still. Teleporting onto a stationary object or an object moving with constant speed takes no dice roll (for example onto a planet). Teleporters can also be used to transport objects from one starship to another during starship combat, as explained in the Starship Combat section.

Teleporters can transport characters into ships, buildings, etc. and ignore Armor, Force Fields, and other DEF in the way. However, teleporters cannot penetrate defenses built with the Stops Teleportation advantage, unless they take the Refined Teleportation Advantage (+1/2).

Teleporters are Instant and cost END.

Personal Teleporter Cost: 30 Points to Teleport 100 kg (1 human) 15", 2x mass for +5 points, 2x range for +5 points, Armor Piercing Advantage for +1/2.

Starship Teleporter Cost: 30 Points to Teleport 100 kg (1 human) 15" starship scale (2 km.), 2x mass for +5 points, 2x range for +5 points, Armor Piercing Advantage for +1/2.

TRACTOR BEAMS

Tractor Beams are primarily used as starship devices, and can be used to grab other ships and hold them. To grab a ship or object, you must hit with the Tractor Beam like you would with a weapon. The OCV of the Tractor Beam equals the OCV of the character wielding it. Tractor Beam devices are built similarly to guns, and use the OCV modifier, Range Modifier, Activation Rolls and so on.

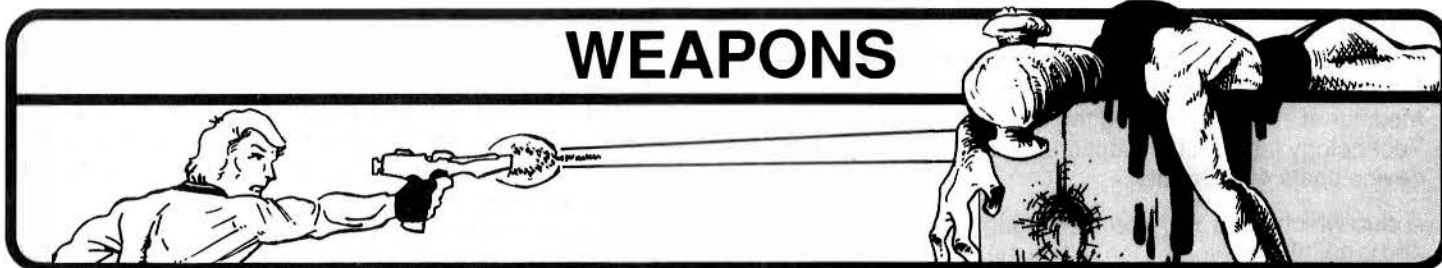
If a Tractor Beam has successfully grabbed the target ship, the operator may move the target ship by using the G-force of the Tractor Beam against the G-force exerted by the target ship's thrust. The target ship can use its own tractor beams, if any, to help break free. Further details on using Tractor Beams in combat are given in the Starship Combat section.

Tractor Beams have a base range of -1/3 starship hexes, and may take the usual Increased Range Advantage.

Tractor Beams are Instant and cost END.

Cost: 10 Points per G. Gs can cancel the thrust of the target ship.

WEAPONS



The following rules explain how to build weapons of all kinds, from hand-held blasters to ship-mounted rocket launchers and archaic melee weapons. Alien Powers which do damage are also built using these rules.

Weapons have a Point Cost, which depends on the Damage done and Advantages and Limitations, such as Autofire, Limited Uses, and so forth. Weapons also have a Credit Cost which is figured from the Point Cost as explained in the Technology Introduction, and represents the amount of money needed to purchase the weapon.

WEAPONS BASE COST

The base Point Cost of a weapon is determined by the amount of damage it inflicts. The Base Point Cost of Damage is 5 Power Points per 1d6 Normal, or 15 Points per 1d6 Killing Damage. The player must specify whether a weapon does Physical or Energy damage when the weapon is created, and should also describe the weapon's Special Effects, as discussed at the start of the Technology section.

MELEE AND RANGED WEAPONS

Every weapon must be either Melee or Ranged. In either case, the base Point cost is the same, determined only by the Damage.

A character using a Melee weapon may add his or her STR damage to the damage done by the weapon. The damage done by the weapon increases by 1 Damage Class for every 5 STR the character exerts, up to a maximum of twice the weapon's base Damage Class. For normal attacks, +1 Damage Class is simply +1d6 normal damage. Damage Classes for Killing attacks are shown on the Damage Cost Chart. Of course, the character must pay END for the STR used as well as any END cost the weapon might have. Players may wish to take the Reduced END Advantage with the STR minimum Limitation to describe a melee weapon.

Example: *Owik, a heavyworlder, has a STR of 25, and is using a club which does 3d6 normal Damage. If Owik uses 15 STR, he does 6d6 normal Damage. Since 6d6 is twice the base damage of the club, Owik cannot use more than 15 of his STR to add damage when using the club.*

Ranged weapons have an additional statistic: Range Modifier. The attacker's OCV goes down at a rate determined by the weapon's Range Modifier, as described in the Combat section. STR damage does not add to the damage done by a ranged attack. It is possible for a ranged weapon to have a range of only 1 hex or contact (such as a syringe or an inaccurate squirt gun). Although these weapons are similar to melee weapons in that they have no range, they are still "ranged weapons" because the attacker's STR does not add to the damage done.

Ranged weapons start out with a -1/3" Range Modifier, which may be increased by taking the Increased Range Advantage, or decreased by taking the Decreased Range

Limitation, as described in the Advantages and Limitations section.

For the convenience of players and GMs, the costs of various amounts of Damage are shown in the Damage Cost Table.

DAMAGE COST TABLE

Power Points	Killing	Normal	Damage Class
5	1 pip	1d6	1
10	1d6-1 or 1/2d6	2d6	2
15	1d6	3d6	3
20	1d6+1	4d6	4
25	2d6-1 or 1 1/2d6	5d6	5
30	2d6	6d6	6
35	2d6+1	7d6	7
40	3d6-1 or 2 1/2d6	8d6	8
45	3d6	9d6	9
50	3d6+1	10d6	10
55	4d6-1 or 3 1/2d6	11d6	11
60	4d6	12d6	12
65	4d6+1	13d6	13
70	5d6-1 or 4 1/2d6	14d6	14
75	5d6	15d6	15
80	5d6+1	16d6	16
85	6d6-1 or 5 1/2d6	17d6	17
90	6d6	18d6	18
95	6d6+1	19d6	19
100	7d6-1 or 6 1/2	20d6	20
105	7d6	21d6	21
110	7d6+1	22d6	22
115	8d6-1 or 7 1/2d6	23d6	23
120	8d6	24d6	24
125	8d6+1	25d6	25
130	9d6-1 or 8 1/2d6	26d6	26
135	9d6	27d6	27
140	9d6+1	28d6	28
145	10d6-1 or 9 1/2d6	29d6	29
150	10d6	30d6	30
155	10d6+1	31d6	31
160	11d6-1 or 10 1/2d6	32d6	32
165	11d6	33d6	33
170	11d6+1	34d6	34
175	12d6-1 or 11 1/2d6	35d6	35
180	12d6	36d6	36
	etc.		

Examples:

A laser pistol which does 2d6 Killing damage costs 30 Points, and is a Ranged weapon with the starting Range Modifier of -1/3". Consulting the Credit Cost table in the Technology Introduction section, we see that a 30 Point device costs 400 Credits.

A club which does 3d6 normal damage costs 15 Points and is a Melee weapon. Consulting the Credit Cost table, we see that this club costs 30 Cr.

A sword which does 1d6+1 Killing costs 20 Points, is a Melee weapon, and costs 100 Credits.

ENDURANCE COST OF WEAPONS

All weapons cost END each time they are used, unless they have the Limited Uses Limitation or the Reduced Endurance Advantage. The END cost is 1 END per 5 Active Points. Active Points include the base Point cost and Advantages, but not Limitations. Pistols and rifles usually have the Limited Uses Limitation (which means no END cost). Starship weapons will probably draw from a power supply, and thus have END cost. Natural weapons may have an END cost, which draws from a character's END. However, some Natural Weapons may have a limited number of shots, such as poison fangs which must be slowly refilled with poison. Such Natural Weapons may be built just like artificial Weapons, with Limited Uses and no END Cost.

Example: The 2d6K laser pistol in the previous set of examples has 30 Active Points and thus costs 6 END each time it is fired. That is not sensible for a pistol, so let's give the pistol the Limited Uses Limitation. Consult-

ing the Limitations section, we see that a device may have 6 uses and reload in 1 Phase as a +0 Limitation (no change in the Point cost). We also see that devices with Limited Uses do not cost END. Now we have a 2d6K laser pistol with a -1/3" Range Modifier which has 6 shots before reloading, and takes 1 Phase to reload. The Pistol still has 30 Active Points and costs 400 Credits, but it no longer costs END to use. That's a good game simulation of a laser pistol.

The club and sword in the previous example cost 3 and 4 END each Phase they are used, which is reasonable for a Melee weapon. They do not need the Limited Uses Limitation.

Example: An 8d6 K starship weapon costs 120 Points, has the base range Modifier of -1/3 starship hexes, 120 Active Points, and has an END cost of 24. Starship weapons are not bought with Credits, but with starship construction Points, so we will not list a Credit cost for this weapon.

Many more weapon examples are given in the device list.

ACCURACY OF WEAPONS

Weapons normally have no effect upon their users' OCV; they neither make it easier or harder for the character to hit an opponent. The accuracy of weapons can be improved at a cost of 5 points per +1 OCV; conversely, the OCV can be bought back at a bonus of 5 points per -1 OCV (to reflect inaccurate weapons). These points are part of the Base Cost of the weapon, and can the price can be increased or decreased according to advantages or limitations. Very few weapons should alter the OCV by more than 2.

**DEVICES AVAILABLE**

The GM should indicate if the following devices are available, and any restrictions placed on them. It is entirely reasonable for some technology to be completely unavailable, especially if it hasn't been developed yet.

	Yes	No	Notes		Yes	No	Notes
Armor (Force Fields?)	☐	☐		Invisibility	☐	☐	
Artificial Gravity	☐	☐		Life Support	☐	☐	
Communications	☐	☐		Light Illusions	☐	☐	
Communication Jammers	☐	☐		Mental Illusions	☐	☐	
Computers (AI)	☐	☐		Mind Control	☐	☐	
Damage Control	☐	☐		Missile Deflection	☐	☐	
Detectors	☐	☐		Robot Doctors	☐	☐	
Drugs	☐	☐		Secondary Starships	☐	☐	
Ego Defense	☐	☐		Suspended Animation	☐	☐	
Entangle	☐	☐		Telepathy	☐	☐	
Flight	☐	☐		Teleporters	☐	☐	
Healing	☐	☐		Tractor Beams	☐	☐	

DEVICE AVAILABILITY IN THE ALLIANCE

Listed below is the availability of certain devices in this campaign universe. Anything not specifically listed should be considered available. Devices listed as "not available" are not sold by any store, and are considered impossible by most scientists. Of course, a device such as an invisibility belt may be developed by a mad scientist, or used by advanced aliens, but this would be a significant plot device in a scenario.

Armor (Force Fields?): Both force fields and armor are available.

Artificial Gravity: Artificial Gravity is available.

Communication Jammers: These exist but are used only on large military warships.

Computers (Artificially Intelligent?): Computers are everywhere. Artificial Intelligence exists, but is not perfected and therefore not in general use.

Damage Control: Damage Control is rare and expensive, and used only on the most advanced military starships.

Ego Defense: EGO Defense is not available.

FTL Travel: FTL travel has several restrictions. Most FTL travel is done at 2 LY/day, but faster ships have 4 LY/day. Very fast scout ships have 8 LY/day, and rumors are circulating of a Phychi government project to develop a 16 LY/day FTL ship. The 8 LY/day FTL drive is not perfected; it has a 14-Activation roll and goes badly off course if this roll fails. The 16 LY/day drive, if it exists at all, is even more unreliable.

FTL drives cannot be used within 100 diameters of a planet or larger object, and require at least 5 minutes of complicated computations with the engines off (DCV 0) to engage. If the PCs need to use their FTL drive close to a planet or without computation time, they are taking a terrible

risk. Such attempts may be outlawed entirely by the GM, or perhaps a Piloting roll at -5 or more is needed. If the roll fails, the consequences may vary from the FTL drive exploding to the ship Breaking Apart from the unbalanced stresses.

FTL Radio messages travel at a rate of 100 LY/day.

Healing: Healing devices exist; they are available in hospitals, and carried by people such as soldiers and space construction workers. Healing devices are not completely reliable, and all have Activation rolls of 14- or lower. For this reason, healing devices are not found in every home or office.

Invisibility: Personal Invisibility devices are not available. Invisibility devices are huge, and therefore can only be put on starships, "cloaking" the whole ship. Even so, they are still expensive and rarely used.

Light Illusions: Light Illusions are not available.

Mental Illusions: Mental Illusions are not available.

Mind Control: Mind Control devices are not available.

Missile Deflection: Missile Deflection is only available to deflect meteors, not ship-to-ship projectile weapons or energy attacks. Since meteors are rare in space, Missile Deflectors are only used by salvage ships which frequently fly through clouds of debris left over after space battles.

Robot Doctors: Robot Doctors are available, and exist on the more expensive starships. They cannot heal characters any faster than 1 BODY restored every 3 hours.

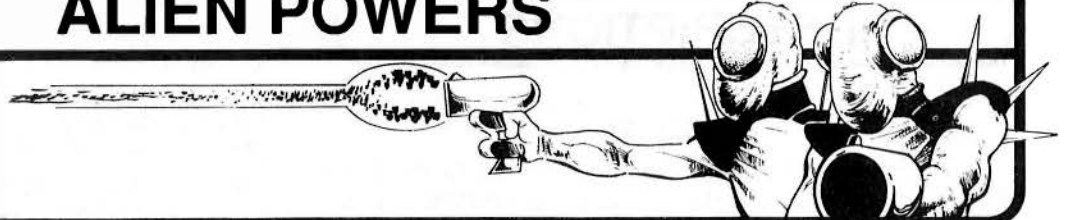
Suspended Animation: Suspended Animation chambers exist, but are rarely used. The standard of living is high enough so that most people travel awake, instead of using the possibly dangerous Suspended Animation Chambers. Suspended Animation chambers are safe unless they are damaged or the power fails.

Telepathy: Telepathy devices are not available.

Teleporters: Teleporters are not available.

Tractor Beams: Tractor beams exist, and are used in industry and by large warships and salvage vessels.

ALIEN POWERS



Powers are unusual abilities possessed by aliens, such as Telepathy or Telekinesis. Powers are described in the Technology section because they are very similar to devices in game terms. Powers and devices share the same Advantages and Limitations. The main difference between Powers and devices is that Alien Powers are bought with character Points during character creation, and are permanent. Powers cannot be stolen or modified after character creation, except by spending Experience Points to augment them. Devices are very different; they are bought with money (Credits) and may be stolen, sold or modified many times during game play.

To obtain a Power, the alien must pay character Points equal to the Point cost of the Power. No Credits are used to buy Alien Powers. The Point cost of Alien Powers may be modified by adding Advantages and Limitations, just as with devices.

The following list should cover almost all aliens in science fiction media. For truly bizarre Powers, players should refer to **Champions**, the Hero Games superhero role-playing game. The GM may wish to forbid certain Powers if they are inappropriate in his or her campaign universe.

The following Powers are not complete descriptions of an alien's abilities; in order to accurately simulate a particular ability, the Power may need to be modified by adding Advantages or Limitations. In addition, the player will have to define the Special Effects of each Power (see the discussion of Special Effects in the Technology Introduction section).

All Powers cost Endurance to use, unless specified otherwise. The Endurance cost is 1 END for every 5 Points, each phase the Power is used.

REPLACEABLE POWERS

Since devices are relatively easy to get, and Powers are only available during character creation, certain Powers get the Replaceable bonus listed in the Disadvantages section. The Replaceable bonus cheapens those Powers which can be easily duplicated by technology. For example, if every human can easily buy a 2d6 Ranged Killing Attack (a blaster) with Credits (spending no character Points) an Alien Power enabling the alien to do a 2d6K ranged attack should get the Replaceable bonus, making it cheaper. Further examples of the Replaceable bonus are given in the Limitations section.

The following list shows all the Alien Powers used in Star Hero:

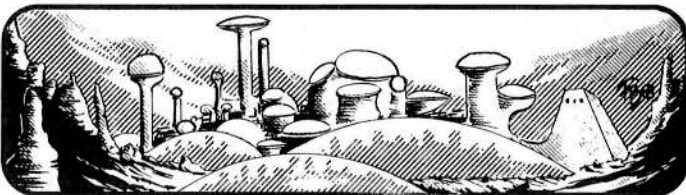
PHYSICAL POWERS	MENTAL POWERS
Armor	Ego Attack
Clinging	Ego Defense
Enhanced Senses	Mental Illusions
Extra Limbs	Mind Control
Flight	Telekinesis
Life Support	Telepathy
Natural Weapon	
Regeneration	
Shape Change	
Small Body	
Teleportation	

PHYSICAL POWERS DESCRIPTIONS

ARMOR

Armor represents a toughened hide, force field, or other natural protection which provides resistant defense; that is, defense against both Normal and Killing attacks. The defenses (PD and ED) from natural and artificial Armor add, so if Riic, a lizard creature with natural 3 PD Armor, puts on a 6 PD body-armor suit then he now has a total of 9 resistant PD. Armor costs no END, and never gets the Replaceable bonus.

Cost: For each 5 Points the alien gets 3 resistant PD or 3 resistant ED. Armor costs no END.



CLINGING

Aliens with Clinging can attach themselves to walls, ceilings or other surfaces and move around on them as though they were level. While Clinging, the alien can exert up to 10 STR for every 5 Points in Clinging. An Alien who uses more STR than this limit will fall off the wall. Sample Special Effects for Clinging are claws, suckers, or a slimy foot like a snail.

Clinging costs END each Phase at the usual rate of 1 END per 5 Points in Clinging.

Cost: 5 Points for the ability to exert 10 STR while Clinging, +2 STR for +1 Point.

ENHANCED SENSES

These Powers give the alien the ability to sense things beyond the range of normal human senses. Enhanced Senses cost no END. These senses may seem to have high Point costs, but the real cost is usually less. Most, if not all of these senses are eligible for the Replaceable Limitation, at the GM's option. Also, Enhanced Senses are often replacements for human senses. For example, an alien who has only IR vision should take the Physical Limitation Blind (13 pts.), and then buy IR vision (5 pts.). However, none of these Powers truly replace sight: IR Vision, X-ray vision and Sonar all produce images too blurry for reading and recognizing faces easily. If an alien's Enhanced Senses are powerful enough to replace vision, the GM may decide to give that alien only half the usual bonus for being Blind, or no bonus at all.

Infrared Vision: This allows the alien to see in dark places or at night. Infrared vision depends on temperature differences, so a warm-blooded animal would shine brightly, while cold objects would appear dark. Aliens with IR vision have normal sight perception rolls in darkness, but images are blurry. Reading normal-size writing is impossible with IR vision. To see a person at night with IR vision would require a normal PER roll, but to recognize a face would require a PER roll at -3. IR vision costs 5 pts.

Active X-Ray Vision: The alien must have an X-ray emitting organ, and an X-ray detecting organ, which might not resemble a human eye at all. X-rays easily penetrate interior walls, wooden boxes or thin sheets of metal, so the alien may make normal perception rolls to see right through such obstacles. The alien can also see in complete darkness. X-rays will not penetrate lead or thick, dense barriers (more than 30 cm or 1 foot thick). Like an IR image, the X-ray image is blurry. X-ray vision costs 20 pts.

Passive X-Ray Vision: This works similarly to Active X-Ray Vision. For 5 pts. a character may detect X-rays but not produce them. This is useful for finding radioactive minerals and other X-ray sources, but not for seeing normal objects. Passive X-Ray Vision costs 5 Pts.

Ultrasonic Hearing: The alien can hear (and produce) sounds at frequencies outside the human range, both supersonic and subsonic. Aliens with Ultrasonic Hearing may carry on conversations inaudible to humans, and can detect Active Sonar. Ultrasonic Hearing costs 10 Points.

Active Sonar: The alien emits high-pitched sounds and listens to the echoes to form a picture of its surroundings. The alien can "see" normally in darkness. Sonar is very useful for finding caves or dense substances surrounded by water or rock, which carry sound well. However, the images are blurry; it would be easy to see a human but hard to identify a face, requiring a Perception Roll with a -3 modifier.

The character gets no information about color or texture, and cannot see through any object which stops sound (like windows or walls). Aliens with Active Sonar also have Ultrasonic Hearing for free. Active Sonar costs 20 Points.

Passive Sonar: This Power works just like Active Sonar, except that the alien doesn't emit any sound. Instead, the alien uses ambient sounds to locate objects. Aliens with Passive Sonar also have Ultrasonic Hearing for free.

Passive Sonar costs 25 Points.

Radio Hearing: The Alien can hear all frequencies of radio waves, scan across channels, and tell what direction the radio signals are coming from. The alien may also send radio signals over short distances (a few miles). Radio Hearing costs 10 Points.

Tracking Scent: The alien can identify individuals by scent, and follow scent trails (like a bloodhound) with a successful smell Perception roll. Tracking Scent costs 15 Points.

EXTRA LIMBS

This power gives an alien a usable extra limb such as a prehensile tail, leg, arm, or pseudopod. Each extra limb acts like a skill level, which can be applied to any of the following: HTH combat, Breakfall, Climbing, and Stealth. The extra limb may also add to other skill rolls at the GM's discretion. Extra Limbs cost 10 Points each.

FLIGHT

This power gives an alien the ability to fly. The alien may fly at 5"/phase in combat for 10 Points. For each +2 Points, the alien gets +1" combat flight. Out of combat, the character may move 2 times as far each phase. As always, a noncombat move may not begin or end in combat. The maximum STR an alien may exert while flying equals the Points spent on flight. While flying, a character uses 1 END per 5" of combat Flight per phase.

Example: *T'chk, an intelligent flying insect, has STR 15 and 10 Points in Flight. She can fly 5" per phase in combat and 10" per phase out of combat. T'chk may carry a human while flying, exerting 10 STR and using 3 END per phase: 2 END for STR and 1 END for Flight. Although T'chk can lift two humans while standing with 15 STR, she cannot carry two humans while flying since she has only 10 Points in Flight.*

Detailed Flight Movement: Sometimes it is important to know how fast a flying character is travelling. Flying characters do not instantly accelerate, but change their speed by 5 hexes for each 1 hex travelled through, up to a maximum speed equal to the total number of hexes travelled that phase. Characters slow down the same way, with their deceleration taking place in the last few hexes of Flight.

Sometimes, a flying character must make a series of sharp turns to dodge obstacles on the map, which can be a problem because a flying character is not as maneuverable as a running character. The number of 60 degree turns a character may make in a single Phase is limited by that character's Turn Mode. A Flying character may make a "free" 60 degree turn at any time after the start of movement, but cannot make another turn in the same direction until after moving at least one Turn Mode in inches forward. Turn Mode is calculated from this formula.



Current Turn Mode = Total Flight Distance / 5

As a simple rule, a Flying character may make 5 equally spaced turns during a Phase of movement. If the character has Skill Levels with Flight, they may be subtracted from that character's Turn Mode.

A flyer uses 2 inches of forward movement to gain 1 inch of height. A flyer can dive 1 inch downward and 1 inch forward for every 1 inch of Flight. A Flyer who makes a power dive straight down may move 2 inches downward for every 1 inch of Flight. To pull out of a power dive, a Flyer must move 2 Turn Modes down and then "pull up" to level Flight.

A Flying character who begins and ends a Phase out of combat may perform a Noncombat Flight Move equal to 3 inches for every 1 inch of combat Flight. As always, characters making noncombat moves have OCV 0 and DCV 0.

Flight Cost: 10 Points for 5"/phase of Combat Flight, +1" for 2 Points. Noncombat movement is 2 times faster: 2" for every 1" of combat Flight.

INVISIBILITY

This power allows the alien to become invisible to normal sight for 20 Points. Invisible aliens cannot be found with normal sight perception rolls, but may be found with hearing perception rolls if they make noise. Invisible aliens leave a "fringe" around them where the light bends; this can be spotted at close range. An Invisible alien may be spotted with a normal sight Perception Roll at a range of 1" or less.

Characters attacking an invisible alien usually have OCV 0 and cannot apply any Skill Levels to the attack rolls. Attackers who have some idea where the alien is, for example by hearing footsteps, have half their total OCV, including levels.

If the invisible alien is making a visible attack, or is in hand-to-hand combat with an attacker, the effect of Invisibility is reduced. An attacker who makes a successful Perception Roll only suffers a -1 OCV penalty. Otherwise the attack is made at half DCV.

The attacker can try to make a new Perception Roll each phase to find the invisible target. Once the roll succeeds, the invisible character has been "spotted": the attacker can follow the invisible alien without making any further Perception Rolls, until the attacker is distracted.

Invisible Aliens can be seen with Infrared or X-ray vision. Invisibility has no effect against characters with these Vision powers, unless it is improved by spending more Points.

For +5 Points, an alien can be invisible to IR Vision, and for another +5 Points, an alien can be invisible to X-ray Vision. In addition, for an additional +1/2 cost, treated as a Power Advantage, an alien does not have a fringe effect. So, total invisibility would cost 30 Points with a fringe effect, and 45 Points without a fringe effect.

Cost: 20 Points for Invisibility to normal vision, +5 Points to be Invisible to another category (IR, X-Ray, etc.) and +1/2 cost to have no fringe effect.

LIFE SUPPORT

Aliens with this Power can survive conditions which would kill an unprotected human. There are several types of Life Support, and Life Support does not cost END. Most, if not all, Life Support Powers should get the Replaceable limitation bonus, since equipment such as scuba gear and spacesuits are easily obtained.

The following chart shows the levels of Life Support and the Point cost. Each level of Life Support includes all the those above it on the chart (i.e. 30 Points includes survival in all environments listed). Life Support costs no END to use.

LIFE SUPPORT COST	
Cost	Effect
5 pts.	The alien can breathe under water, using dissolved oxygen.
10 pts.	The alien does not need to breathe, and is immune to inhaled gas. Oxygen is absorbed through the skin.
15 pts.	The alien has no need for oxygen, and is immune to gases absorbed through the skin.
20 pts.	The alien can survive in space or under high pressure.
25 pts.	The alien doesn't need to eat or excrete.
30 pts.	The alien can survive under conditions of extreme heat, cold, radiation, or pressure. The alien still takes damage from attacks of these natures due to shock.
+5 pts.	The alien has no need for sleep.

The special effects of the alien's Life Support must be specified and approved by the GM. The exact description of an alien's powers will help make the alien more realistic, and therefore more fun to play. Here is a list of special effects for various Life Support powers.

5 Points: The alien may have gills or a porous membrane, in addition to lungs.

10 Points: The alien may perform metabolic processes at its skin; it might be a photosynthetic plant.

15 Points: The alien might get oxygen from its food, or be able to absorb solar energy directly.

20 Points: The alien may be a silicon-based rock being, performing metabolic reactions without air or water. It may use radioactive elements as a power source.

25 Points: The alien may be an android with a long-term power source which rarely or never needs refueling, or the alien could have been born with stored food adequate for its lifespan.

30 Points: The alien may live on energy extracted from radioactive decay, or be a partially immaterial being such as a cloud of energy.

NATURAL WEAPON

This Power includes natural weapons such as claws, and special abilities which do damage such as an electric shock. Natural Weapons are described under Weapons in the Devices Section.

REGENERATION

The alien has superhuman healing powers, and recovers lost BODY much faster than the normal rate of 1 REC in BODY per month. For each 10 Points spent, the character gets back 1 BODY during each Recovery. Remember that Recoveries occur less often when a character is unconscious, which will slow Regeneration. An alien may never gain back more BODY than its original BODY total. Regeneration costs no END.

Cost: 1 BODY per recovery costs 10 pts; +1 BODY per recovery per +10 Pts.

Example: *Zoran has spent 20 Points on regeneration; he will regain 2 BODY per Recovery. When fully healed, Zoran has 10 BODY. If he loses 3 BODY in an attack and spends a phase recovering, he will have 9 BODY at the end of the phase. If he recovers again on his next phase, he will have 10 BODY.*

SHAPECHANGE

For 10 Points, an alien may change the shape of its face and body in minor ways, altering height up or down by up to 15 cm (6 inches), skin and hair color, and facial features. For 20 Points, an alien may change its body into any shape, but its total mass does not change. Shapeshift does not change an alien's abilities — when Shapeshifted into the form of a large bird, the alien has realistic wings but cannot really fly.

Shapechange is a half-phase action, and the form may be maintained as long as the alien pays END. An alien with Disguise and Shapeshift may instantly duplicate people with a successful Disguise roll.

Cost: 10 Points for changing shape in minor ways, 20 Points for changing into any shape.



SMALL BODY

A character may have a smaller body than the normal 100 kg, 2 meters tall human body. Smaller Characters can hide more easily, and are harder to hit with Ranged Attacks. Hand-to-Hand attacks are not affected by the size of the target character, and neither are Ranged Attacks at a range of 1" or less.

Small Body is an expensive Power, but small-bodied aliens would almost always have less than 10 STR Max and less than 6" Running. Selling back Characteristic Maxima and Running is explained in the Alien Creation section. Small Body costs no END.

Dog-Sized: mass 12 kgs, height 1 meter, +2 with Concealment, Stealth, 1/2x Range Modifier. Cost: 10 Points.

Cat-Sized: mass 2 kgs, height 50 cm, +4 with Concealment, Stealth, 1/4x Range Modifier. Cost: 20 Points.

Mouse-Sized or Smaller: mass 250 grams, height 25 cm, +6 with Concealment, Stealth, 1/8x Range Modifier. Cost: 30 Points.

Example: *Shaka is a Cat-sized character with a DCV of 5 and did not spend any Points on Stealth or Concealment. Shaka gets 12- Stealth and Concealment for free, instead of the 8- that normal-sized characters get. A guard with an OCV of 5 is trying to shoot Shaka at a range of 4". The guard's gun has a Range Modifier of -1/3", which becomes -1/1" when shooting at Shaka. The guard takes -3 range modifier, and has an attack roll of 8-.*

TELEPORTATION

Teleportation allows an alien to disappear from one point and appear at another point without passing through the points in between. For 30 Points, an alien can teleport itself 15" to a point it can see. Normally, an alien can teleport only its own body and clothing, to a maximum of 100 kg. For each +5 Points the alien can teleport 2x as much mass.

Example: *The Wraith race can teleport by moving through a different dimension. A Wraith who spent +5 points could Teleport itself and one human it was touching. A Wraith who spent +10 Points could Teleport itself and 3 humans it was touching.*

The alien may prepare 1 extra phase and teleport 2x normal distance for +5 Points. The distance may be doubled as many times as desired for +5 Points, but the entire Teleport will still require only one phase of preparation.

Normally an alien can Teleport only to a point it can see. For +1 Point, the alien may memorize a location and Teleport there even when the location is not visible. Of course, the location must be within the Teleporter's range.

Teleporting is a full move. An alien can Teleport half its full distance (a half phase action) and attack (another half phase action) in the same phase for +10 Points.

Cost: 30 Points to Teleport 15", +1" for every +2 Points, 2x distance for +5 Points (takes 1 extra phase), 1 memorized location for +1 Point, 1/2 distance Teleport and attack for +10 Points. Teleportation costs 1 END per 5 Points. Minimum cost: 30 Points.

MENTAL POWERS



EGO COMBAT VALUE AND ATTACK ROLLS

Ego Attack, Mental Illusions, Mind Control, and Telepathy operate in much the same way as physical attacks: a 3d6 attack roll is needed to "lock on" to the target's mind, and then more dice are rolled to determine the effect of the mental power. The attack roll is not based on OCV and DCV, but on Ego Combat Value or ECV. All characters have an ECV figured using the following formula.

$$\text{ECV} = \text{EGO}/3$$

The attack roll for a mental attack is $11 + \text{attacker's ECV} - \text{defender's ECV}$, rolled on 3d6.

Example: *Ylem, an amoeboid alien, is attempting to use Telepathy to read Logan's mind. Ylem has 23 EGO, so its ECV is $23/3 = 7\frac{2}{3}$ which rounds to 8. Logan's EGO is 13 so her ECV is $13/3 = 4\frac{1}{3}$ which rounds to 4. Ylem must roll $11 + 8 - 4 = 15$ or less to "lock on" to Logan's mind.*

Mental attacks have no range Modifier, but the target must be within line-of-sight. The maximum range of any mental power is 5x Points in the power in inches.

An alien with more than one mental power may use multiple powers against a single opponent as one combined attack after a single successful attack roll based on ECV.

An alien with a mental power (a mentalist) can sense mental attacks, even if the attack is being made on another character. The attack is obvious to all mentalists who can see either the attacker or the target, unless the attack is bought with the Invisible advantage. Characters without mental powers cannot detect mental attacks in this way: mental attacks are automatically invisible to non-mentalists.

THE MENTAL POWERS

EGO ATTACK

This power allows aliens to attack another character mentally, doing STUN which bypasses the usual defenses such as PD, ED, Armor, and Force Fields. After making an attack roll based on Ego Combat Value, as described above, the player controlling the attacking character rolls 1d6 for every 10 Points in Ego Attack and subtracts the target's EGO defense (if any). The target takes the remainder as STUN damage. Ego Attacks have no effect on walls or other inanimate objects, and they cannot do BODY damage.

Cost: 10 Points for every 1d6 damage.

EGO DEFENSE

This power allows an alien to resist some of the effects of Ego Attack, Mental Illusions, Mind Control, and Telepathy. The alien gets its INT/5, plus the number of Points spent, as an Ego Defense. Ego Defense does not cost END to use. Further details on the use of Ego Defense are given in the description of Ego Attack, Mental Illusions, Mind Control, and Telepathy.

Cost: 1 Point for +1 Ego Defense, base Ego Defense = INT/5; minimum cost 5 Points. Ego Defense costs no END to use.

MENTAL ILLUSIONS

This power allows an alien to project illusions directly into an opponent's mind. After making an attack roll based on Ego Combat value, as described above, the player controlling the attacking alien character describes the illusion to the GM. The player then rolls 1d6 for every 5 Points spent on Mental Illusions and subtracts the target's Ego Defense, if any. The remainder is compared to the target character's INT as shown on the Mental Illusions Effects chart, which describes what effect the illusion has on the target character.

The particular illusion can have an effect on how real it appears to the target character. An illusion appropriate to the surroundings and expectations of the target character should have +1 level of effect (move down the chart one line), subject to GM approval. A silly or absurd illusion may have 1 or even 2 levels less effect (move up one or two lines on the chart).

Example: *Xil has 30 Points in Mental Illusion, and is trying to convince a spaceport guard to leave his post. After making an attack roll, Xil's player describes the illusion: "The guard sees the entire building going up in flames around him!". Xil rolls 6 dice, totalling 21. This is greater than 2x the guard's INT of 10, so we see on the Mental Illusions Effects chart that the guard should perceive the illusion with all of his senses: feeling heat, seeing flames, and smelling smoke. However, the GM rules that this illusion is one level less convincing because the spaceport building is made of concrete and steel, and would not burn easily. The guard sees flames, but does not smell smoke. A more plausible illusion, such as another guard requesting help, would have been more effective.*

Some Mental Illusions are dangerous, such as fires or illusory enemies. If a Mental Illusion is strong enough (3 or 4x the target's INT), the target will actually take damage from the shock and pain of the illusion. If a doctor examines a person damaged by Illusory attacks, there will be no scars, but a general weakening of the victim's body: "It's all in your head!".

The maximum damage done by a Mental attack is half the number of dice in Mental Illusions. Thus a 12d6 Mental Illusion could do up to 6d6 normal or 2d6 Killing damage to the target. The target's PD, ED and Armor are subtracted from the attack normally. The target's Ego Defense also is subtracted from the attack, even if the illusory attack was Killing.

Cost: 5 Points for 1d6 of Mental Illusions.

MENTAL ILLUSIONS EFFECTS	
Dice Total is greater than:	Effect
1x target's INT	Target sees illusion.
2x target's INT	Target perceives illusion with all of his or her senses.
3x target's INT	Target can take STUN from illusory attacks.
4x target's INT	Target can take both STUN and BODY from illusory attacks.

MIND CONTROL

This Power allows an alien to control another character's actions. After making an attack roll based on Ego Combat Value, as described above, the alien's player tells the GM what command the target must obey. The player then rolls 1d6 for every 5 Points spent on Mind Control and subtracts the target's Ego Defense, if any. The remainder is compared to the target character's EGO as shown on the Mind Control Effects chart. If the dice total is high enough, the target must continue obeying the command as long as the attacker continues to pay END. If the dice total is too low, the command has no effect. Each time a new command is issued, the attacker must make a new attack roll and Mind Control roll.

If the target has a Psychological Limitation which strengthens the command, the GM should increase the effect by +1 level on the Mind Control Chart. On the other hand, commands which violate the target's Psychological Limitations should have 1 or 2 levels less effect.

Cost: 5 Points for 1d6 of Mind Control.

MIND CONTROL EFFECTS	
Dice total is greater than:	Effect
1x target's EGO	Target will perform desirable or routine actions.
2x target's EGO	Target will perform unusual actions which are not repulsive or dangerous.
3x target's EGO	Target will perform mildly unpleasant or slightly risky acts.
4x target's EGO	Target will perform very unpleasant or dangerous acts.

Example *Xil wants to make a guard run away from a fight, by using 9d6 of Mind Control. The GM decides that the guard is not overconfident, but not a coward, so running away from combat is a mildly unpleasant act. Xil must roll 3x the guard's EGO of 10 — 30. Xil makes the attack roll based on ECV, and then rolls 9d6, getting 32 and causing the guard to flee. If the guard had a Psycho-*

logical Limitation: Overconfident, or knew that she would be executed for deserting her post, the GM would have required Xil to make a roll of 4x EGO. Conversely, if the guard was badly demoralized, the Mind Control would be easier, requiring only 2x EGO.

TELEKINESIS

Telekinesis allows an alien to grab or lift objects and exert force at a distance, by using mental energy. For 10 Points the alien has a Telekinetic STR of 10 and a range of 10". For every +1 Point the alien has +1 Telekinetic STR and +1" range. Telekinesis affects objects as a whole, so it may not be used to bend, break, or punch objects. However, throwing objects against walls or dropping them will do damage.

Although Telekinesis may not be used to Punch, it may be used to Grab a character. Telekinetic attacks have a Range modifier of -1/3". Hand-to-hand combat skill levels do not apply to Telekinetic attacks, but 3 Point levels with Telekinesis and 8 Point levels with all combat do apply.

Cost: 10 Points for a Telekinetic STR of 10 and a range of 10", +1 STR and +1" range for +1 Point.

TELEPATHY

This Power allows an alien to read and send thoughts. When using Telepathy, the alien first decides whether to read the target's thoughts or send a message. After making an attack roll based on Ego Combat Value, as described above, the player controlling the alien rolls 1d6 for every 5 Points spent on Telepathy and subtracts the target's Ego Defense, if any. The remainder is compared to the target character's INT as shown on the Telepathy Effects chart.

Once a successful Telepathic contact is made, the Telepath may maintain that level of contact by simply expending END each phase; no dice roll is needed. Sending thoughts to someone only requires 1x INT on the chart. A new attack roll and Telepathy Roll is required if a telepath attempts to read past a target's Psychological Limitations, or deeper into the target's mind.

If the target is of a very different race than the attacker, the GM may rule that Telepathy is harder by 1 or 2 levels on the chart. This reflects the fact that vastly different races may lack common concepts, making communication difficult.

When Telepathy is used to send messages, the target hears a kind of "inner voice", or sees pictures in "the mind's eye". These voices and images transmit information, but do not compel the target to take any action, or distort the target's senses, even if the Telepath rolled 4x target's INT. Characters who want such effects should buy Mental Illusions or Mind Control.

Cost: 5 Points for each 1d6 of Telepathy.

TELEPATHY EFFECTS	
Dice total is greater than:	Effect
1x target's INT	The alien can read surface thoughts, or send thoughts.
2x target's INT	The alien can read deep, hidden thoughts.
3x target's INT	The alien can read from the target's memory.
4x target's INT	The alien can read from the target's subconscious.

USING ADVANTAGES AND LIMITATIONS



Some devices and Powers have modifiers called Advantages and Limitations (just like the game **Champions**). These are shown as positive multipliers, such as +1/4 (for advantages), or negative multipliers, such as -1/4 (for limitations). To figure the Point cost of a weapon or piece of equipment use the following formula:

Real Cost = Base Cost x (1 + Advantages) / (1 + Limitations)

Where the Base Cost is the price of the equipment without modifiers.

Example 1: A 6d6 Autofire blaster with 64 shots, 5 minutes to reload, and a 14- Burnout roll:

6d6 costs 5 pts per d6 x 6 = 30 pts. This is the Base Cost. Autofire is a +1/4 Advantage. 64 shots per clip, 5 minutes to reload is a +3/4 Advantage. 14- Burnout is a +3/4 Limitation. We plug this into the equation and get: $30 \times (1 + 1/4 + 3/4) / (1 + 3/4)$ equals $(30 \times 2) / (1 3/4) = 34$ Points. If the equipment has no Advantages (or Limitations), use +0 in the equation.

Example 2: If the above gun did not have a Burnout roll:

$30 \times (1 + 1/4 + 3/4) / (1 + 0) = 60$ Points.

ACTIVE POINTS

Occasionally you will need to figure Active points for Powers or a piece of equipment. This is another measure of how good the equipment or Power is. Active points simply use the top of the equation to figure cost.

Active points = Base cost x (1 + Advantages)

For example, using the gun in Example 1, the active points would be: $30 \times 2 = 60$ active points

USING THE TABLES INSTEAD OF THE EQUATIONS

If you do not wish to use the equation, you may use the tables below. The multiplication has already been done for you. Find the Base Cost across the top of the table, then find the total of the advantage modifiers on the left hand side of the chart (not counting the +1). Where these two intersect is the final active cost of the device or Power.

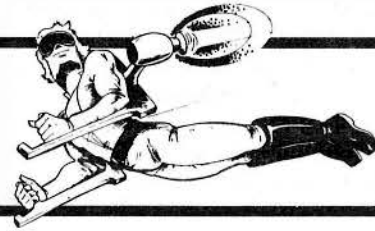
On the following page is the Limitation chart. It is used the same way as the Advantage chart. By finding the intersection of the Active points and the total of the multipliers, you get the Real Cost. The Real Cost is the number of points you actually pay.

ADVANTAGE TABLE																
Total Multiplier	Base Points															
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
1/4	6	12	19	25	31	37	44	50	56	62	69	75	81	87	94	100
1/2	7	15	22	30	37	45	52	60	67	75	82	90	97	105	112	120
3/4	9	17	26	35	44	52	61	70	79	87	96	105	114	122	131	140
1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
1 1/4	11	22	34	45	56	67	79	90	101	112	124	135	146	157	169	180
1 1/2	12	25	37	50	62	75	87	100	112	125	137	150	162	175	187	200
1 3/4	14	27	41	55	69	82	96	110	124	137	151	165	179	192	206	220
2	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240
2 1/4	16	32	49	65	81	97	114	130	146	162	179	195	211	227	244	260
2 1/2	17	35	52	70	87	105	122	140	157	175	192	210	227	245	262	280
2 3/4	19	37	56	75	94	112	131	150	169	187	206	225	244	262	281	300
3	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320

LIMITATION TABLE

Total Limitation	Active Points															
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
1/4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64
1/2	3	7	10	13	17	20	23	27	30	33	37	40	43	47	50	53
3/4	3	6	9	11	14	17	20	23	26	29	31	34	37	40	43	46
1	2	5	7	10	12	15	17	20	22	25	27	30	32	35	37	40
1 1/4	2	4	7	9	11	13	16	18	20	22	24	27	29	31	33	36
1 1/2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
1 3/4	2	4	5	7	9	11	13	15	16	18	20	22	24	25	27	29
2	2	3	5	7	8	10	12	13	15	17	18	20	22	23	25	27
2 1/4	2	3	5	6	8	9	11	12	14	15	17	18	20	22	23	25
2 1/2	1	3	4	6	7	9	10	11	13	14	16	17	19	20	21	23
2 3/4	1	3	4	5	7	8	9	11	12	13	15	16	17	19	20	21
3	1	2	4	5	6	7	9	10	11	12	14	15	16	17	19	20

ADVANTAGES



Advantages make a device more powerful, and increase its Power Point Cost. Advantages also increase the Active Point cost of a device, thus increasing its mass and END cost. Some Advantages, such as Miniaturization, do not increase the Active Point cost of a device; such exceptions are explicitly mentioned in the Advantage description.

ARMOR PIERCING

The Armor Piercing Advantage allows an attack to act against 1/2 the defense it would normally work against. The damage is rolled normally, but only half of the target's defense is subtracted from the BODY and STUN done. The Advantage Hardened Defense allows a character (or starship) to ignore the effect of Armor Piercing. Armor Piercing may be bought many times, but it never reduces the defense below one-half. The only effect of multiple Armor Piercing is to negate Hardened Defense. However, Hardened Defense may be bought many times also.

Armor Piercing is a +1/2 Advantage.

ATTACK VERSUS LIMITED DEFENSE (AVLD)

This Advantage is only for starship weapons, to create special attacks which bypass certain types of defenses. AVLD is the starship version of No Normal Defense attacks against characters; some defenses are completely useless against AVLD attacks. A certain type of defense must be specified which will protect a starship from the AVLD attack. The weapon's damage is rolled as usual, and if the target

ship does not have the defense, it takes the full damage with no defense. If the target has the defense, that defense is subtracted from the damage done.

The cost of an AVLD attack ranges from +1/2 to +2, depending on how common the defense is. The price of an AVLD will vary in different campaigns, and the ultimate decision is up to the GM. The GM should closely regulate AVLD attacks, since not all attacks are available in every campaign universe.

AVLD COST CHART

Defense is:	Example	Advantage
Common	Force Field, Armor	+1/2
Uncommon	Hardened Armor, Ablative Armor	+1
Very Uncommon	Doubly Hardened Armor	+2

Each AVLD should have a description of its special effects, which will add color to the game and help the GM decide how well it works when used in unusual situations.

Example AVLD Attacks, Defenses and Cost Multipliers:

Anti-matter attack: defense is Force Fields, +1/2

Magnetic attack: defense is Armor, +1/2

Thermal attack: defense is Ablative Armor, +1

Focused plasma beam attack: defense is Doubly Hardened Armor, +2

ATTACK VS. SPECIFIC EQUIPMENT (AVSE)

This attack only affects specific shipboard equipment (but not characters). Ignore the Hit Location table, and inflict BODY damage upon the specified location. The attack must penetrate armor and force fields, just like a normal attack — unless it has the advantage AVLD. Only the specified equipment takes the damage. Characters and other equipment in the room do not take shrapnel damage.

The special effects of AVSE attacks should also be specified. Sample special effects are listed below.

AVSE is a +1 Advantage.

Examples of AVSE:

Heat-seeking Missiles: attacks Sublight Engines

Energy Drain Field: attacks Weapons

Flash of Light: attacks Detectors (Radar, Telescopes, etc.)

Biological Weapon: attacks Life Support

Gravity Wave Weapon: attacks Artificial Gravity Generator

Force Field Jammer: attacks Force Field Generator

ATTACK WITH NO NORMAL DEFENSE (NND)

NND attacks do STUN only, and ignore most defenses such as PD, ED, Force Fields, and Armor. The target takes the full amount rolled on the dice as STUN. NND attacks do no BODY. This advantage is useless for starship weapons, since starships don't take STUN damage. For a similar effect in starship combat, use the AVLD advantage.

There must be some defense against a NND attack, defined when the attack is purchased. The defense must be reasonably common, as determined by the GM. Unlike other defenses, defense against an NND attack is all-or-nothing: targets which have the defense take no STUN, and targets lacking the defense take full STUN damage. NND is a +1 advantage.

NND Examples:

Knockout Gas: defense is 10 Points or more in Life Support

Nerve Blow: defense is inflexible body armor

Gravity Field Attack: defense is STR 20 or more, or CON 15 or more

Fast Neutron Attack: defense is **not** having 7 or more resistant PD, because the neutrons must be slowed down before they become dangerous

AUTOFIRE AND SELECTIVE FIRE

Autofire is used for weapons like rapid-fire pulsed lasers and MIRV torpedoes which can hit a target more than once in a single phase. Since Autofire weapons use multiple shots for each attack, they often have the Limited Uses Limitation (to avoid the enormous END cost). Weapons with the Autofire Advantage may be used to perform the Autofire attack maneuvers described in the Combat section and in the Starship Combat section. Full Autofire attacks use 10 shots from a weapon. If an Autofire attack hits a target many times, each hit is counted separately against the target's defenses. When using Autofire, the range modifier of the weapon is halved.

Autofire is intended for ranged attacks such as guns. Weapons with no range may only have the Autofire if they purchase an additional +1/4 advantage. If a weapon has the No Normal Defense or the Attack Versus Limited Defense Advantages, the cost multiplier for Autofire is increased from +1/4 to +1 for Autofire and from +1/2 to +1 1/4 for Selective Fire.

Selective Fire: Selective Fire allows the attacker to use both Autofire, Burst fire, Controlled Burst, and single-shot attacks with the same weapon, usually by flipping a switch before firing (see the Combat section). When the weapon is used in the single-shot mode, it operates as if it did not have the Autofire advantage at all: its range modifier is not halved, and it has +0 OCV (unless the weapon has increased OCV in addition to the Autofire advantage).

Autofire is a +1/4 Advantage, and Selective Fire is a +1/2 advantage.

EXPLOSION

An Explosive attack is aimed at a hex, not at a character. A hex has DCV 3, and the weapon's normal range modifier applies. Explosions do their full damage to all characters and objects in the central hex, and less damage to objects in neighboring hexes. Normal attacks fall off by 1d6 for every 1" (2 meters) distance from the central hex. The highest remaining die is always subtracted first. Killing attacks fall off by 1 Damage Class per 1", with the highest die subtracted first. Damage Classes are explained in the Weapons section.

Note that a character's DCV does not protect them from an Explosion: only moving further from the explosion can help them. However, falling prone or Diving for Cover can decrease the damage done, as explained in the Combat section.

Example: Zakul sets off an 8d6 normal physical explosion (a grenade) in a hallway, 2" away from Logan. The 8 dice rolled are 1, 2, 3, 3, 4, 5, 6, 6. If Logan were in the central hex of the explosion, she would take the full effect: $1 + 2 + 3 + 3 + 4 + 5 + 6 + 6 = 30$ STUN and 9 BODY, minus her PD. However, she is 2" away and therefore subtracts the two highest dice (the sixes), leaving $1 + 2 + 3 + 3 + 4 + 5 = 18$ STUN and 5 BODY.

The Explosion Advantage has a different effect on starship weapons. Because the map scale is so large, the Explosion is entirely contained in one hex. Furthermore, the attack is made against the target starship's DCV as usual, and not against a hex. If the attack roll succeeds, the target ship takes the full damage. However, the target starship still takes damage even if the attack roll fails! If the roll fails, the ship takes 1 Damage Class less damage for every 1 the roll failed by. This is because the attack was close enough to do partial damage to the ship. Again, the highest dice are always subtracted first when figuring Explosion damage.

Example: Chiron fires a 6d6 Killing Explosive torpedo at Satora's starship. Chiron's OCV is 5, and Satora's DCV is 6. Chiron must roll $11 + 5 - 6 = 10$ or less to score a direct hit on Satora's ship. Chiron's player rolls a 13, failing his attack roll by 3: 3 Damage Classes (1d6 Killing) must be subtracted from the damage Satori takes. Chiron's player rolls 6 dice of damage, and removes the highest die. Note that this is not the same as rolling 5d6 for the damage Satori's ship takes.

Explosion is a +1/2 Advantage.

HARDENED DEFENSE

This Advantage "Hardens" a particular defense for a +1/4 cost multiplier, enabling that defense to give its full protection against an Armor Piercing attack. Defenses are things such as PD, ED, Ego Defense, Armor, Force Fields, and so on. Hardened Defense may be bought many times to counteract attacks which have bought Armor Piercing many times.

Hardened Defenses: cost multiplier +1/4, does not increase END Cost.

REFINED TELEPORTATION

This advantage refines and improves teleportation so that it can penetrate a defense built with the Stops Teleportation advantage. Refined Teleportation may be bought many times, but the only effect of multiple Refined Teleportation is to negate Stops Teleportation bought multiple times.

Refined Teleportation costs +1/2 to penetrate one level of Stops Teleport.

INCREASED RANGE

Increased Range doubles the Range Modifier of weapons and other ranged devices. Ranged devices start out with a -1/3" Range Modifier, which can be doubled to -1/6" with one level of Increased Range. Increased Range can be bought multiple times, doubling it to -1/12", -1/24" or even higher.

Increased Range also doubles the maximum range of devices with a maximum range such as Communicators. Teleporters have a special system of changing maximum range and should not use the Increased Range Advantage.

Increased Range costs +1/4 to double the Range Modifier and maximum range of a device or Power.

INVISIBLE EFFECTS

Devices without this advantage have an obvious effect, such as a loud noise or a beam of light, which identifies the location of the character operating the device and the device's target (the exception is mental devices, see Alien Powers). This side-effect may be eliminated with the Invisible Effects Advantage. There are two kinds of Invisible Effects: Normally Invisible and Totally Invisible. Normally Invisible Effects cannot be detected with normal sight or hearing, but may be detected with IR Vision, X-Ray Vision, Ultrasonic Hearing, and so on. Totally Invisible Effects cannot be seen or heard by any character. The Invisible Effect advantage does not increase the END cost of devices or alien powers.

Normally Invisible Effects is a +1/2 Advantage, Totally Invisible Effects is a +1 Advantage.

MINIATURIZATION

Miniaturization is used only for devices, not for Alien Powers. Devices start out with a base mass figured from the device's Active Points using the table in the Technology Introduction section. This mass may be decreased by taking the Miniaturization Advantage, which reduces the mass of a device to 1/4 of its base mass, and is a +1/4 Advantage. Miniaturization may be bought many times, and does not increase the Active Point cost of a device.

One of the uses of Miniaturization is to make devices which can be easily hidden on a character's body. To make it easier to design such devices, the mass table has been extended to smaller masses below with examples of small objects.

Device Mass	Examples
0.1 gm.	tooth filling, small gem
0.2 gm.	small earring, aspirin tablet
0.4 gm.	small pearl, normal earring
0.8 gm.	cigarette filter, medicine capsule
1.6 gm.	1/4 teaspoon of water, earplug
3.2 gm.	1/2 teaspoon, large earring, finger ring
6.4 gm.	1 teaspoon, necktie clasp, barrette, credit card
12.5 gm.	1 tablespoon
25 gm.	keychain
50 gm.	1/4 cup
0.1 kg.	1/4 pound, change purse
0.2 kg.	1 cup, belt buckle, boot heel
0.4 kg.	1 pound
0.8 kg.	1 quart, small handgun
1.6 kg.	4 pounds, large handgun

Miniaturization reduces the mass of a device to 1/4 mass, and is a +1/4 Advantage. Miniaturization does not increase the Active Point cost of a device.



REDUCED ENDURANCE

Reduced Endurance is used only for Alien Powers, and cannot be purchased for personal or starship devices. Devices should draw END from an external Power Plant, take the Stored Power Advantage, or have the Limited Uses Limitation.

Each level of Reduced Endurance decreases the END cost of the power to half its previous value, rounding down. Eventually, the rounded-off END cost will reach zero; when that happens, the power costs no END. Each level of Reduced Endurance is a +1/4 Advantage. reduced END does not raise the Active Points of a Power, or the END cost of a power. A Power may not have both the Reduced END Advantage and the Increased END Limitation.

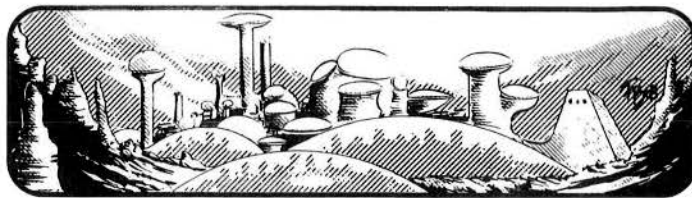
Example: *Xil has 6d6 Mind Control, which costs 30 Points and has an END cost of $30/5 = 6$ END per Phase. If Xil takes one level of Reduced Endurance, the END cost halves to 3 per Phase, and the Point cost of the Mind Control increases to $30 \times (1 + 1/4) = 37$ Points. Two levels of Reduced Endurance will bring the END cost down to $3/2 = 1.5$ rounded to 1 END per Phase, and three levels of Reduced Endurance will bring this power to zero END cost. 6d6 Mind Control at zero END cost (3 levels of Reduced END at +1/4 per level) would cost $30 \times (1 + 1/4 + 1/4 + 1/4) = 30 \times 1\ 3/4 = 52$ Points.*

Reduced END halves the END cost for Alien Powers and is a +1/4 Advantage. Reduced END may be bought many times. Reduced END cannot be bought for devices, but only for Alien Powers. Reduced END does not affect the Active points of an Alien Power.

STOPS TELEPORTATION

This advantage, when applied to a ship's Armor or Force Field, prevents teleportation in or out of the ship. Individuals who attempt to teleport through a force field with this advantage from outside will end up in space (See the Teleporting rules in the Starship Combat section). This advantage is used primarily to prevent unwanted intruders from teleporting onto the ship. If the crew of the ship wish to teleport out of the ship, then the force field must be lowered for the duration of the teleportation. Stops Teleportation can be overcome by a teleporter with the Refined Teleportation advantage. Stops Teleportation can be purchased multiple times to counteract teleporters which have bought Refined Teleportation bought many times.

Stops Teleportation is a +1/4 advantage.



STORED POWER

Stored Power reflects batteries, gas tanks and other limited storage devices which permit a device to operate for a limited time without an external power source. Stored Power can be bought for devices, but not for Alien Powers. Alien Powers should buy Reduced Endurance instead. The cost multiplier for Stored Power depends on its duration (how long the device can operate before the Stored Power is exhausted) as shown in the following table.

Typically, devices with Stored Power are rechargeable; recharging a device takes an amount of time equal to the next shorter duration. For example, a device with Stored Power for 3 hours would take 1/2 hour to recharge. If a device is not rechargeable, and must be discarded once the Stored Power is exhausted, the bonus is two levels less on the chart. However, the minimum cost multiplier for Stored Power is +1/4.

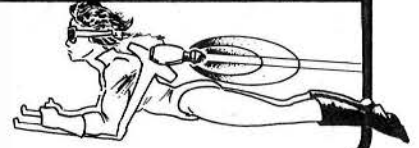
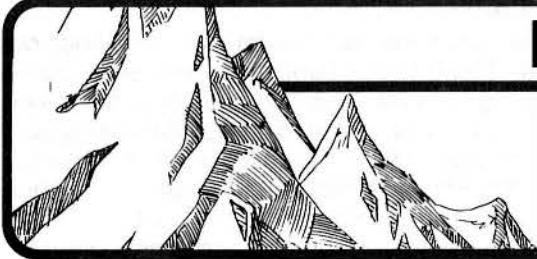
Note that Stored Power is intended for constant devices; Instant devices such as guns should use Limited Uses instead.

STORED POWER COST TABLE

Duration	Cost Multiplier
1 Turn (12 seconds)	+1/4
1 minute (5 Turns)	+1/2
5 minutes	+3/4
1/2 hour (30 minutes)	+1
3 hours	+1 1/4
1 day	+1 1/2
1 week	+1 3/4
1 month	+2

Example: *A spacesuit is bought as 20 Points of Life Support with the Stored Power Advantage: duration 1 day (+1 1/2) would cost 50 Points. This spacesuit may be recharged in 3 hours (time spent recharging the batteries, refilling the air tanks, and so forth). If the spacesuit was non-rechargeable, its 1 day duration would only cost +1 for a total Point cost of 40 Points.*

LIMITATIONS



Listed below are possible Limitations on devices. They make a device less powerful, and hence reduce its Power Point Cost.

ABLATIVE

This Limitation is for Armor and Force Fields. Ablative Defenses are shot off little by little by attacks. As the Ablative Defense is damaged it acquires a lower and lower Activation roll, until it is gone altogether. If a starship, character or device has mixed types of defenses, some Ablative and some not Ablative, the Ablative defense is always "on top"; it takes damage first, and may be destroyed by attacks which do not penetrate the defenses beneath it.

Ablative defenses count as resistant PD or ED just like normal Armor. If the damage done by an attack gets through the Ablative Defense (by exceeding it), the Ablative defense acquires an Activation roll of 14-. Each time an attack exceeds the Ablative Defense, the Activation roll drops by three (11-, 8-, 5-, gone). This Activation roll has to be made each time the Ablative Defense is hit. If the Activation roll fails, the Ablative Defense does not work against the attack, and the Activation roll stays the same.

Ablative is a -1/2 Limitation.

ACTIVATION ROLL

Devices with this Limitation do not always function properly; they may be unreliable (if a weapon) or have limited coverage (if armor). Each time the device is used, the user must make an Activation Roll on 3d6. If the Activation roll succeeds, the device works normally. If the Activation Roll fails, the device has no effect, and another attempt may be made on the operator's next phase. If the device has Limited Uses, each attempt expends one Use whether the Activation Roll succeeds or not. The bonus for Activation Roll depends on the roll, as shown below.

Activation Roll	Bonus
14-	-1/2
11-	-1
8-	-2

If the GM is using the optional hit location rules, then body armor (or force fields) purchased with this limitation protect the following areas:

Armor Activates on	It Protects Hit Location
8-	10-13
11-	4-5, 10-13, 17-18
14-	3-5, 8-14, 17-18

Thus, armor bought with 8- Activation is essentially a protective vest, 11- Activation armor is a protective helmet, boots, and vest, while 14- Activation armor is a full-coverage helmet, a protective jacket, and boots.

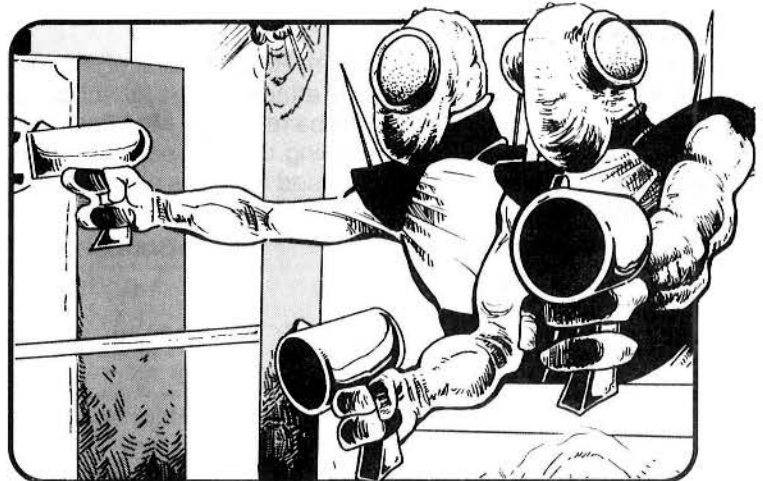
ARC OF FIRE/DEFENSE

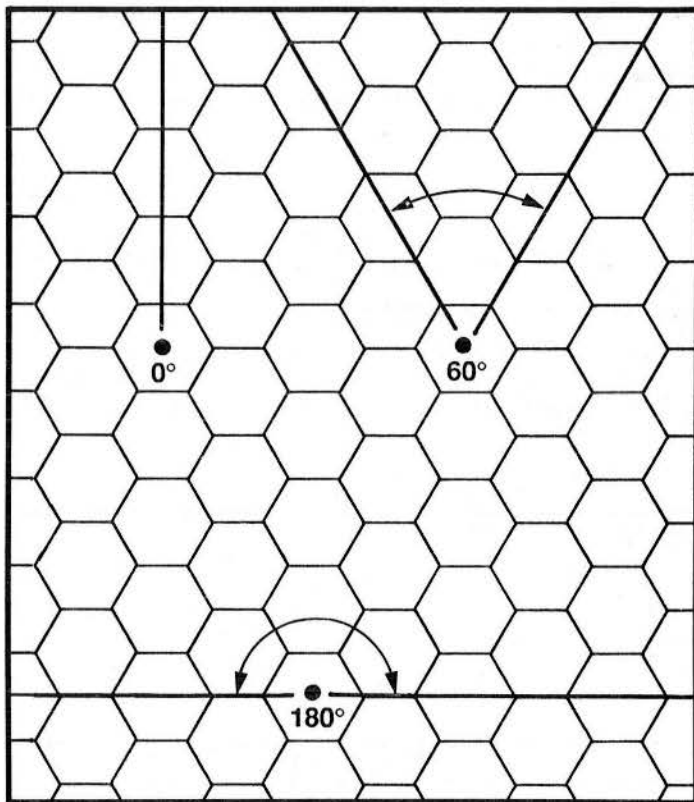
This Limitation applies only to starship weapons and starship defenses. Weapons without this Limitation (such as lasers mounted on rotating turrets) are able to fire in any direction. If a weapon has a restricted Arc of Fire, it cannot fire in all directions, but only in certain directions as shown in the Arc of Fire/Defense table. This gives the weapon a bonus depending on the Arc.

Similarly, defenses (Armor, Force Fields, Missile Deflection, etc.) without this Limitation protect the starship equally well from attacks in all directions. If a defense has the Arc of Defense Limitation, the defense only protects the ship against attacks in certain directions, as shown on the Arc of Fire/Defense Table.

ARC OF FIRE/DEFENSE TABLE		
Arc	Effect	Bonus
0 deg	Weapon fires only down one hex row; or defense only protects against attacks from one hex row.	-1 1/2
60 deg	Weapon fires only through one hex side; or defense only protects against attacks which pass through one hex side.	-1
180 deg	Weapon fires through 3 hex sides; or defense only protects against attacks which pass through 3 hex sides.	-1/2
360 deg	Weapon fires in all directions; or defense protects against attacks from all directions.	-0

(See Arc of Fire/Defense Diagram on page 94)





BURNOUT ROLL

Devices with Burnout rolls are not only unreliable, but fragile, and tend to break suddenly during use. Burnout rolls are similar to Activation rolls, but the consequences of a failed roll are more severe. Each time the device is used, a Burnout Roll must be made on 3d6. If the Burnout Roll succeeds, the device operates normally. If the Burnout Roll fails, the device has no effect that phase, and is broken. The device must be repaired before it may be used again. Repairing a broken device usually requires at least 5 minutes, tools, and a successful Weaponsmith, Electronics, or Mechanics Roll. The time may be longer, and other skills may be required. The exact procedure to repair a Burned-out device is determined by the GM.

Burnout Roll	Bonus
14-	-3/4
11-	-1 1/2

DECREASED RANGE

Every Ranged weapon has a Range Modifier, which determines the OCV modifier the attacker takes for shooting the weapon at long ranges. The base Range Modifier is -1/3", which can be reduced by taking the Decreased Range Limitation. The Bonus for Decreased Range is shown in the following table.

Range Modifier	Bonus
-1/3"	-0
-1/1"	-1/4
No Range: contact or same hex	-1/2

GENERAL LIMITATION

General Limitation is the catch-all for any Limitations not explicitly listed. The General Limitation examples should help the GM assign a point value to any Limitation a player thinks up. These Limitations depend on the GM's campaign, and range from 0 (the GM thinks that it will not limit the device or power) to -2 (the Limitation will make the device or power useless nearly all the time). Remember, any Limitation which doesn't reduce the effectiveness of a device or power isn't worth a bonus. For example, a weapon which works only on humans may get a -1 Limitation in a campaign in which aliens predominate, but no bonus at all in a campaign containing very few aliens.

GENERAL LIMITATION EXAMPLES

Bonus	Device Limitation
-1/2	Device or Power costs END to use (for devices or Powers which normally cost no END).
-1	Concentrate: Operator must spend a full phase and fall to zero DCV to use the device or Power (for weapons and Attacks).
-1	Backfire: Attack does full damage to the Attacker each time it is used, even if the Attack Roll fails to hit the target.
-1/4 to -2	Device or power only works in a given situation (bonus is based on how common the situation is).

Some examples:

-1/4	Antipersonnel weapon only works in atmosphere
-2	Ship-to-ship weapon only works in atmosphere

INCREASED ENDURANCE COST

Most devices and Alien Powers cost Endurance (END) to use. Players may increase this END cost and get a bonus. The bonus depends on the multiple of normal END cost, as shown below:

INCREASED ENDURANCE COST BONUS

Endurance Multiple	Bonus
x1 1/2	-1/2
x2	-1
x3	-2

For example, if a device which normally costs 10 END takes the x2 Endurance Multiple, then it will get a +1 bonus and its END cost is now 20.

Powers and devices that have no END cost may not take Increased Endurance Cost, and no Power may have both increased END cost and the Reduced END cost Limitation.

LIMITED USES

All devices need energy to operate. Some devices get their energy from a character's body, like a club, or from a vehicle's power plant, and therefore have an unlimited number of uses. However, devices like handguns use stored energy, and run out of energy after a certain number of uses. Such devices should have the Limited Uses Limitation to reflect the amount of stored energy they have. Limited Uses are applicable only to Instant devices; constant devices should use Stored Power instead.

Powers and devices with Limited Uses do not cost END, since they are using stored energy. Therefore, Limited Uses could be either a Limitation or an Advantage. If the device or Power has only a small number of Limited Uses, and takes a long time to recharge, that is a Limitation. On the other hand, if a device or Power has a large number of Limited Uses and is quickly recharged, that is an Advantage.

The Limitation bonus (or Advantage cost multiplier) of Limited Uses depends on two things: the number of uses the device has before recharging, and the time required to recharge the device. "Recharging" may be as simple as inserting a new power pack (1 phase), or it may require a complete overhaul (1 day). Other devices may never recharge; they could be "disposable" devices like grenades which cannot be recharged. In the Limited Uses chart, Limitation bonuses are negative (since they decrease the cost of a Power or device) and Advantage cost multipliers are positive (since they increase the cost).

LIMITED USES CHART	
No. Uses	Advantage/Limitation
1	-2
2	-1 1/2
3	-1 1/4
4	-1
6	-3/4
8	-1/2
12	-1/4
16	+0
32	+1/4
64	+1/2
125	+3/4
250	+1

The standard device recharges all of its uses every 24 hours. Devices can be constructed to regain their uses at shorter time increments: every five minutes, every turn, or every phase. To determine the limitation or advantage for Devices built with these recharge rates, simply move down the chart by one level for each time increment of increased recharging.

Example: Owik is constructing a power blaster that has 32 charges that can be recharged in 1 turn. 32 Charges is a +1/4 advantage, and recharging in one minute moves down the chart 2 levels. The final overall advantage is +3/4.

Conversely, to build devices that never recharge, simply move up one level on the chart to determine the proper advantage/limitation.

REPLACEABLE

This Limitation is only used for Alien Powers, and is essentially a bonus given to aliens who have Powers easily Replaced by technology. Since humans can easily buy spacesuits, 2d6 Killing blasters, and other equipment with Credits, the value of similar alien Powers is reduced.

The Replaceable bonus must be carefully monitored by the GM, and given only when the alien's power is not much better than the human's equipment. For example, if humans can easily buy a 2d6 Killing ranged attack (such as a blaster) but cannot buy a ranged Ego Attack, an alien with the Ego Attack Power would not receive a Replaceable bonus. Similarly, if all the available blasters have a 14- Burnout roll, an alien Power which did 2d6 Killing at Range with no Burnout roll might receive a reduced Replaceable bonus, or none at all.

Replaceable is a -1/2 Limitation.

SLOW MISSILE

This Limitation is normally used for starship weapons, but can be used for normal weapons with the GM's permission. Slow missile attacks do not instantaneously reach their target, but can be shot down before they hit. A Slow Missile hits at the end of the Segment on which it was fired. Shooting at a Slow Missile counts as a defensive Action, so a gunner can abort his or her next phase to shoot. The DCV of the missile equals the OCV with which it was fired.

Attacks against the missile take their normal Range Modifier, but the Slow Missile can be destroyed in any hex it passes through — that is, any hex in a straight line from the attacker to the target. Any attack which does at least half as many dice of damage as the Slow Missile does will destroy the Slow Missile. Attacks with insufficient damage to destroy the Slow Missile have no effect.

Example: Owik (the space pirate) has a 8d6 Killing attack with the Slow Missile Limitation. On Segment 12, Owik (OCV 5) shoots his Slow Missile at Ila's ship (DCV 4). Owik needs to roll 12-, and rolls 9: a hit! However, the Missile will not hit Ila's ship until the end of Segment 12, which gives Ila's gunner a chance for one shot at the missile: Ila's gunner has OCV 7 and shoots a 5d6 Killing laser at the Missile. The Missile's DCV is the OCV with which it was fired (5), and Ila's gunner takes no range Modifier, since he can wait until the missile is right next to Ila's ship before firing. Ila's gunner must roll 13- to hit the Missile; he rolls 12 and hits. No damage dice are rolled; since the laser's 5d6K damage is more than half the Missile's 8d6K damage, the Missile is destroyed. Owik flies away, vowing revenge another day.

Slow Missile is a -1/2 Limitation.

STR MINIMUM

This Limitation is only used for weapons. Some weapons, such as swords and heavy rifles, are so heavy or clumsy that characters need to have a certain amount of STR to wield them. A character using a weapon with the STR Minimum disadvantage must have at least as much STR as the STR Minimum or suffer an OCV penalty: -1 OCV per 5 STR below the STR Min. In addition, STR Min affects the STR damage added to melee weapons: instead of adding 1d6 normal damage per 5 STR, the added damage is 1d6 per 5 STR over the STR Min. The bonus for STR Min depends on the STR Min of the weapon, as shown in the following table. Damage Classes are explained in the Weapons section.

STR Min**Bonus**

5 + Damage Class of weapon
10 + Damage Class of weapon

+1/4
+1/2

For example, a 2d6 Killing blaster (Damage Class 6) with a STR Min of 11 would receive a +1/4 bonus, and a 2d6 Killing blaster with a STR Min of 16 would receive a +1/2 bonus.

VOLATILE

Volatile equipment tends to explode when damaged or when it fails a Burnout Roll. Examples of Volatile equipment include missile launchers with a dangerous supply of explosive warheads or propulsion fuel, nuclear engines which can melt down, and END storage cells which can short out and explode. The Volatile Limitation is intended primarily for starship weapons, engines and equipment, but it may be used for hand-held weapons with the GM's permission.

If Volatile equipment fails a Burnout Roll or is damaged during combat, the equipment explodes. If the equipment explodes, the starship takes the BODY damage with no defense, and the Volatile equipment is destroyed. Characters near the exploding equipment take Explosion damage as for other Explosives: full damage -1d6 per hex away from the Volatile Equipment.

If there is no detailed map of the starship interior, characters in the same room as the Volatile equipment each roll 1d6-1 to determine the number of dice subtracted from the damage done due to distance from the explosion, intervening objects which partially protect the character, and so forth. This die roll may be modified up or down by the GM to account for room size, amount of equipment, or other factors.

The bonus for Volatile equipment depends on the damage done as shown below. The Active Points referred to are the Active Points of the piece of equipment that is Volatile.

Bonus**Explosion Damage**

-1/2

(Active Points)/20 d6 normal Explosion

-3/4

(Active Points)/10 d6 normal Explosion

-1

(Active Points)/5 d6 normal Explosion

Example: Zakul's starship has an 8d6 Killing plasma gun. This weapon has 120 Active Points, and the Volatile Limitation with (Active Points)/20 d6 Damage for +1/2 bonus. Zakul's plasma gun is hit in combat, and takes 8 BODY. As explained in the Starship Combat Section, weapons which take 8 BODY have a 13- chance of being damaged. Zakul's player rolls 3d6 and gets 10; the plasma gun is damaged, so it explodes! The Explosion damage is $120/20 = 6d6$ normal: Zakul's player rolls 6d6 and gets 1, 1, 2, 4, 5, 6: Zakul's starship takes 5 BODY with no defense.

DEVICE SUMMARY

Listed below is a summary of the devices in the Device List. The Cost given is in Credits, and the Mass is in kilograms (1 kilogram = 2.2 pounds).

NAME	COST	MASS	NOTES
Armor			
Second Chance Vest	5	.6	+6 PD and +3 ED Vest, 8- Act.
Safeguard Armor	100	.8	+6 PD and +6 ED
Safeguard Heavy Armor	400	1.6	+9 PD and +9 ED
Alpha Improved Pad-Suit	15	.4	+10 PD, non-resistant
Reflect Armor	30	.6	+9 ED
Improved Reflect Armor	400	1.6	+12 ED
Cromtech Power Armor	400	3.2	+3 PD, +20 STR,
Omnicorp Assault Armor	18,000	150	+9 PD and +6 ED, + 15 STR, 10 " Flight
Flicker Force Shield	15	1.6	+6 PD and +3 ED, 11- Act.
Flicker Force Belt	640	2.4	+6 PD and +6 ED, 5 min. duration
Communicators			
Button Communicator	10	1.6 gm	Range of 70 meters
Flicker Communicator	30	.8	Range of 640 km

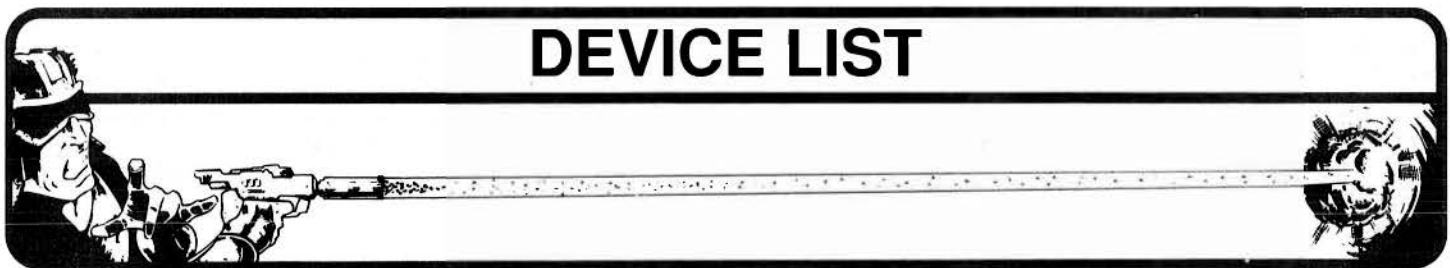
NAME	COST	MASS	NOTES
Computers			
Pocket Brain Computer	640	.8	
Universal Translator	1500	12.5	Translates languages
Voice Duplicator	200	6.4	13- Mimicry roll
Portable Voice Duplicator	6,400	.2	13- Mimicry roll, Lasts 3 hours
Detectors			
Poison Detector	30	.4	Takes 1 turn
IR Goggles	200	.2	Lasts 3 hours
IR Contact Lenses	2000	.05 grams	Lasts 3 hours
Dolphin Sonar Device	1500	6.4	Portable, sees underground
Drugs			
Artificial Adrenaline	100/dose	.2 gm.	+2d6 STR, -1 STR / 5 min.
Zeon Truth Serum	400/dose	.2 gm.	-2d6 EGO
Triton Amnesia Drug	400/dose	.2 gm.	-3d6 INT
Crimson Anger Inducer	400/dose	.2 gm.	-1 1/2 d6 EGO
Last Rite Death Sim.	400/dose	.2 gm.	-3d6 STUN
Paisley Hallucinogen	400/dose	.2 gm.	-3d6 INT
Slaver Hypnotic Drug	400/dose	.2 gm.	-1d6 INT and -1d6 EGO
Illness Simulation	400/dose	.2 gm.	-1 1/2 d6 CON
Spinner Inebriant	400/dose	.2 gm.	-2d6 INT and -1d6 EGO
The Paralyzer	400/dose	.2 gm.	-3d6 STR
Triglyceride Stimulant	400/dose	.2 gm.	+1d6 DEX
Healing Devices			
Personal Autodoc	100	1.6	3d6 healing, 14- Act. roll
Flight			
Jetpack	1500	3.2	10" Flight
Life Support			
Artificial Gills	10	.4	Breathe Underwater
Filter Noseplugs	100	3.2	Protection from gas
Emergency Bubble	30	.4	Protects from Space, 14- Act.
TM&M Standard Spacesuit	670	3.2	Lasts 1 day
Combat Spacesuit	6430	25.8	Lasts 1 day, +7 PD +8 ED
Space Belt	4000	.4	Life Support for 1 day

WEAPONS

NAME	COST	OCV	RMOD	DAMAGE	SHOTS	MASS	NOTES
Handguns							
Blaster	400	+0	-1/3"	2d6K	6	1.6	Physical Damage
Needler	400	+0	-1/3"	2d6K	6	1.6	
Blaster+scope	1000	+2	-1/3"	2d6K	4	1.6	
Kicker	400	+0	-1/3"	6d6	6	1.6	
Stunner	400	+0	-1/3"	6d6	6	1.6	STUN only
Tight Beam Blaster	400	+0	-1/3"	1d6+1K AP	6	1.6	Armor Piercing
Mauler Mark IV	100	-2	-1/1"	8d6	6	1.6	Physical Damage, STR Min 15
Cryogenic Ndlr	640	+0	-1/3"	5d6 NND	6	1.6	14- Activation The Cryogenic Needler can also use any of the Drugs for ammo.

NAME	COST	OCV	RMOD	DAMAGE	SHOTS	MASS	NOTES
Rifles							
Stinger	400	+0	-1/3"	2d6-1K	30	3.2	Autofire, 14- Burnout
Fast Neutron Rifle	200	+0	-1/3"	5d6 NND	6	3.2	14- Burnout
Flechette Auto Launcher	640	+1	-1/6"	1d6K AP	30	12.5	Autofire, 14- Burnout
Ion AutoRifle	1000	+0	-1/6"	2d6+1K	60	12.5	14- Volatile
Magnum Needler	400	+0	-1/3"	3d6-1K	3	3.2	Physical Damage
Mauler Mark VIII	250	-1	-1/1"	10d6	6	4.8	Physical Damage, STR Min 20
OmniCorp Auto-Cannon	400	-1	-1/3"	1d6+1K	125	4.8	Autofire, STR Min 14
Power Blaster	400	+0	-1/3"	3d6-1K	3	3.2	
Gyrojet Sniper Rifle	800	+0	-1/24"	2d6-1 AP K	3	25	Takes Turn to Reload
Micro-rocket Launcher	150	+0	-1/3"	3d6+1K	1	4.8	Slow Missile
OmniCorp Cage Gun	400	+0	-1/3"	3d6 Entangle	6	1.6	Entangle
Zeon Laser Rifle	400	+0	-1/6"	3d6-1K	3	6.4	STR Min 10
Concealable Weapons							
Mini-Blaster	30	+0	-1/3"	1d6+1K	3	0.2	Easily hidden
Stun Capsules	100	+0	-1/2"	4d6NNDX	1.00	16	Explosion
Grenades							
Concussion	100	+0	-1/2"	9d6X	1	1.6	14- Act. Explosion
Plasma	100	+0	-1/2"	3d6KX	1	1.6	14- Act. Explosion
Pulse	100	+0	-1/2"	6d6NNDX	1	0.8	14- Act. Explosion

RESTRICTED DEVICES			
DEVICE	COST	MASS	NOTES
Mind Shield	1000	.4	10 points of EGO defense
Invisibility Belt	100,000	3.2	works vs. normal vision
Disguise Belt	100,000	3.2	14- Burnout
Slave Collar	400,000	3.2	8d6 Mind Control, 14-, no range
Truth Probe	64,000	25	15d6 Mind Control
Interrogator	200,000	25	15d6 Telepathy, no range
Teleportation Belt	64,000	0.8	120", 8 Uses



DEVICE LIST

The following devices are hand held, as opposed to starship devices. Subject to GM approval and monetary limitations, characters may own any of these items. To obtain a device, the character pays the Credit cost. The character does not pay character Points. The cost of each device in credits (Cr) is listed next to the device; 1 Credit equals about 1 American dollar.

These devices make it easy for players to make customized items, by adding Advantages or Limitations to the listed items, and changing the costs accordingly. For details, see the Advantages and Limitations section.

ARMOR

SECOND CHANCE VEST

5 CR

The lightest body armor made by Safeguard Inc., this tight-weave polymer Vest offers some slight protection against attacks. It has an activation roll of 8-; if the optional hit location rules are being used, the vest protects locations 10-13.

+6 PD and +3 ED — 15 Pts.

Limitation:

8- Activation — -2

Mass: 0.6 kg

END Cost: zero

Total Point Cost: 5

SAFEGUARD BODY ARMOR 100 CR

This body armor resembles a jumpsuit, and gives 6 PD and 6 ED defense. It comes with a "ski mask" and covers all locations, even the head.

+6 PD and +6 ED — 20 Pts.

Mass: 0.8 kg

END Cost: zero

Total Point cost: 20

SAFEGUARD HEAVY ARMOR 400 CR

This body armor is similar to the regular Safeguard Body Armor, and covers all locations. However, this armor is thicker and weighs more: characters take -1 to Concealment rolls if they attempt to wear this armor inconspicuously.

+9 PD and +9 ED — 30 Pts.

Mass: 1.6 kg

END Cost: zero

Total Point Cost: 30

ALPHA IMPROVED PAD-SUIT 15 CR

This body armor was developed to help protect Phychi kick boxers from suffering serious bodily injury during tournaments. To the surprise of its inventors, the pad-suits quickly caught on outside the arena; they can now be found almost anywhere. Although the pad-suits offer no protection from killing attacks (they have no resistant defense), they are of considerable value in hand-to-hand combat, at the end of long falls, and so forth. With the hood pulled up, the pad-suit protects all locations.

+10 PD (non-resistant) — 10 Pts.

Mass: 0.4 kg

END Cost: zero

Total Point Cost: 10

REFLECT ARMOR 30 CR

This armor was developed as a defense against energy weapons, and has since achieved wide popularity. It offers no protection against physical attacks (being made of a light reflective material) but is very useful against energy attacks.

+9 ED — 15 Pts.

Mass: 0.6 kg

END Cost: zero

Total Point Cost: 15

IMPROVED REFLECT ARMOR 400 CR

This body armor is similar to the standard reflect armor, but utilizes improved materials to give its wearer still greater defense advanced energy weapons.

+12 ED — 30 Pts.

Mass: 1.6 kg

END Cost: zero

Total Point Cost: 30

CROMTECH POWER LOADER 400 CR

Designed initially as a manual loader for heavy industry, this powered armor has become popular among those who wish to operate with a greatly increased Strength. However, the suit is rather bulky.

+3 PD — 5 Pts.

+20 STR — 20 Pts

Advantage:

Stored Power for STR: 5 minutes — +3/4

Limitation:

Bulky — -1/2

Mass: 3.2 kg

END Cost: zero

Total Point Cost: 27

OMNICORP ASSAULT ARMOR 18,000 CR

The top-of-the-line assault armor, this armor is used by military personnel and mercenaries for the most dangerous firefights. This Assault Armor is all that is necessary to turn an average soldier into a frightful engine of destruction. Even more powerful armor designs might exist, but are likely owned only by governments.

+12 PD and +6 ED 30 — Pts.

+15 STR — 15 Pts

Advantage:

Stored Power for STR: 5 minutes — +3/4

10" Flight — 20 pts.

Advantage:

Stored Power: 30 Minutes — +1

Mass: 150 kg

END Cost: zero

Total Point Cost: 96

FLICKER FORCE SHIELD 15 CR

This device is worn on the character's wrist. When turned on, it forms a shield of energy which the character can use as protection against attacks. In the hands of a skilled shield-user, the shield has an Activation Roll of 11- (or protects locations 4-5, 10-13, and one arm). GMs may wish to assign a lower activation roll (or less coverage) if the shield-user is a novice.

Armor: +6 PD +3 ED — 15 Pts.

Advantage:

Stored Power for 30 minutes — +1

Limitation:

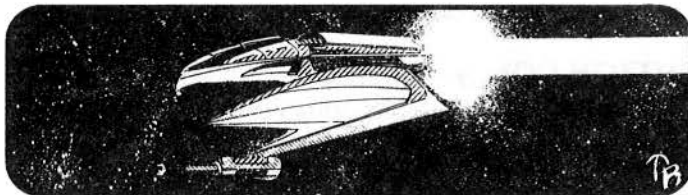
Requires Power — -1/2

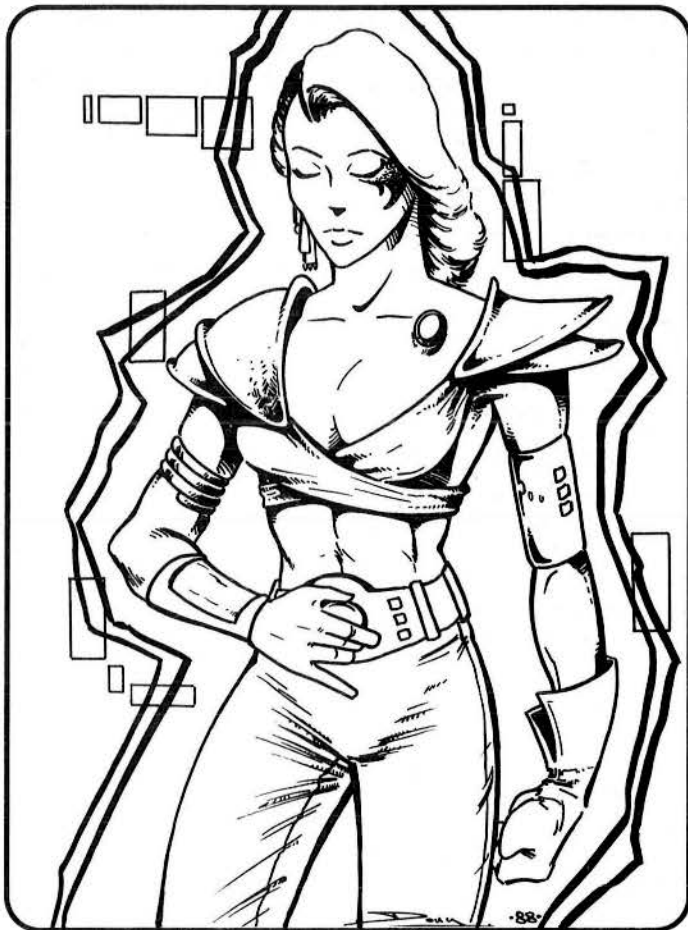
11- Activation — -1

Mass: 1.6 kg

END Cost: zero

Total Point cost: 12





FLICKER FORCE BELT 150 CR

This small device is worn around a character's waist. When turned on, it forms an obvious force field around the character which provides 6 PD and 6 ED. The Force Field Belt has a total operating time of 5 minutes before the batteries run out.

Armor: +6 PD +6 ED — 20 Pts.

Advantage:

Stored Power for 5 minutes — +3/4

Limitation:

Requires Power — -1/2

Mass: 2.4 kg

END Cost: zero

Total Point cost: 23

COMMUNICATORS

BUTTON COMMUNICATOR 10 CR

This Communicator is small enough to fit in an ear or inside a button, and provides two-way communication. Its total mass is 1.6 grams; it is smaller than 1 cm. in all dimensions. The Button Communicator is often worn by characters to keep in contact with each other, or planted in a car or room as a "bug". Its maximum range under normal conditions (in cities or woods) is 35" or 70 meters, and its batteries last for 1 day. The range may be shorter under adverse circumstances, like in caves or large starships, or much longer in empty space.

Radio (sound only) — 3 Pts.

Advantages:

Stored Power for 1 day — +1 1/2

Miniaturization: 4 levels, 1/250 mass. — +1

Active Pts.: 7

Base mass: 0.4 kg

Final mass: 1.6 grams

END Cost: zero

Total Point cost: 10

FLICKER PERSONAL COMMUNICATOR 30 CR

This Communicator is easy to carry in a pocket or holster, and provides two-way communication for 640 km., which is far enough to go from a planet's surface to a starship in orbit.

Radio (sound only) — 3 Pts.

Advantages:

Stored Power for 1 day — +1 1/2

Increased Range: 12 levels (x4000 range) — +3

Active Pts. = 16

Base range = 5 x Active Pts. = 80"

Final Range = 320,000" = 640 km.

Mass: 0.8 kg.

END Cost: zero, uses Stored Power

Total Point cost: 16

COMPUTERS

POCKET BRAIN 640 CR

The Pocket Brain is carried by almost all technical or scientific professionals on Theris. A general-purpose database is included with the Pocket Brain, and a wide variety of additional programs and data chips are available for low prices (10 - 100 Cr). The Pocket Brain can be used as a reference library or as a recording device.

Val	Char	Cost
5	INT	5
0	DEX	0
1	SPD	0
Cost		Skill
3		Scholar
1		KS: Emergency Medicine 11-
1		KS: Phychi 11-
1		KS: Alliance 11-
1		KS: General Science 11-
1		KS: General Math 11-
3		Linguist
1		Phychi
1		Tradespeak
4		Free memory for additional Skills, Programs or recorded information.
		Powers
1		Search Database for Information
1		Help User Operate this Computer
1		Record Information (typed-in, audio or video)
Total Points in Characteristics, Skills and Programs: 25		

Advantages:

Stored Power for 1 day — +1 1/2
 Miniaturization: 2 levels (1/16 mass) — +1/2
 Computer Points: 62
 Active Points: 31
 Base mass: 1.6 kg.
 Total Mass: .1 kg.
 END Cost: zero

Total Point Cost: 75 computer Points, 37 real Points

UNIVERSAL TRANSLATOR 1000 CR

This device is actually a computer that can translate a familiar or new language. To translate a new language usually takes at least a day of analysis of the language (although the GM may change this time period).

Val	Char	Cost
8	INT	8
0	DEX	0
1	SPD	0
Cost Skill		
7	Translation 13-	
3	Linguist	
1	Tradespeak	
1	Phychi	
1	Kindred	
1	Shadu	
1	Imen	
1	Ento	
1	Hawk language	
1	Heavyworlder language	
3	Free Memory for additional Languages	
Programs		
1	Analyze Unknown Spoken Language	
1	Analyze Unknown Written Language	
1	Interpreter: Continuous Translation from one Language to another (both Languages must be known to the Translator)	
Total Points in Characteristics, Skills and Programs: 32		

Advantages:

Stored Power for 1 day — +1 1/2
 Computer pts. 80
 Active Points 40
 Mass: 3.2 kg
 END Cost: zero

Total Point Cost: 80 computer Points, 40 real Points

VOICE DUPLICATOR 200 CR

This device is actually a computer that can analyze any voice it hears and then duplicate that voice. The analysis takes 1 hour, during which time the Voice Duplicator must hear continuous conversation in the voice to be Duplicated. Once the Duplicator has learned a voice, each time it is used to fool someone the Duplicator's Mimicry skill is rolled versus a suspicious character's PER roll. The Duplicator can only learn or use voices speaking languages it knows. It must also have the 5 point level in each language to imitate dialects, regional accents, and so forth. Tradespeak is the only exception: the maximum level obtainable in this very simple language is 2 points.

To use the Duplicator, a person talks into a microphone, and simultaneously the Duplicator produces the mimicked voice saying the same words. The user can speak so quietly that only the Voice Duplicator is heard by other characters. Since the Voice Duplicator must be plugged into an external power supply, it is most useful for talking to people over the vid-phone or when seated behind a desk.

Val	Char	Cost
8	INT	8
0	DEX	0
3	SPD	20
Cost Skill		
7	Mimicry 13-	
3	Linguist	
1	Tradespeak	
4	Phychi	
4	Kindred	
5	Free memory for memorized voices or Language skills.	
Programs:		
1	Analyze New Voice	
1	Imitate Voice from Memory	
Total Points in Characteristics, Skills and Programs: 54		

Mass: 1.6 kg

END Cost: 9

END/Turn (must be plugged into a power source)

Total Point Cost: 54 computer Points, 27 real Points

PORTABLE VOICE DUPLICATOR 6,400 CR

This unit is the same as the Voice Duplicator, except it has the following Advantages. It is small enough to hide on a character's body.

Stored Power for 3 hours — +1 1/4

Miniaturization: 2 levels (1/16 Mass) — +3/4

Base Mass: 12.5 kg. Final Mass: 0.2 kg.

Mass: 0.4 kg.

END Cost: zero, uses Stored Power

Total Point cost: 148 computer points, 74 real Points

DETECTORS**NEW HORIZONS POISON DETECTOR 30 CR**

This device can detect known poisons in a sample of food, water, or air, and gives the user a vague identification of the type of poison. A poison is defined as a substance harmful to humans. The Poison Detector is a Constant device; it draws power each Turn and requires 1 Turn (12 seconds) to analyze a sample. The 1 minute of stored power is therefore enough for 5 analyses before recharging.

Detect Common things (poison) — 5 Pts.

Analyze for type of poison — Pts. 5

Advantage: Stored Power (1 minute, 1 Turn to recharge)
 +1/2

Mass: .4 kg

END Cost: zero

Total Point Cost: 15

IR GOGGLES**200 CR**

IR goggles permit a character to see at night or in a dark room. The IR image is blurry; people appear as outlines and are hard to recognize. Warm objects, like people, appear bright while cooler things are dark. This detector is Passive; it does not contain an IR light emitter, but depends on the intrinsic radiation emitted by warm objects.

Detects Common Energy: IR — 5 Pts.

Locate and Analyze (forms image) — +5 Pts.

Advantages:

Stored Power for 3 hrs., recharge in 1/2 hr — +1 1/4

Miniaturization: 1 level — +1/4

Mass: 0.2 kg.

END Cost: zero, uses Stored Power

Total Point cost: 25

IR CONTACT LENSES**640 CR/PAIR**

For those to whom money is no object, these work like the IR goggles above but are much smaller. These contact lenses do not impair normal vision, but produce faint IR images which are clearly visible when characters are in a dark place. They are formed out of plastic impregnated with IR-sensitive chemicals which become depleted after 3 hours. After 3 hours of use, the contact lenses stop working and must be discarded. Notice the extremely small mass: 0.05 grams (not kilograms). The lenses are approx. 1 cm across and 0.5 mm thick, and the same density as water.

The statistics are the same as for IR goggles except:

Advantages:

Miniaturization: 7 Levels (1/16000 mass) (1 3/4)

Stored Power for 3 hrs., no recharge (+3/4) base mass

0.8 kg / 16 000 = 0.05 grams

Total Point cost: 35 Pts.

DOLPHIN SONAR DEVICE**1500 CR**

This device is placed against the ground or a wall of a building and it will give a 3-D picture of caves, rooms, ventilation ducts and so on. It has a duration of 30 minutes, which means the device can be left on for 30 minutes straight, or turned on and off many times for a total time of 30 minutes. After the stored power is used up, it must be recharged. It will recharge in 5 minutes.

Detect Common Energy: sound — 5 pts.

Locates (forms image) — +5 pts.

Analyzes (3-d image) — +5 pts.

Advantages:

4 levels of increased range, base range: -1/3",
final range: -1/48" — +1

Stored Power for 30 minutes — +1

Mass: 6.4 kg

END Cost: zero (uses Stored Power)

Total Point Cost: 45

DRUGS

NEW HORIZONS**100 CR PER DOSE****ARTIFICIAL ADRENALINE**

Adrenaline causes a short-lived "rush" of energy (+2d6 STR). The extra STR is lost at the rate of 1 every 5 minutes, until the character is back to his or her normal STR. The drug is not completely reliable; each time a character takes a

dose, the Activation roll must be made. If it fails, the drug has no effect. If the Activation roll succeeds, the drug has its normal effect and duration (and no further rolls are made).

A character taking more than one dose at once may overdose. The character must make a CON roll or take 1d6 STUN for every 10 Active Points in the additional doses.

The adrenaline is assumed to be in pill or liquid form, and to attack a character with it in combat gives the attacker a zero OCV and -1/3".

+2d6 to STR — 20 pts.

Advantage:

Lose the extra STR at 1 every 5 minutes — +1

7 levels Miniaturization, 40 Active points, base mass: 3.2 kg, final mass: 2 grams (pill sized) — +1 3/4

Limitation:

1 Limited Use, never reload — -2 1/4

Zero OCV — -1/2

Mass: 2 grams

END Cost: zero

Total Point Cost: 20

ZEON TRUTH SERUM**400 CR PER DOSE**

This drug lowers the victim's EGO, making it easier to use Interrogation to find out what they know. The EGO quickly returns (1/2 EGO per phase), so the victim must be questioned immediately.

The truth serum is assumed to be in pill or liquid form, and to attack a character with it gives the attacker a zero OCV (and -1/3").

-2d6 EGO (Cost Multiple x2) — 40 pts.

Advantages:

The lost EGO returns at 1/2 EGO/Phase — +1/4

7 levels Miniaturization, 50 Active points, base mass: 6.4 kg, final mass: .4 grams — +1 3/4

Limitations:

1 Limited Use, never reload — -2 1/4

Zero OCV — +1/2

Mass: .4 grams

END Cost: zero

Total Point Cost: 32

GENERIC**400 CR PER DOSE**

All of the following drugs have the same statistics. To administer the drug, they are assumed to be in a syringe or liquid filled capsule that when broken absorbs through the skin. This gives the attacker only 1/2 OCV and -1/3" to hit a target.

3d6 CHA change/Cost Multiple — 30 pts.

Advantages:

Wears off at 1 point/ 1 minute — +3/4

Miniaturization: 7 levels 53 Active Points, base mass 6.4 kg, final mass .4 grams (about the size of a capsule) — +1 3/4

Limitations:

1 Limited Use, no reload — -2 1/4

1/2 OCV when used to attack — -1/4

Mass: .4 grams (capsule sized)

END Cost: zero

Total Point Cost: 30

Credit Cost: 400 per dose

Except for the inebriants, the following drugs are illegal on most worlds. Characters must have Streetwise or Pharmacology to obtain them.

The Drug	The Effects
Triton Amnesia Drug	3d6 INT drain
Crimson Anger Inducing Drug	1 1/2 d6 EGO drain
Last Rite Death Simulation	3d6 STUN drain
Paisley Hallucinogenic Drug	3d6 INT drain
Slaver Hypnotic Drug	1d6 INT and 1d6 EGO drain
Hypochondriac Illness Simulation	1 1/2 d6 CON drain
Spinner Inebriants	2d6 INT and 1/2 d6 EGO drain
The Paralyzer	3d6 STR drain
Triglyceride Stimulant	1d6 DEX addition

HEALING

PERSONAL AUTODOC 100 CR

This device injects tissue-repair enzymes and nutrients into the bloodstream of an injured person, stimulating rapid healing. The healing doesn't always work, however. Some tissues such as brain matter are unable to regenerate in this manner, and sometimes the victim's body rejects the drug. In game terms, this unreliability is reflected as an Activation roll: if the roll fails, the Autodoc cannot be used to repair that wound.

There are other restrictions on the use of Healing described in the Device capabilities section.

3d6 Healing — 30 Pts.

Limitations:

Limited Uses: 12 uses 5 minutes to reload — +0

14- Activation Roll — -1/2

Mass: 1.6 kg.

END cost: zero

Total Point Cost: 20

FLIGHT

JETPACK 1500 CR

Characters wearing a jetpack can fly about, either in space or above planetary surfaces. Self-contained jetpacks are often attached to spacesuits, so the wearer can jet across from one spaceship to another, or return to a spaceship after accidentally falling off.

10" Flight — 20 Pts.

Advantage:

Stored Power for 3 hours — +1 1/4

Mass: 3.2 kg.

END cost: zero (uses Stored Power)

Total Point cost: 45

LIFE SUPPORT

ARTIFICIAL GILLS 10 CR

Artificial gills are very popular among Theris skin divers. Artificial Gills extract oxygen from the water using large, fan-like membranes. After 1 day of use, the oxygen extractors become clogged with algae and silt and the Gills must be cleaned before being reused.

Life Support (breathe under water) — 5 Pts.

Advantage:

Stored Power for 1 day — +1 1/2

Mass: 0.4 kg.

END Cost: zero (uses Stored Power)

Total Point Cost: 12

FILTER NOSEPLUGS 100 CR

Filter noseplugs protect characters from smoke, STUN gas, and other poisons in the air by filtering them out. After 30 minutes of use, the filtration chemicals are exhausted and the noseplugs become useless.

Life Support: (immune to inhaled gas) — 10 Pts.

Advantage:

Stored Power for 1 day, never rechargeable — +1

Miniaturization: 4 levels Active Pts.: 20 Base Mass: 0.8 kg.

Final Mass: 3.2 grams — +1

Limitations:

Does not work under water — -1/2

Mass: 3.2 grams

END cost: zero (uses Stored Power)

Total Point Cost: 20

EMERGENCY BUBBLE 30 CR

Often carried on passenger liners, Emergency Bubbles provide stopgap protection against vacuum. In the event of an unforeseen catastrophe, individuals who don't have spacesuits can climb into the bubbles. There they will be protected (hopefully) long enough for those in spacesuits to carry them to safety. Each bubble contains enough air for 3 hours, and can only be used once. Characters inside a bubble cannot affect the outside world at all unless they first open or break the bubble (in which case they lose whatever protection it provided).

Life Support: survival in space — 20 Pts.

Advantage:

Stored Power for 3 hours, never recharges — +3/4

1 Level Miniaturization — +1/4

Limitation:

Extremely Bulky (Wearer cannot take actions) — -1

14- Activation — -1/2

Mass: 0.4 kg

END Cost: zero (uses Stored Power)

Total Point Cost: 16

TM&M STANDARD SPACESUIT 670 CR

This is a standard spacesuit on Alliance vessels, especially Phychi ones. A Flicker Personal Communicator is built into the suit.

The Standard spacesuit has 4 DEF (i. e. 4 resistant PD and ED) and 6 BODY. This DEF and BODY is used only to determine damage to the spacesuit; characters wearing this spacesuit do not get any additional defenses.

Damaged spacesuits begin leaking air as explained in the Life Support description; the Stored Power duration goes down by 1 level per BODY done to the suit. The Stored Power durations are repeated here for convenience: 1 Turn (12 seconds), 1 minute, 5 minutes, 1/2 hour, 3 hours, 1 day. For example, a spacesuit which is hit by a 9 BODY attack will take 5 BODY and all its air will leak out in 1 Turn.

Life Support: survival in space — 20 Pts.

Advantage:

Stored Power for 1 day, recharge in 3 hrs — +1 1/2

Limitation:

Preparation Time: (time spent putting on suit) 1 Turn +1/2

Mass: 6.4 kg

END Cost: zero (uses Stored Power)

Total Point Cost: 33 **Total Credit Cost:** 640

Extra device: Flicker Personal Communicator

+30 Credits and +0.8 kg.

Total Mass: 7.2 kg **Total Credit Cost:** 670 Cr

TM&M COMBAT SPACESUIT 6430 CR

This spacesuit is used by military personnel, security guards at space stations, and space explorers. It has 7 resistant PD and 8 resistant ED. Otherwise, it is identical to the TM&M Standard Spacesuit.

Life Support: survival in space — 20 Pts.

Armor: +7 PD and +8 ED — 25 Pts.

Advantage:

Stored Power for 1 day, recharge in 3 hrs — +1 1/2

Miniaturization: 2 levels — +1/2

Active Pts.: 112 Base mass: 400 kg. Total Mass: 25 kg.

Limitation:

Preparation Time: (time spent putting on suit) 1 Turn -1/2

Clumsy: -2 to wearer's DCV and DEX rolls — -1/2

Mass: 25 kg

END Cost: zero (uses Stored Power)

Total Point Cost: 67 **Credit Cost:** 6400 Cr

Extra device: Flicker Personal Communicator

+30 Credits and +0.8 kg.

Total Mass: 25.8 kg

Total Credit cost: 6430 Cr

SPACE BELT 4000 CR

This small device is worn around a character's waist. When turned on, it forms a force field around the character and acts as a spacesuit, protecting the wearer for up to 1 day in space. In the Alliance, space belts are not available; people use the TM&M spacesuits listed above. However, the GM may choose to make them available in a particular campaign, perhaps at an increased Credit cost.

Life Support: survival in space — 20 Pts.

Advantage:

Stored Power for 1 day, recharge in 3 hrs — +1 1/2

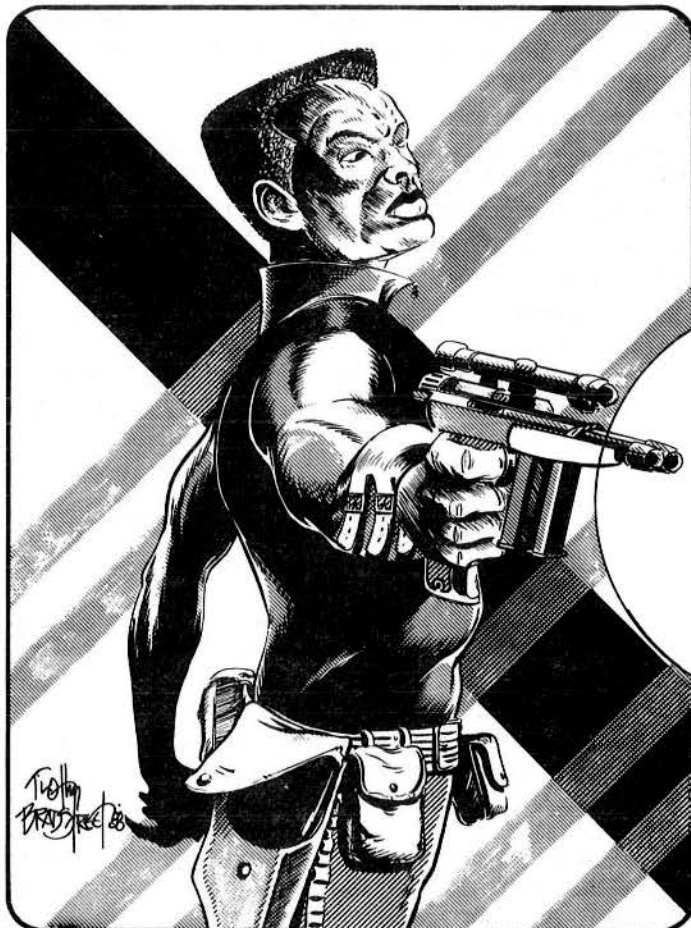
Miniaturization: 2 levels — +1/2

Active Pts.: 50 Base mass: 6.4 kg. Final Mass: 0.4 kg.

Mass: 0.4 kg

END Cost: zero (uses Stored Power)

Total Point Cost: 60



WEAPONS

HANDGUNS

BLASTER 400 CR

This is a small hand held gun that shoots a laser beam. Used blasters are very common in the Alliance, and are often sold for lower Credit costs (with minor problems such as Activation Rolls). The blaster uses small energy cells which have enough power for 6 shots, and are discarded after use. The energy cells are very cheap; they cost 5 Credits each, and weigh 0.1 kg.

2d6K Energy Damage — 30 pts.

Range Modifier -1/3" — +0

6 shots/clip, 1 phase reload — +0

+0 OCV Modifier — +0

Mass: 1.6 kg

END Cost: zero

Total Point Cost: 30

NEEDLER 400 CR

Same as the Blaster except it does 2d6 Killing Physical Damage.

BLASTER WITH LASER SPOTTING SCOPE

1000 CR

This weapon is a Blaster with a low-power laser mounted on the barrel, which shines a red dot where the weapon is aimed. This "spotting scope" makes the weapon much easier to aim accurately; the user gets a +2 OCV modifier. It has fewer shots per clip, and is smaller and easier to hide than the standard Blaster.

2d6K Energy Damage — 30 Pts.
 +2 OCV Modifier — +10 Pts.
 Range Modifier -1/3" — +0
 4 shots/clip, 1 phase reload — -1/4
 Advantage:
 Miniaturization 1/4 mass — +1/4
 Mass: 1.6 kg
 END Cost: zero
Total Point Cost: 40

KICKER

400 CR

Same as the Blaster except the blaster beam is slightly unfocused, changing the damage from 2d6K to 6d6 Normal Energy damage.

STUNNER

400 CR

By unfocusing the beam still further, the Blaster becomes a 6d6 STUN Only Energy damage weapon.

TIGHT BEAM BLASTER

400 CR

By focusing the beam more tightly, the Blaster becomes a 1d6+1 Killing Armor Piercing weapon.

MAULER MARK IV

100 CR

A heavy, inaccurate weapon, the Mauler shoots a powerful beam of concussive force. It is favored by those who wish to do punishing damage and don't care too much who receives it. The Mauler can be extremely valuable in close quarters (like a barroom brawl), but is less useful in a ranged fire-fight. It is nearly worthless against distant opponents.

8d6 Physical Damage — 40 Pts.
 -2 OCV Modifier — -10 Pts.
 Range Modifier -1/1" — -1/4
 6 shots/clip, 1 phase reload — +0
 Limitation:
 STR Min 13 — -1/4
 Mass: 1.6 kg
 END Cost: zero
Total Point Cost: 20

CRYOGENIC NEEDLER

400 CR

The Cryogenic Needler has a tank of knockout drug, which it flash-freezes in the shape of a needle and then ejects at high speed towards the target. The frozen drug penetrates the target's skin, where it melts and does NND STUN damage. The defense is 5 resistant PD, which prevents the frozen drug from reaching the target's skin. Aliens with nonhuman metabolisms (such as Doppelgangers) may take only 1/2 damage at the GM's discretion because the drug is intended primarily for humans.

5d6 Damage — 25 Pts.
 Range Modifier -1/3" — +0
 +0 OCV Modifier — +0
 6 shots/clip 1 phase reload — +0

Advantages:

No Normal Defense Attack — +1
 Miniaturization: 1/4 mass — +1/4

Limitations:

14- Activation Roll — -1/2
 STR Minimum 10 — -1/4

Mass: 1.6 kg

END Cost: zero

Total Point Cost: 32

OTHER AMMUNITION FOR CRYOGENIC NEEDLER

Any of the following drugs may be loaded into the Cryogenic Needler. One clip of ammunition costs 4 Credits, in addition to the cost of the drug.

Triton Amnesia:	3d6 INT drain
Crimson Anger-Inducer:	1 1/2d6 EGO drain
Paisley Hallucinogen:	3d6 INT drain
Slaver Hypnotic:	1d6 INT and 1d6 EGO
Spinner Inebriant:	2d6 INT and 1/2 d6 EGO drain
Paralyzer:	3d6 STR drain

RIFLES

STINGER AUTOFIRE BLASTER

400 CR

2d6-1K Energy Damage — 25 Pts.
 Range Modifier -1/3" — +0

Advantages:

Autofire — +1/4
 32 shots/clip (1 phase reload) — +1
 Miniaturization (1/4 mass) — +1/4

Limitations:

14- Burnout Roll — -3/4
 STR minimum of 10 — -1/4

Mass: 3.2 kg

END Cost: zero

Total Point Cost: 31

FAST NEUTRON RIFLE

200 CR

The Fast Neutron Rifle is the great equalizer, because heavily armored targets become vulnerable. Fast Neutrons pass right through the human body without doing much harm, but once they slow down they become dangerous. In game terms, this means that the Fast Neutron Rifle is a No Normal Defense attack, and the defense is having less than 7 resistant PD. Large defenses simply slow down the Neutrons, making them dangerous. Similarly, if a target is hiding behind a thin wall, metal door, or other object less than 1 foot thick, the Fast Neutron rifle will harm them. If the target steps out in the open and removes any heavy Armor, the Fast Neutron Rifle will become harmless.

5d6 Damage — 25 Pts.
 Range Modifier -1/3" — +0

Advantages:

No Normal Defense
 (defense is less than 5 resistant PD) — +1

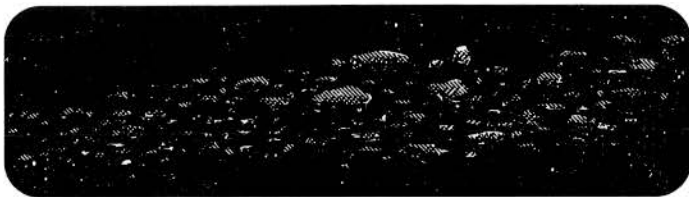
Limitations:

14- Burnout Roll — -3/4
 STR minimum of 10 — -1/4

Mass: 6.4 kg

END Cost: zero

Total Point Cost: 25



FLECHETTE AUTO LAUNCHER 640 CR

The Flechette Auto-Launcher fires a stream of small darts (flechettes) at extremely high velocity. The flechettes are extremely sharp and aerodynamically designed for minimum resistance as they fly through the air. However, the weapon is rather fragile, and will often become jammed or disabled if used frequently.

1d6K Physical Damage — 15 Pts.

+1 OCV Modifier — +5 Pts.

Range Modifier -1/6" — +1/4

30 shots/clip, 1 phase reload — +1

Advantage:

Armor Piercing — +1/2

Autofire — +1/4

Limitation:

14- Burnout -3/4

Mass: 12.5 kg —

END Cost: zero

Total Point Cost: 34

ION RIFLE 1000 CR

The Ion Rifle shoots electrically charged metal pellets using a pulsed magnetic field. The barrel of the gun has thick coils of wire around it, giving the gun a distinctive appearance. The Ion Rifle is very heavy, and normally used only by very strong soldiers or by soldiers lying prone, bracing the device on the ground. This posture reduces the STR Min to 12. Ion Rifles have an additional problem: they occasionally explode, doing a 10.5 d6 normal physical explosion centered on the gun. Ion Rifles are standard issue for marines in the Kindred military.

2d6+1K Physical Damage — 35 Pts.

Advantages:

Selective Fire — +1/2

60 shots/clip (1 phase reload) — +1 1/4

Range Modifier -1/6" — +1/4

Miniaturization (2 levels) Active Pts.: 105 Base Mass: 200 kg. Final Mass: 12.5 kg. — +1/2

Limitations:

14- Burnout Roll — -3/4

STR minimum of 17 — -1/2

Volatile: Active Pts./10 d6 = 10.5 d6 Explosion when Burnout Roll fails — -3/4

Mass: 12.5 kg

END Cost: zero

Total Point Cost: 41

MAGNUM NEEDLER 400 CR

Same as Power Blaster except it does 3d6-1 Killing Physical Damage.

MAULER MARK VIII 250 CR

An even more punishing version of the basic Mauler design. Due to the increased size of the weapon, the Mauler Mark VIII is more accurate than the Mark IV, but is still a poor gun for a long distance gun battle.

10d6 Physical Damage — 50 Pts.

-1 OCV — -5 Pts.

Range Modifier -1/1" — -1/4

6 shots/clip, 1 phase reload — +0

Limitations:

STR minimum of 20 — -1/2

Mass: 4.8 kg

END Cost: zero

Total Point Cost: 26

OMNICORP AUTO-CANNON 400 CR

Designed specifically for reliable, continuous automatic fire, the OmniCorp Auto-cannon features sophisticated firing and cooling mechanisms. Moreover, given the size of its magazine, its user rarely need worry about running out of ammunition. In combat, the Auto-cannon is often used to pin down enemies or provide cover for friendly forces.

1d6 +1K Physical Damage — 20 Pts.

-1 OCV Modifier — -5 Pts.

Range Modifier -1/3" — +0

125 shots/clip, 1 phase reload — +1 1/2

Advantage:

Autofire — +1/4

Limitation:

STR Min 14 — -1/2

Mass: 4.8 kg

END Cost: zero

Total Point Cost: 30

POWER BLASTER 400 CR

The Power Blaster uses up its energy at twice the normal rate, doing 3d6-1 Killing damage, but having only 3 shots before reloading. Reloading takes 1 phase and the energy cells are the same as the normal Blaster. The blaster is larger (for heat dissipation), weighing 3.2 kg.

GYROJET SNIPER RIFLE 800 CR

The Gyrojet Sniper Rifle enables its user to engage opponents at extremely long range. It completely outranges most rifles, and has been a favorite of marksmen since it was first introduced. It is slow to reload, and its clip holds only 3 rounds, but most snipers think the extra range to be worth the sacrifice.

2d6-1K AP Physical Damage — 37 Pts.

Range Modifier -1/24" — +3/4

3 shots/clip, 1 turn reload — -3/4

Mass: 20 kg

END Cost: zero

Total Point Cost: 37

MICRO-ROCKET LAUNCHER 800 CR

This heavy weapon does tremendous damage, and was initially designed as an anti-vehicular weapon. It must be reloaded each time it is fired; moreover, the rocket flies slowly enough to be shot from the air. The Micro-rocket launcher is a favorite of Heavy-Worlders.

3d6+1K Physical Damage — 50 Pts.

+0 OCV Modifier — +0 Pts.

Range Modifier -1/3" — +0

1 shots/clip, 1 phase reload — -1

Limitation:

Slow Missile — -1/2

Mass: 6.4 kg

END Cost: zero

Total Point Cost: 37

OMNICORP CAGE GUN**400 CR.**

The OmniCorp Cage Gun fires a quick acting crystalline matrix which serves to bind and entangle whatever or whom-ever it strikes. The only way to remove the entangle is to destroy it or to apply an anti-bonding agent which will dissolve the entangle completely after several minutes.

3d6, 3 DEF Entangle — 30 Pts.
 +0 OCV Modifier — +0
 Range Modifier -1/3" — +0
 6 shots/clip, 1 phase reload — +0
 Mass: 1.6 kg
 END Cost: zero
Total Point Cost: 30

ZEON LASER RIFLE**400 CR**

3d6-1 K Energy Damage — 40 Pts.
 Advantages:
 Range Modifier: x2 to -1/6" — +1/4
 Limitations:
 3 shots/clip (1 phase reload) — -1/2
 STR minimum: 10 — -1/4
 Mass: 6.4 kg
 END Cost: zero
Total Point Cost: 29

**CONCEALABLE WEAPONS****MINI-BLASTER****30 CR**

The mini-blaster is smaller, cheaper and does less damage than the standard blaster. Its small size makes it easy to hide in a shoe heel, belt buckle, or other medium-sized item of clothing.

1d6+1K Energy Damage — 20 Pts.
 Range Modifier -1/3" — +0
 +0 OCV Modifier +0
 Advantages:
 Miniaturization: 1/4 mass — +1/4
 Limitations:
 3 shots/clip, 1 phase reload — -1/2
 Mass: 0.2 kg
 END Cost: zero
Total Point Cost: 17

STUN CAPSULES**100 CR EACH**

When broken, these capsules emit a gas that knocks characters out without doing BODY to them. The damage done is highest in a central hex, and falls off by 1d6 (the highest one) per hex away from the central one. The defense is 10 Points Life Support, i.e. a gas mask or spacesuit. These capsules are so tiny (1.6 grams; less than 2 cm. long) that they can be easily concealed in a necklace, bracelet, button or other item of clothing.

4d6 damage — 20 Pts.

Advantages:

No Normal Defense Damage — +1

Explosion — +1/2

Miniaturization: 6 levels 1/4000 mass — +1 1/2

Active Points: 50 Base mass: 6.4 kg Final Mass: 1.6 grams

Limitations:

1 shot: no reload — -2 1/4

14- Activation Roll — -1/2

No Knockback — -1/4

Mass: 1.6 grams

END Cost: zero

Total Point Cost: 20

GRENADES**CONCUSSION GRENADE****100 CR EACH**

All grenades may be fused to go off on impact or a fixed time delay after the pin is pulled (normally 4 Segments). The Concussion grenade is simply an explosive which makes a shock wave in the air which hits people and objects like a brick wall, doing normal physical damage.

9d6 normal physical damage — 45 Pts.

Advantages:

Explosion — +1/2

Miniaturization: 2 levels — +1/2

Active Pts.: 67 Base mass: 25 kg. Final mass: 1.6 kg.

Limitations:

1 shot, no reload — -2 1/4

-1/1" when thrown — -1/4

14- Activation Roll — -1/2

Mass: 1.6 kg

END Cost: zero

Total Point Cost: 22

MODIFIED GRENADES**PLASMA GRENADE****100 CR EACH**

Same as Concussion grenade except it does 3d6 Killing Energy damage.

PULSE GRENADE**100 CR EACH**

Same as Concussion grenade except it does NND damage by producing an electric pulse which shocks the target's nervous system. The defense is being electrically shielded, either by wearing metal armor or by being surrounded by water.

6d6 damage — 30 Pts.

Advantages:

Explosion — +1/2

No Normal Defense — +1

Miniaturization: 2 levels — +1/2

Active Pts.: 75 Base mass: 25 kg. Final mass: 1.6 kg.

Limitations:

1 shot, no reload — -2 1/4

-1/1" when thrown — -1/4

14- Activation Roll — -1/2

Mass: 0.8 kg

END Cost: zero

Total Point Cost: 22

RESTRICTED DEVICES

Restricted Devices include device functions such as Mind Control, Telepathy, Teleportation, and Invisibility. They are listed below instead of in the normal list because they are often not allowed in campaigns. Restricted Devices have their Credit cost multiplied by 100, to reflect their powerful nature and lack of availability. In some campaigns a certain Restricted Device may be very common; if so, the GM should assign a lower Credit cost to the common device.

In the Alliance, none of these devices are available for sale.

MIND SHIELD 1000 CR

This device, worn as a helmet, protects its wearer's privacy by providing defense against Telepathy, Mind Control and other Mental Powers.

10 Points EGO defense — 10 Pts.

END cost: zero

Mass: 0.4 kg,

Point cost: 10

INVISIBILITY BELT 100,000 CR

This invisibility belt partially conceals a character, but the character still has a fringe effect, and may be seen by someone within 1 hex who makes a Perception Roll.

Invisible to normal vision — 20 Pts.

Advantage:

Stored Power for 1/2 hr, recharge in 5 minutes — +1

Mass: 3.2 kg

END Cost: zero (uses Stored Power)

Total Points Spent: 40

DISGUISE BELT 100,000 CR (NEW TECHNOLOGY, INC.)

This Disguise Belt will project a light illusion, thereby changing the wearer's appearance. To prepare the belt for use takes 5 minutes and a Computer Programming roll. In addition, to cast an illusion of a specific person takes a picture or videotape of that person.

The belt has enough stored power for 3 hours of continuous use or it can be turned off and on repeatedly for a total of 3 hours time. Each time it is turned on, the player should make a roll. On 14 or less, the belt malfunctions and needs repairs (use the skill Electronics).

10d6 Light Illusion — 50 Pts.

Advantages:

Stored Power: 3 hours — +1 1/4

1 level Miniaturization — +1/4

Active Points: 63, base mass: 12.5 kg, final mass: 3.2 kg

Limitation:

Burnout roll 14- — -3/4

Illusion must be pre-programmed: it takes 5 minutes and a computer programming roll. To make an illusion of a specific person requires a picture. — -1

Illusion can only be cast on wearer — -1/2

Mass: 3.2 kg

END Cost: zero (uses Stored Power)

Total Point Cost: 39



SLAVE COLLAR 400,000 CR

This device forces its victim to obey all spoken commands like a zombie. For each new command, the dice of Mind Control are re-rolled and again compared to the victim's EGO, as explained in the description of the Alien Power "Mind Control".

Mind Control 8d6 — 40 pts.

Advantages:

Stored Power for 1 day — +1 1/2

Miniaturization: 3 levels — +3/4

Active Pts.: 100 Base Mass: 200 kg Final mass: 3.2 kg.

Limitations:

No Range — -1/2

14- Activation roll — -1/2

Mass: 3.2 kg.

END cost: zero (uses Stored Power)

Point cost: 65

TRUTH PROBE 64,000 CR

This device forces its victim to answer questions truthfully through direct mental domination. The device is not portable, and must be plugged into an external power source. In game terms, the effect is Mind Control with only one command possible: "Answer truthfully".

Mind Control 15d6 — 75 pts.

Limitations:

Command cannot be varied — -1

Mass: 25 kg.

END cost: 15/use

Total Point Cost: 37

TELEPATHIC INTERROGATOR 200,000 CR

The Telepathic Interrogator permits the user to inspect a person's thoughts at will. This is much more powerful than the Truth Probe, because the operator doesn't even have to ask detailed questions, but can replay entire scenes from the victim's memory (if the Telepathy roll is high enough). Such devices would have a tremendous effect on society, perhaps causing the end of crime, or the creation of a terrifying totalitarian state.

Telepathy 15d6 — 75 pts.

Limitations:

No Range — -1/2

Mass: 25 kg.

END cost: 15/use

Point cost: 50

TELEPORTATION BELT**64,000 CR**

This teleportation belt is easily carried around, and allows its user to travel up to 1/4 km in two Phases. One Phase is spent preparing to Teleport, and one Phase is spent Teleporting. Further details about Teleportation are given in the "Teleporters" device description.

Teleport 1 human (200 kg) — 30 pts.

Max. Range 120" (about 1/4 km.) — +15 pts.

Advantages:

Miniaturization (1/4 mass) +1/4

Limitations: —

8 Limited Uses Recharges after 1 day — -1/2

Active Pts: 55 Base mass: 3.2kg. Final mass: 0.8 kg.

END Cost: zero

Total Point Cost: 37

BUILDING STARSHIPS



The system explained below enables players to quickly build a starship in game terms, but it will still be necessary for the players or GM to make a detailed map of any starship which is used frequently. These starships are generic, and important ships should be personalized by adding extra small items, like curtains, alien pets, or emergency bulkheads.

This section is broken into three parts:

- 1) Ship's Statistics
- 2) Ship's Equipment
- 3) Ship Disadvantages

HOW DO CHARACTERS BUY A STARSHIP?

The GM may build the ship, ask the players to build their own ship, or use one from published sources. Players do **not** pay for starships with Character Points. The GM will assign the number of Points (sometimes called construction Points) that the players may 'spend' building their ship. The more Points, the more powerful the ship. The Point cost of a starship determines the Credit cost of the starship, as explained at the start of the Technology section. The table below is a guide to help the GM decide how many construction Points to use in building a starship.

Total Points	Credit Cost	Ship is:	Example:
50	2 KCr	very weak or Lifeboat	Shuttlecraft
200-300	200-800 KCr	average	Small Fighter ship, pleasure yacht
500	4 MCr	good	explorer's ship
700	13 MCr	very good	scout craft, PC's ship
1500	180 MCr	devastating	Space Pirate's ship, small battleship
			Large military battleship

HOW TO FIGURE THE COST OF A STARSHIP

Starships are built with Points, the same way Characters are. Starships have Statistics (like BODY, DEF, etc.) and Equipment. If the PCs want more points to build their ship, they may take starship Disadvantages (GM permitting) such as "Can't land on planets" or "Distinctive Looks". To determine the actual credit cost of the spaceship, refer to the Device Cost Table.

STATISTICS

Statistics describe the hull of the ship (like its BODY, DEF, number of rooms, and so on). Statistics have their cost listed next to them on the Starship Record Sheet. For example, BODY for a ship costs 2 Points for each +1 BODY. Some starship Statistics start at zero (0), while others start at 10, 2 or 1. For example, a starship's BODY starts at 10. For 20 points, a ship can have 20 BODY.

Some of the Statistics are optional. For example, not all starships have Force Fields, Maneuverability, Life Support, or Rooms.

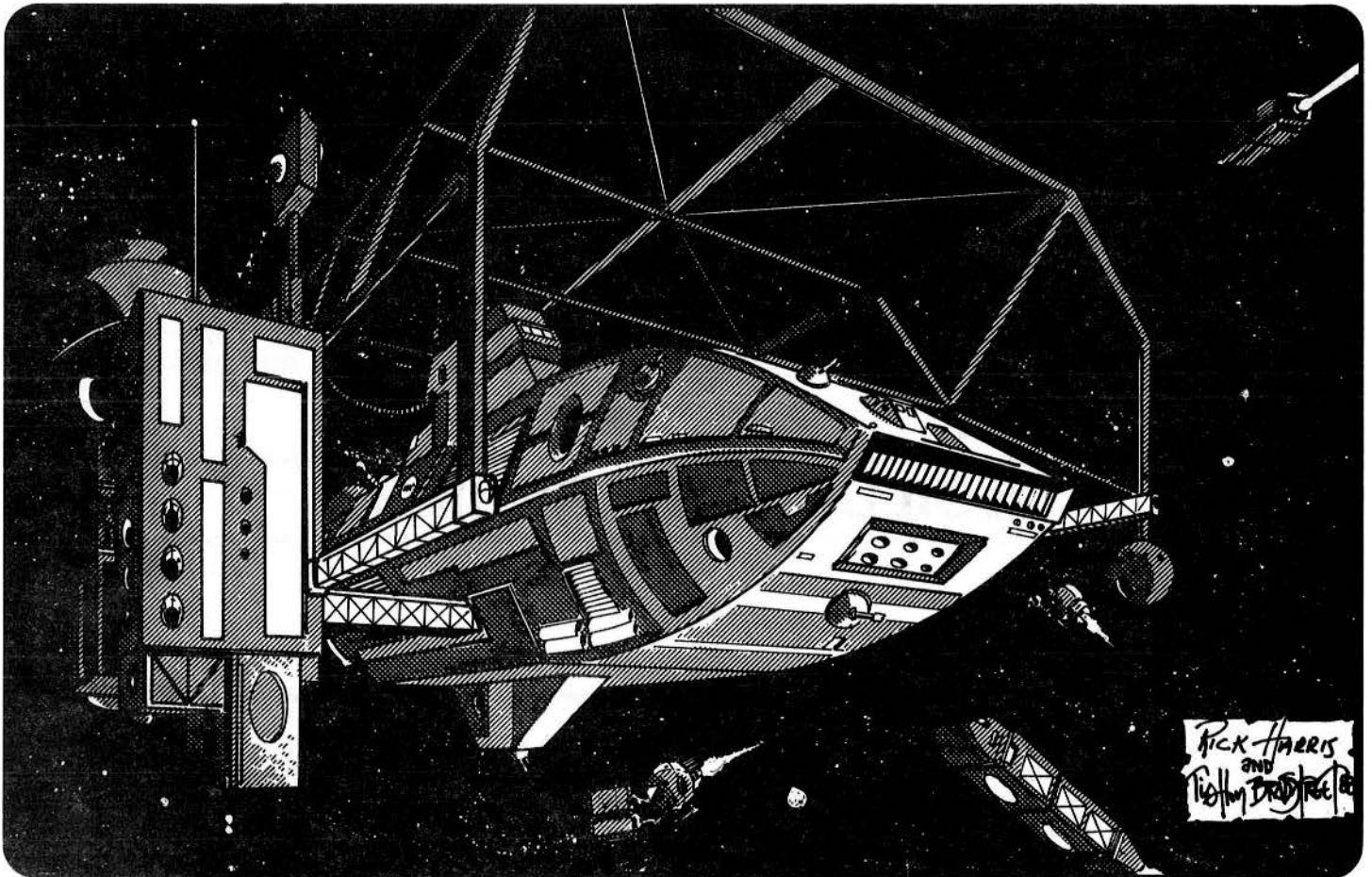
Equipment and Weapons

All starship Equipment, including weapons, should be built using the device building system. Equipment is optional, although most starships will have a Communicator, a Computer, and Detectors. However, note that Armor and Life Support are starship Statistics, not Equipment.

STARSHIP CREATION SUMMARY

The GM defines the campaign guidelines, and tells the PCs what technology is available. For example, most campaigns have FTL travel, but some may not have Force Fields, Missile Deflection, Teleporters, and so on.

1. The GM assigns the players a certain number of Points to buy the starship.
2. Purchase the Statistics of your ship. You may wish to look at the starship examples. In fact, it may be a good idea to start with a sample starship and modify it.



3. Buy the Equipment on your ship. You will probably want at least a computer, communicator, and a detector. Most ships used by PCs will have at least one ship's gun.
4. Consider Disadvantages. These will help pay for Equipment and Statistics.
5. Balancing: Make sure the cost of the starship does not exceed the number of Points the GM assigned.

STARSHIP STATISTICS COST SUMMARY

Statistic/Required Equipment	Cost
BODY	2 pts. for 1 BODY
DEF (Armor)	3 pts. for 1 DEF
DEF (Force Fields)	2 pts for 1 DEF
END (Batteries)	1 pt. for 2 END
FTL	10 pts. for 1 Light year per day, x2 for +5 pts.
Gs (average)	10 pts. for each 1 G of acceleration
Life Support	2 pts. for 1 person, 2x number of people for each +2 pts.
Maneuverability	10 pts. for +1 to the piloting roll
REC (Power Plant)	1 pt. for 1 REC
SPD (Speed)	+10 pts. for +1 SPD
THR	= 12 x Gs / SPD: cannot be bought directly
Living Quarters	2 pts. for 1 room, 2x as many rooms for each +2 pts.
High-Tech rooms	2 pts. each
Carrying Capacity	Base is 1/4 ship's mass and volume, 2x mass and volume for +2 Points.

IMPROVING A STARSHIP AFTER IT HAS BEEN BUILT

It is possible to improve a starship after it has been built. The ship's owner will be spending more Points on their ship, or switching Points around, with GM's approval. These modifications are possible at any well-equipped starport, if the owner can pay for them with Credits. Individuals with Mechanics skill can do some of the work themselves, thus reducing the cost by 10% times the amount a Mechanics skill roll was made by, or some similar amount at the GM's option.

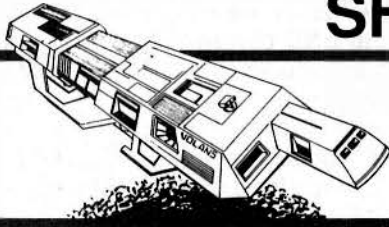
Small changes, like altering existing weapons or equipment without changing the Point cost, should be a simple matter of paying Credits to a competent mechanic. Major modifications such as adding more rooms or building in a new gun are sometimes possible. A partial redesigning of the ship may be required. It will be up to the GM.

Of course, any additions will have to be obtained somehow. Player characters may be rich enough to buy parts for the ship. Characters may find an abandoned spaceship and use it for parts. Or a grateful NPC may reward PCs with spaceship parts.

STARSHIP HEXES AND RANGE MODIFIERS

Starship Hexes (ss hexes) are different from normal hexes, which are 2 meters across. A starship hex is 128 meters or 64". Hence if a starship weapon has -1/3 ss hexes, that is -1 per 192" normal scale. Details of buying starship weapons are given in the Weapons section. Of course, when describing the interior of a starship, the hexes are normal-sized. A 2 hex by 2 hex room is 4 meters across, not 256 meters across.

SHIP'S STATISTICS



BODY

A starship's BODY determines the amount of damage a starship can take before it is destroyed. BODY also determines the overall size and mass of the starship. BODY that increases a ship's mass costs 2 points per BODY. BODY can also be bought that does not increase the overall mass of the ship (to reflect improved building materials). A ship cannot have more BODY that does not increase mass than it has normal BODY. BODY that does not increase the mass costs 3 points per BODY.

All ships start with 10 BODY; this reflects the minimum BODY necessary to build a space-worthy vessel. Although it would be possible to sell back a ship's BODY, the resulting vessel would be exceptionally delicate, and would consist of intricate circuitry, force screens, or some equally fragile materials.

One normal BODY costs 2 Points. One BODY that does not increase the ship's mass costs 3 points.

DEFENSE (DEF)

DEF determines how well the ship can resist attacks. DEF functions as resistant PD and ED in combat: it is subtracted from the BODY done by an attack before the ship takes BODY. There are two types of DEF: Armor and Force Fields.

ARMOR

Armor acts as resistant PD and ED, covers the whole ship, and costs no END.

ArmorCost: 3 Points for 1 DEF. (This is both PD and ED.)

The most common Advantages and Limitations used for Armor are listed below. See the Advantages section and the Limitations section for details.

Armor Advantages: Hardened Defense, Stops Teleportation (in Advantages section).

Armor Limitations: Ablative, Activation Roll, Burnout Roll, Arc of Defense (in the Limitations section), Restricted Location, ED only, PD only (explained below).

Special Limitations for Starship Armor

ED Only: Armor with this Limitation is only effective against Energy attacks, and provides no defense against Physical attacks. ED Only is a +1 Limitation.

PD Only: Armor with this Limitation is only effective against Physical attacks. PD Only is a +1 Limitation.

FORCE FIELD

A Force Field provides DEF just like Armor, except that Force Fields can be turned on and off, and costs ship's END each Turn equal to Active Points in Force Field / 5. The ship must have a Force Field Generator, which must be in a High-Tech room. If the Force Field generator is damaged, the Force Field vanishes.

The most common Advantages and Limitations used for Force Fields are listed below.

Force Field Advantages: Hardened Defense, Reduced Endurance, Limited Uses, Stops Teleportation

Force Field Limitations: all those listed for Armor, Increased END, and Volatile (the Force Field generator can explode).

Force Field Cost: 2 Points. per DEF

Restricted Location: This Limitation is used to represent Armor which only covers part of the starship. The parts of a starship are listed on the Starship Hit Location table. The bonus depends on the number of Locations covered.

Bonus	Coverage
+1	Armor covers 1 Location
+1/2	Armor covers 2 Locations
+1/4	Armor covers 3 Locations

ENDURANCE (END)

END represents energy storage batteries on the starship, which can save up power for engines, weapons and other equipment to use. The END battery must be located in a High-Tech room, where it has a chance of being destroyed in combat. A starship can be built with several END batteries scattered throughout the starship's High-Tech rooms. In any case, the location of each Battery and the amount of END each contains should be noted on the Starship Record Sheet. END costs no END.

FASTER-THAN-LIGHT ENGINES (FTL)

FTL engines are used for travelling great distances, say from one solar system to another. FTL speed is given in Light Years per day (LY/day). Typically, inhabited planets are 10-20 lightyears (LY) apart. A starship without FTL engines would take years to reach another solar system.

FTL engines use END at the rate of 1 END for every 5 Points in FTL each Turn. The GM will probably place an upper limit on FTL speed, since very fast FTL travel will greatly change the campaign. Usually the GM will also require all FTL engines to have a Limitation of some sort to reflect the type of FTL travel used in the campaign. What follows are some common limitations; GMs should feel free to add to this list.

Bonus	Limitation
+1/2	Cannot be used within 100 diameters of planets or other massive objects.
+1/2	FTL travel requires constant supervision by a specially trained FTL Pilot.
+1	Can only be used to hop between certain positions (FTL warp points). These positions are hard to find: finding them requires a Navigation roll and a computer.

FTL Cost: 10 points for 1 light year per day, 2x FTL speed for +5 Power Points. END cost is 1 END each Turn for every 5 Points in FTL.

LIFE SUPPORT

In order for a starship to provide warmth, adequate atmospheric pressure, air to breathe, and food, it has to have Life Support. Life Support units also can recycle food and water. The Life Support unit is usually in the engine room, but could be in any High-Tech room. Life Support for one person costs 2 Points, and the number of people supported is multiplied by x2 for every +2 Points, as shown on the Life Support table.

The END cost for Life Support is 1 END per 5 Points in Life Support each Turn — **not** each phase — with a minimum cost of 1 END per turn. This means that it takes less power to have one big Life Support unit than to have several small ones.

No. of characters supported	Point cost	END cost/Turn
1	2	1
2	4	1
4	6	1
8	8	2
16	10	2
32	12	2
64	14	3
125	16	3
250	18	4
500	20	4
1000	22	4
	etc.	

MANEUVERABILITY (MAN)

Some ships are clumsy and sluggish, while other ships are nimble and responsive. The difference may be that one ship has only one large rocket engine for forward thrust, and another ship has large, powerful gyroscopes and attitude jets. In game terms, all these design alterations are described with a Piloting roll modifier: MAN.

Maneuverability adds to the pilot's skill roll when performing combat maneuvers, including all the Pilot Maneuvers described in the Starship Combat section. The GM should set a maximum MAN modifier for the ships in the campaign; the higher the maximum the less important the operator will be. A maximum modifier of +3 is advised, as this allows for a wide array of ship types, but does not eliminate the importance of characters. MAN costs no END.

Cost: 10 Points for each +1 to the piloting roll. A ship's MAN can also be reduced, decreasing the starship's Point cost: -10 points for each -1 to the piloting roll, to a minimum MAN of -3.

REC (POWER PLANT)

A starship's REC is analogous to a character's Recovery score; it measures the rate at which the ship's Power Plant can recharge its END batteries. After each Segment 12, during the post-Segment 12 Recovery, the ship's Power Plant produces 1 END for each 1 REC the ship has, which may be put into the ship's END reserve, or spent on power-consuming equipment like engines, weapons, Life Support, etc. If a starship's END batteries are full, any END not used immediately during the next Turn is lost. Starships with no END batteries can still be used as long as the Power Plant works, but they cannot save up END from Turn to Turn.

A useful number to record on the Starship Record Sheet is the starship's Free REC. Free REC is equal to the ship's REC score minus the END consumed each Turn by Constant devices which are usually in use during combat, such as Life Support, Sensors, and Computers.

Starship REC costs 1 Point for 1 REC; this is cheaper than REC for characters, because starships can only recover END after Segment 12 (instead of every Phase).

Cost: 1 Pt. for 1 REC. REC costs no END.

SPEED (SPD)

A starship's SPD determines how often the ship moves on the map, and also how often the pilot may attempt Pilot Maneuvers. SPD, starship movement, and starship piloting are discussed in the Starship Combat section. Starships start out with SPD 1, and SPD cannot be reduced below 1. SPD costs no END. The maximum SPD possible is 12, for a cost of 110 Points. Very few starships need such a high SPD, because the Pilot would also have to have SPD 12 to use a SPD 12 starship at maximum efficiency.

Cost: 10 points for +1 SPD. SPD costs no END.

Gs (AVERAGE)

Average Gs represent the power of the slower-than-light engines. Gs are used to move the ship in combat and for taking off and landing on planets. 1 G costs 10 Points. There is no maximum number of Gs a starship can have, but the occupants will take damage from high G-force unless the ship has Artificial Gravity. Damage from G-force is discussed in the Starship Combat section.

One important fact about Average Gs is that starships with SPD scores greater than 1 are capable of high-acceleration maneuvers in excess of the starship's Average Gs score. After such a maneuver, the starship must use fewer Gs in successive phases, to let the engines cool down. In order for a starship to have its full maneuverability in combat, it may well require more Artificial Gravity than its Average Gs. Gs cost END, but only indirectly by means of the figured statistic THR.

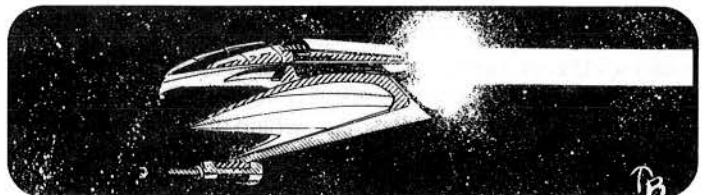
Cost: Average Gs cost 10 Points each.

THRUST (THR)

THR cannot be bought directly with Points, but is computed from a starship's Gs and SPD. THR is used to figure out exactly how many inches a starship moves each phase, as explained in the Starship Combat section. THR is calculated using the following formula, or the THR Table. To use the THR Table, cross-index the ship's Gs with the ship's SPD. The result is the ship's THR. Using THR costs END, as explained in the Starship Combat section. For starships with SPD 3 or 4 (the most common SPD values), each 2 THR used costs 1 END.

If the pilot's SPD is lower than the ship's SPD, then the THR should be recalculated using the pilot's SPD.

$$\text{THR} = 12 \times \text{Gs} / \text{SPD}$$



THRUST (THR) TABLE

	SPD											
	1	2	3	4	5	6	7	8	9	10	11	12
1	12	6	4	3	2	2	2	2	1	1	1	1
2	24	12	8	6	5	4	3	3	3	2	2	2
3	36	18	12	9	7	6	5	5	4	4	3	3
4	48	24	16	12	10	8	7	6	5	5	4	4
5	60	30	20	15	12	10	9	8	7	6	5	5
6	72	36	24	18	14	12	10	9	8	7	7	6
7	84	42	28	21	17	14	12	10	9	8	8	7
8	96	48	32	24	19	16	14	12	10	10	9	8
9	108	54	36	27	21	18	15	14	12	11	10	9
10	120	60	40	30	24	20	17	15	13	12	11	10
11	132	66	44	33	26	22	19	17	15	13	12	11
12	144	72	48	36	29	24	21	18	16	14	13	12

LIVING QUARTERS

This category includes bedrooms, dining rooms, lounge rooms, recreational rooms, gyms, swimming pools etc. These are rooms which have life support, but not high technology equipment. The rooms may have stereos, TVs and computers, but not ship's guns, engines, force field generators, or scientific laboratory equipment. In general, equipment which costs END must be placed in a High-Tech room. Each room is considered to be 2" wide, 2" deep and 1" high, or 4 x 4 x 2 meters.

Cruise ships may have 100 cabins or more for passengers. Living Quarters do not add significantly to the mass or size of a ship, unless the Optional Volume Conservation Rule is in effect.

A room may be hidden and have a secret entrance. Each concealed room costs 2 Points.

Living Quarters Cost: 2 Points for 1 room (2"x2"x1"), 2x as many rooms for +2 Pts. Living Quarters cost no END.

Point Cost	Number of Living Quarters
2.....	1
4.....	2
6.....	4
8.....	8
10.....	16
12.....	32
14.....	64
16.....	125
18.....	250
20.....	500
etc.	

HIGH-TECH ROOMS

High-Tech rooms include control rooms, laboratories, engine rooms and other rooms which contain equipment such as weapons or sensors. Strange rooms such as specially shielded rooms or environment rooms may be purchased as High-Tech rooms, with the GM's permission. All Equipment which costs ship's END must be installed in a High-Tech room. All High-Tech rooms are connected to the ship's Life Support system for free (if desired).

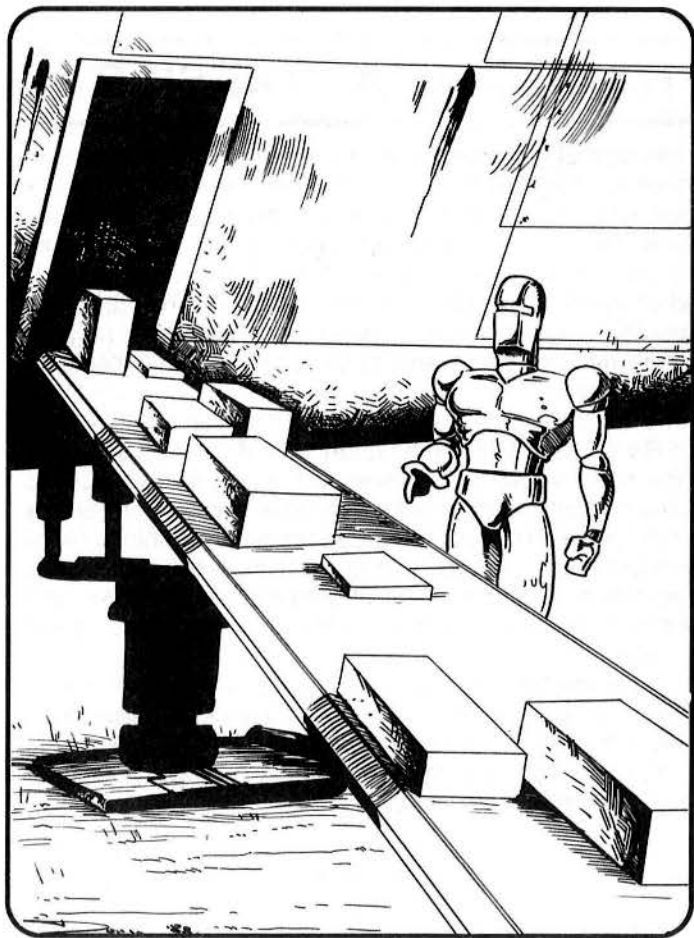
Explorers may wish to have science labs on their space-ship, such as Physics, Chemistry, Biology, Mechanics, sick-bay, or Robotics labs. Labs provide up to +2 to Science rolls for tasks which do not need a lab. Labs also enable a scientist to do complicated tasks impossible to do in the field (such as analyzing a virus and finding a cure). Specify at the time of purchase of the ship what the labs are. Science labs may be altered after the starship is built, with the GM's approval. Changing a Chemistry lab to a Physics lab after the starship is built should be a simple matter of buying new equipment and installing it, at a Credit cost determined by the GM.

Each lab is assumed to be in a room 2 hexes by 2 hexes (4 meters by 4 meters). The rooms are 1 hex (2 meters) high. To buy a larger lab, count it as 2 or more labs.

Every ship starts out with one high-tech room, for free, since the controls and engines must both be in a high-tech room. A one-room ship is possible: the Control Room and the Engine Room are the same. High-Tech rooms do not significantly add to the size or weight of a ship, unless the optional Volume Conservation Rule is in effect.

A High-Tech room may be hidden, with a secret entrance. A concealed High-Tech room cost 3 points.

High-Tech Rooms Cost: 2 Pts. each; 3 Pts. for each concealed High-Tech room.



CARGO SPACE

Explorers may want to use Cargo Space for storing vehicles, large equipment, minerals, trade goods, and so forth. Cargo Space is not connected to the ship's Life Support. To get storage areas with Life Support, buy Living Quarters.

Ships start out with base cargo mass capacity and size equal to 1/4 the ship's base mass and size, determined from the ship's BODY as shown below. The cargo room may be doubled in mass capacity and size for +2 points. Increasing cargo space does not subtract space from other areas of the starship, but simply makes the ship bigger. For example, here is a chart showing the size of a ship with 25 BODY. As usual, the total size of the ship in hexes is equal to its total mass in tons.

Base Ship Mass	Cargo Mass	Total Ship Mass	Pts. Spent on Cargo
100 tons	25 tons	125 tons	0
100 tons	50 tons	150 tons	2
100 tons	100 tons	200 tons	4
100 tons	200 tons	300 tons	6
etc.			

If desired, ships may have less cargo space than 1/4 of the ship's size, but they do not get any Disadvantage points for decreased cargo.

Cargo Space may be hidden, with a secret door. Hidden Cargo Space costs 1 point for 16 hexes, which adds to the total Cargo Space.

HOW BIG IS A STARSHIP?

The size of a starship is determined by its BODY, and is independent of the Construction Point cost of the ship. A small ship loaded with Armor, weapons and expensive equipment can cost many more Points than a large, slow merchant vessel. Unless the optional Mass Conservation and/or the Volume Conservation rules are in effect, the starship's mass is of little importance. However, it may be useful when one ship wants to carry another ship inside its Cargo Space.

The Starship Size Table shows a starship's mass, size and Range Mod Multiple as a function of the ship's BODY.

The mass shown is the mass of the ship when its Cargo Space is empty, and the size of the ship excludes the ship's Cargo Space. The base Cargo Space on a starship is 1/4 of the ship's mass and size, so the total size of the ship is 25% larger than the number shown in the Starship Size Table, and the starship's mass goes up by 25% when the Cargo Space is filled.

The Range Mod Multiple is a measure of the overall size of the starship. The Range Modifiers of attacks made against the starship are multiplied by the Range Mod Multiple. This makes large starships easier to hit at long range, and small starships harder to hit at long range.

STARSHIP SIZE TABLE

BODY	Mass of empty ship	Size of Ship (excluding cargo)	Range Mod Multiple
10	12.5 tons	12.5 hexes	x1/2
15	25 tons	25 hexes	x1
20	50 tons	50 hexes	x1
25	100 tons	100 hexes	x1
30	200 tons	200 hexes	x2
35	400 tons	400 hexes	x2
40	800 tons	800 hexes	x2
45	1600 tons	1600 hexes	x4
50	3.2 Ktons	3200 hexes	x4
55	6.4 Ktons	6400 hexes	x4
60	12.5 Ktons	12,500 hexes	x8
65	25 Ktons	25,000 hexes	x8
70	50 Ktons	50,000 hexes	x8
75	100 Ktons	100,000 hexes	x16
80	200 Ktons	200,000 hexes	x16
85	400 Ktons	400,000 hexes	x16
90	800 Ktons	800,000 hexes	x32
95	1600 Ktons	1,600,000 hexes	x32
100	3200 Ktons	3,200,000 hexes	x32
etc.			
1 hex = 1" x 1" x 1" = 2 meters x 2 meters x 2 meters			

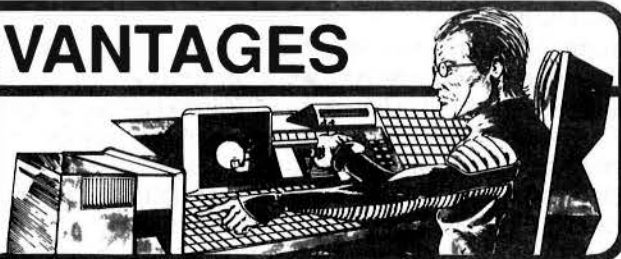
OPTIONAL MASS CONSERVATION RULE

Under this optional rule starships have an added statistic: Carrying Capacity. Carrying Capacity is the total amount of mass and volume of passengers, cargo, and Equipment the ship can carry. The base carrying capacity is 1/4 the mass and volume of the ship. Increasing the Carrying Capacity of a ship costs +5 Construction Points for 2x volume and 2x mass. The total mass of all the equipment and weapons on the starship must be equal to or less than the Carrying Capacity. Engines, defenses, Life Support and rooms do not subtract from the ship's Carrying capacity, but weapons do. The Cargo Space available on the starship is equal to the Carrying Capacity minus the mass of equipment and weapons.

OPTIONAL VOLUME CONSERVATION RULE

Each High-tech room or Living Quarters room is 2 inches by 2 inches by 1 inch in volume, or 4 hexes of volume. A ship must have enough base size to include all its rooms. For example, a ship with 8 High-tech rooms and 8 living quarters would need to be at least 64 hexes in volume, so it would need at least 25 BODY.

STARSHIP DISADVANTAGES



Starship Disadvantages describe ship malfunctions or design flaws which aren't covered in Ship's Statistics. Starship Disadvantages can make great plot devices, especially Unluck and Mystery Disadvantage. Instead of costing Points like Equipment and Statistics, starship Disadvantages reduce the Point cost of a starship, just as character Disadvantages do.

CAN'T LAND

This Disadvantage is used for a starship with a hull which is designed to withstand engine thrust, but not to support itself on the ground or take the heat and stress of entering atmosphere. Although the starship can't land on planets, it may dock at space stations. Characters aboard the starship who wish to get to a planet's surface must use shuttlecraft or teleporters.

Bonus	Damage per landing
5 pts.	Half the ship's BODY
10 pts.	Starship is totally destroyed but contents take no damage (like an escape pod).
15 pts.	Starship and contents are totally destroyed.

DISTINCTIVE LOOKS

A starship with Distinctive Looks has unusual construction or decoration, which frequently attracts attention to it. For example, the ship may look very expensive, or very fast, or have obvious unusual equipment. The ship may inspire fear or hostility, if it resembles ships made by an evil alien race. The bonus for Distinctive Looks depends on the chance of the ship attracting attention, as shown in the following table. If the starship inspires fear or hostility, the bonus is doubled.

Bonus	Chance ship is noticed on 3d6
1 pt.	8-
3 pts.	11-
5 pts.	14-
2x Bonus	Inspires Fear or Hostility.

LIMITED FUEL

Normally, starships have unlimited fuel, or need refueling so rarely that they are not significantly limited. Starships which need refueling frequently should take the Limited Fuel disadvantage. The number of days' worth of fuel under normal operation determines the bonus, as shown below. If a starship exercises fuel conservation measures such as using less engine thrust and coasting more, shutting down all nonessential systems, and so forth, the fuel will last twice as long as the time listed. Conversely, if a starship is frequently in combat, overloaded or damaged it may use fuel at twice the normal rate or even faster, at the GM's option.

Bonus

5 pts.
8 pts.
10 pts.

Time before refueling

40 days
20 days
10 days

If the fuel is hard to obtain, the bonus is increased:

+0 pts.	Very Common Fuels
+5 pts.	Common Fuels
+10 pts.	Uncommon Fuels

Very Common fuels are easily obtained on many planets, such as water or hydrogen. Common fuels, such as plutonium or rocket fuel, are easily bought on any planet with space travel. Uncommon fuels are very expensive or difficult to obtain, such as antimatter or neutronium.

MYSTERY DISADVANTAGE

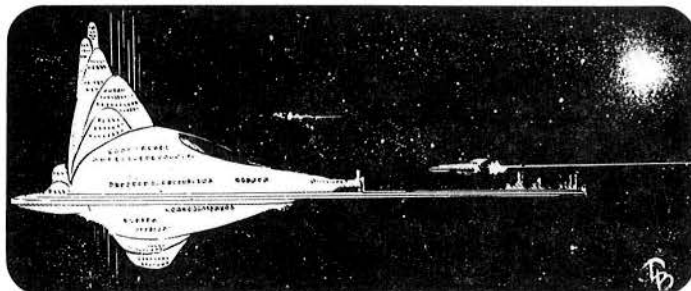
Something is wrong with the ship, but the crew doesn't know about it! This is not really a new disadvantage category, but a way for the GM to add suspense to starship combat. All Mystery Disadvantages must be approved by the GM, who should decide secretly exactly what the disadvantage is. Common examples are Unluck or an Activation roll on the engines or weapons. Once the players find out what the disadvantage is, it may then become a normal disadvantage, or, if the GM chooses, it may change. Some old "lemon" spaceships have so many problems that as soon as one problem is fixed, another appears!

A Mystery Disadvantage is worth 5 or 10 points.

SLOW STARTER

Starships with Slow Starter have engines which must warm up before they are usable. Until the warm-up time has elapsed, the ship's engines cannot be used, and the ship's Power Plant produces no END.

Warm-up time	Bonus
1 turn	3 pts.
5 minutes	5 pts.
1 hour	8 pts.
1 day	10 pts.



UNLUCK

Some starships are old and unreliable, and tend to break at inopportune moments: they have Unluck. Just as for a character's personal Unluck, the GM may require an Unluck roll whenever the characters are winning easily, doing something tricky with the starship, depending on a sure thing, and so forth. The GM may wish to roll the Unluck secretly. The GM should be careful not to overuse this Disadvantage, as Unluck can be frustrating or annoying.

When Unluck is rolled, 1d6 is rolled for every 5 Points of Unluck. Each "1" that appears on the dice counts as one level of Unluck. The more levels of Unluck rolled, the worse the consequences should be. The Unluck Effects Chart gives some suggested effects for Unluck.

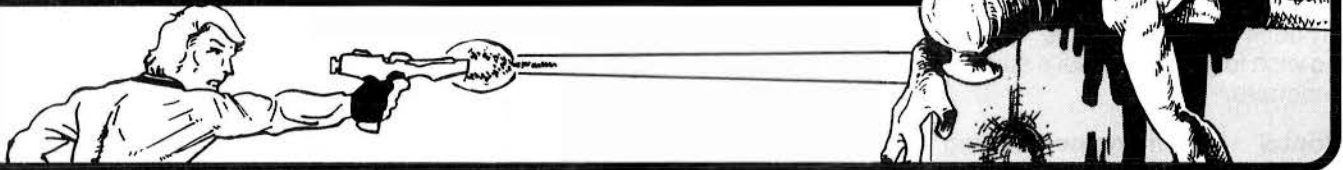
Unluck may also affect the ship in subtle ways, even when rolls are not made. For example, the spaceport may be full when you come to land, the rates for docking just went up, or the ship never has that perfect piece of equipment.

UNLUCK EFFECTS

Levels Possible Effects

- | | |
|---|---|
| 1 | Non-essential starship equipment malfunctions temporarily. Devices with Activation Rolls fail even though the roll succeeded. Floating debris may hide enemy ships, putting the starship at a temporary combat disadvantage. |
| 2 | The ship may be mistaken by authorities for an enemy ship and attacked, a major device may stop working, the ship's navigation systems may malfunction, sending the ship off course. |
| 3 | Total Disaster! The ship is struck by a meteor in apparently clear space. Volatile equipment suddenly explodes. Weapons backfire, or go off by accident in a peaceful spaceport. Engines fail during takeoff or landing; the ship may crash. The airlock door falls off, subjecting the entire ship to explosive decompression. |

STARSHIP COMBAT



Ship-to-ship combat is an important way of advancing the plot in a science fiction adventure. Often the characters meet hostile aliens, pirates, or stumble into wars. Here's how you resolve such combat.

SENSOR SCANNING AND STARSHIP DISTANCES

Before starships can battle, they must find one another. This is done by making Sensors Operation rolls, with modifiers for range and other factors.

Starship combat uses a different map scale than combat between characters: 1 hex = 64" normal scale = 128 meters.

When characters are using Detectors to find other starships, they must make a Ship's Sensors roll with a range modifier determined by the Detector's Range Modifier and the Range Mod Multiple of the target ship. Here is a table of other common modifiers to Ship's Sensors rolls.

Condition	Starship Sensors Skill Roll Modifier
Target Ship is using 1-2 Gs, driving normally	+0
Target ship is using less than 1 G of thrust	-1
Target ship has all engines off	-2
Target ship has all systems off (except Life Support)	-3
Target ship performed a Piloting Maneuver (other than Cruise) this phase	+2
Target is concealed by dust, asteroids, etc.	-1 to -3
Searching ship is in a Communication Jammer field (depends on strength of Jammer)	-1 or more

If the total of all the modifiers is positive, no roll is needed: the ship is automatically detected. Therefore, ships fighting on a map usually do not need to make Sensor rolls unless one of them has an Invisibility or jamming device.

The Range Modifier of the starship's sensors also modifies Sensors Operation rolls. If starships have Invisibility, or are not using their engines, they are very hard to detect, and Sensor rolls are made at the usual Range Modifier penalty (typically -1/3 starship hexes). Starships using engines shine like stars or comets and are much easier to detect. The following chart shows the Sensor Range Mod Multiple to detect a starship blasting with various G-forces. This multiple is independent of a starship's normal Range Mod Multiple. Obviously, starships with their engines turned on can be detected at very long ranges. Starships may have engines which do not produce detectable emissions, by buying Gs with the Invisible Effects Advantage.

To determine the improved range modifier, simply multiply the number of Gs used by 100x.

Gs used	Range Mod Multiple
1	100x
2	200x
3	300x
	etc.



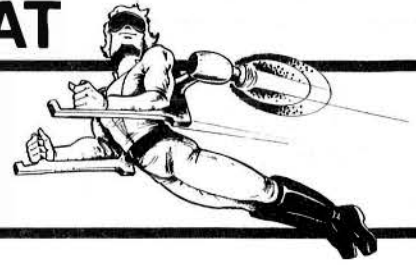
STARSHIP RECORD SHEET

Value	Cost	Base	Pts.	END	Ship Name: _____	Player: _____			
_____ BODY	x2	10	_____		Ship Mass: _____	Size: _____ hexes			
_____ DEF (Armor)	x3	10	_____		Cargo Mass: _____	Size: _____ hexes			
_____ DEF (Force Field).	x2	0	_____	_____	THR: _____	THR END cost: _____			
_____ END	x1/2	0	_____		G-Force: _____	Free REC _____			
_____ FTL (LY/day)	*	0	_____						
_____ Gs (Average)	x10	0	_____						
_____ Life Supp.(People)	**	0	_____						
_____ MAN (+ to Pilot.)	x10	0	_____						
_____ REC (Power Plant)	x1	1	_____						
_____ SPD	x10	1	_____						
_____ Cargo Space (tons)	***		_____						
_____ High-Tech Rooms	x2	1	_____						

_____ Living Quarters	**	0	_____						

Total Statistics Cost: _____									
* 1 for 10 pts., x2 for +5 pts. ** 1 for 2 Pts., x2 for +2 Pts.									
*** x2 for +2 Pts.									
Equipment	Location	Pts.	END	Phases 1 2 3 4 5 6 7 8 9 10 11 12					
_____	_____	_____	_____	STARSHIP PILOT COMBAT MANEUVERS					
_____	_____	_____	_____	Maneuver	Roll	OCV	DCV	R Mod	
_____	_____	_____	_____	Cruise	None	+0	+0	x1	
_____	_____	_____	_____	Evade	Pilot	-2	+3	x1	
_____	_____	_____	_____	Hold Steady	Pilot	+2	-1	x1	
_____	_____	_____	_____	Lock On	Pilot-2	+3/+0	-2	x2	
_____	_____	_____	_____	Swerve	Pilot-2	-3	+4	x1/2	
_____	_____	_____	_____	CONSEQUENCES OF A FAILED PILOTING ROLL					
_____	_____	_____	_____	Condition	Roll Failed By	OCV	DCV	R Mod	
_____	_____	_____	_____	Exposed	1 or 2	-1	-1	x1	
_____	_____	_____	_____	Out of Control	3+	-3	-3	x1/2	
_____	_____	_____	_____	GUNNER COMBAT MANEUVERS					
_____	_____	_____	_____	Maneuver	Shots	OCV	R Mod		
_____	_____	_____	_____	Single Shot	1	+0	x1		
_____	_____	_____	_____	Double Shot	2	-3	x1		
_____	_____	_____	_____	Ctrl. Burst **	3	+0	x1		
_____	_____	_____	_____	Burst Fire **	5	+2	x1/2		
_____	_____	_____	_____	Autofire *	10	+4	x1/2		
_____	_____	_____	_____	Set a Phase	0	+1	x2		
_____	_____	_____	_____	Linked Wpns:-1 OCV/added Wpn					
_____	_____	_____	_____	* Autofire only					
_____	_____	_____	_____	** Selective Fire only					
_____	_____	_____	_____	Shrapnel Damage: 1d6/BODY done					
_____	_____	_____	_____	roll 5+BODY Done for Equipment					
Weapon	OCV	RMod	Damage	Location	Cost	# Shots	Reload	Act. Roll	END
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Weapons & Equipment Cost: _____									
DISADVANTAGES				STARSHIP HIT LOCATION CHART					
_____				3d6	Location	BODY x	OCV	DEF	
_____				3-7	High-Tech Rooms	x1	-5	_____	
_____				8	Weapons	x1	-7	_____	
Disadvantages Total: _____				9-10	Cargo Rooms	x1/2	-3	_____	
Base Points: _____				11	FTL Engines	x1	-6	_____	
Modification Points: _____				12	Living Quarters	x1	-5	_____	
Total Cost: _____				13	Power Plant	x1	-6	_____	
				14+	Sublight Engines	x1	-4	_____	

ENGAGING COMBAT



If two starships detect one another at long range, the faster ship (the one with more Gs) usually decides whether combat will take place or not. If the faster ship wants to run away, it can. If the faster ship wants to approach the slower ship, the two ships will eventually reach combat range, unless the slower ship can prevent detection somehow. Sometimes simply shutting off all engines will confuse an enemy for a while, but real cover like asteroids or landing on a planet provides a better hiding place.

As soon as the starships are close enough to shoot at one another, combat begins. Combat begins on Segment 12, so all Characters and Starships get a Phase on the first Segment of combat.

SUMMARY OF ENGAGEMENT

1. The starships notice each other, either through radio signals or Sensors.
2. If the pilots of the faster ships want to avoid combat, they can run away. No combat occurs. Otherwise, the GM decides which of the 3 types of starship combat occurs: Fly-By, Converging, or Chase.
3. If Converging or Chase combat occurs, the starships are placed on a hex map, in DEX order. Each ship has a Facing determined by the pilot, and a Velocity from 0 up to the ship's THR, also determined by the pilot.

FLY-BY COMBAT

Fly-By combat occurs when two starships are going past each other so rapidly that neither ship can stop, turn, or slow down significantly before they fly past each other. This situation applies when two ships going in opposite directions pass each other, especially if the ships have been accelerating for an hour or more. Usually starships near planets, space stations, or other potential destinations are not moving at such fast rates, and the Converging combat rules are more appropriate. The Fly-By rules are simple, quick and do not use a map.

Fly-By combat **never** happens by chance; space is just too big for that. Two ships will only pass near each other in open space if one or both of the pilots is deliberately adjusting course to cause Fly-By combat. The starship with more Gs can always avoid Fly-By combat if its pilot decides to, and the starship with more Gs can also initiate Fly-By combat. If two starships have the same Gs and only one of them wants to initiate combat, the pilots perform a Pilot skill vs. Pilot skill contest before combat begins. The Pilot who made the roll by the greater amount decides whether or not combat will take place.

No hex map is used for Fly-By combat: dice rolls determine the outcome. Each pilot chooses one Pilot Maneuver (explained later in this section) to execute during the Fly-By, and must make a Pilot roll as usual for that maneuver. Pilots may choose the "Cruise" maneuver which does not require a Pilot roll. As described below, starships lose OCV and DCV if the Pilot roll fails. The gunners then fire in order of decreasing DEX. Weapons take no Range Modifiers, but OCV modifiers from Piloting Maneuvers do apply. Gunners may not Set in Fly-By combat.

In Fly-By combat, only one shot is exchanged. In order to get another shot, the ships would have to stop, turn around, and approach each other. This takes a long time, perhaps hours, and the next combat could be either another Fly-By or a Converging Combat.

Example of Fly-By Combat: *Chiron is flying a small scout ship which has 3 Gs in interplanetary space. Chiron is accelerating towards Theris when he meets a pirate vessel piloted by Satora, an old enemy. Both ships are going too fast to stop, and Chiron doesn't want to fight, but Satora does. Since the pirate ship has 5 Gs and Chiron's ship has only 3, Satora is able to force a Fly-By.*

Both pilots must choose Piloting maneuvers. Chiron's ship has no weapons, so he chooses the Evade starship maneuver: this maneuver requires Chiron to make a Pilot roll. Chiron's DEX is 18, his Pilot skill roll is 13- and his DCV is 6. Chiron rolls 10, so he successfully executes an Evade maneuver. Chiron's starship has a DCV equal to the Pilot's DCV (6) plus the modifier for Evade (+3) for a total DCV of 9.

Satora wants her gunner to have a better chance to hit Chiron, so she chooses the Hold Steady maneuver, which requires a Pilot roll. Her Pilot skill is 12-, and she succeeds with an 8. Satora's gunner has a base OCV of 5, and gets +2 because the ship is Holding Steady for a total OCV of 7. The pirate gunner needs to roll $11 + 7 - 8 = 10$ or less to hit. The gunner's attack roll is 14 — he misses! Chiron continues toward Theris unharmed, and Satora executes her gunner.

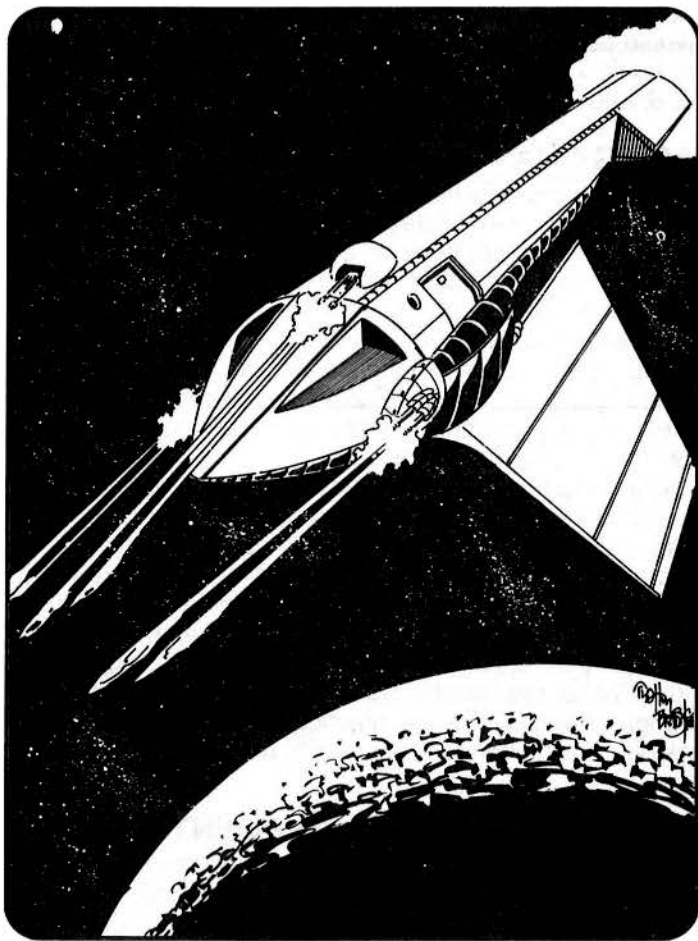
MAPPED COMBAT

Usually, starship combat occurs when starships are moving slowly, like around planets and space stations. Since all the starships are near each other and not moving rapidly with respect to each other, the combat takes place on a hex map (a map marked with hexagons). The standard Hero Games scale is 1" per hex, but any scale could be used.

Each starship in the combat should be represented on the map by a lead miniature or other counter which is small enough to fit into one hex and has an obvious front and back. As combat progresses, the starships move about on the map and shoot at each other, much the same way characters might run around shooting guns at each other.

The first step is to place the counters on the map. The GM should decide how close the ships are to each other when are first placed on the map. A simple rule is to start at 10 times the longest Range Modifier, but it is usually adequate to simply start at the edges of a large hex map.

There are two general types of mapped combat: Converging and Chase combat.



CONVERGING COMBAT

Converging combat occurs when all the starships are flying towards each other. This could be either because all the ships involved are deliberately closing in to attack range, or because enemy ships are hiding at the other ships' destination. In Converging combat, all ships start at the edge of the map and are moving more or less towards the center of the map when combat starts. The GM decides what direction the ships are coming from: if there are two sides in a combat, usually they start on opposite sides of the map. If there are more than two groups of ships in a combat, the GM should divide up the edge of the map, assigning each fleet a region.

Once the GM has assigned a map side to each ship (or fleet of ships) in a combat, the pilots place their ships on the map in DEX order. If there is a desirable position on the map, like hiding behind an asteroid, the GM may use competing Pilot rolls instead of DEX to decide which starship is placed first.

As each ship is placed on the map, that ship's pilot should declare the starship's facing and velocity. The ship's facing is indicated by the orientation of the counter. The ship's velocity should be noted on a piece of scrap paper, as it will change during starship movement as explained below. A starship may start out with any velocity from zero up to the ship's THR.

CHASE COMBAT

Chase combat occurs when one "fleeing" starship is running away from a pursuer. The pursuing ship must have more Gs than the fleeing ship, or the ships will never get close enough for combat. Exception: if the fleeing ship is taken by surprise, Chase combat occurs regardless of the Gs of either starship.

In Chase combat, the fleeing ship starts out in the center of the map, with any velocity up to its THR. The pursuing ship starts out at the edge of the map, behind the pursuer, with any velocity up to its THR.

STARSHIP MOVEMENT

FACING AND VELOCITY

Ships move differently from characters, because they are moving in frictionless space. This means that starships which thrust forward for a while and then shut down their engines continue coasting forever at constant velocity. No thrust is needed to maintain velocity, but thrust is needed to accelerate. Acceleration includes speeding up, slowing down, and turning. In order for a starship to accelerate, it must use its engines to overcome its inertia.

In game terms, a starship's inertia is measured by two things: Facing and Velocity. A ship's Facing indicates its direction of movement, and is indicated by the counter on the map. There are only 6 possible facings, as indicated on the Facing Diagram: a ship must always face a hexside. Velocity is the speed of the ship's movement in hexes per ship's Phase, and is not indicated on the hex map. Each ship's velocity must be recorded on scrap paper and updated during combat.

There are three quantities related to a starship's motion which should not be confused. A starship's Velocity is its current rate of coasting movement in hexes per Phase. A starship's THR measures the amount of acceleration possible for a starship in any Phase, and is used for Velocity changes, Facing changes, and Position changes. A starship's Gs are not used directly in combat, but are used only during starship construction to compute the THR.

For example, a starship with 5 Gs and SPD 3 has a THR of 20, read from the table in the Starship Construction section. In combat, the starship's SPD and THR will be used to determine its movement, not its Gs.

PHASES AND STARSHIP SPD

Starships do not move every Segment, but only on the ship's Phases. Each starship has a SPD statistic which determines how many Phases the starship gets each Turn. Unless the optional Large Scale Combat rule is in effect, 1 Segment equals 1 second of time and 1 Turn equals 12 seconds of time. A starship's SPD does not affect its maximum acceleration, but makes the starship more maneuverable in combat.

Starship pilots can choose not to use all of a starship's SPD, lowering it to any lower SPD to a minimum of 1. A ship's SPD can only be changed on Segment 12. Lowering a starship's SPD is useful if the starship is trying to blast forward in a straight line while giving the passengers a smooth ride (see Thrust and Starship Movement below).

Ships move on each of the ship's Phases, determined from the ship's SPD, in order of the pilot's DEX. Movement is 2-dimensional unless the optional 3-D Movement rule is in effect.

If a ship has no pilot, or the pilot chooses not to act, the ship moves as if it were driven by a pilot with DEX 0. Its DCV is 0 and the ship coasts each phase without speeding up, slowing down or turning.

A starship moves on each of its Phases, regardless of the pilot's SPD. If the pilot has a higher SPD than the starship does, the pilot must hold his or her move until the ship's phase in order to drive the starship. If the pilot has a lower SPD than the starship, the starship will have some Phases during which the pilot cannot act. On these phases, the starship duplicates the pilot's last action: if the pilot was slowing down, the starship slows down further, and if the pilot was turning to the right, the starship turns further to the right. Like sports cars, starships with high SPD may be so nimble that they are hard for slow characters to control! A Pilot can prevent this problem by choosing to lower the starship's SPD, as explained above.

THRUST AND STARSHIP MOVEMENT

Starships have two related numbers which define their movement capability: Gs and THR. Gs represent the actual G-force (acceleration) the engines are capable of generating, measured in units of the Earth's gravity. Gs are not directly used in starship movement, but are used to determine the damage done to characters at high G-forces, as discussed later in this section.

THR (thrust) is a calculated number which is used to actually move the starship on the map: THR depends on both Gs and the starship's SPD. The calculation of THR is explained in the Starship Creation section.

A starship coasts each Phase, moving forward as many hexes as its current Velocity. Any other motion, be it speeding up, slowing down, or turning, requires the expenditure of THR.

Each Phase, the pilot must decide how much THR to use. A pilot may use no THR, some of the ship's THR, or all the ship's THR in a single ship's Phase. However, THR is only renewed after each Segment 12: if a pilot decides to use the ship's entire THR in a single Phase, that ship may use no THR until after the next Segment 12.

THR may be used to do three things: change the ship's Velocity, change the ship's Facing, and change the ship's Location. These three uses of THR may be combined to produce a wide range of motions compatible with Newton's laws of motion.

VELOCITY CHANGES

Changing a ship's Velocity is the simplest use of THR: for each 1 THR used, the ship's Velocity may be changed up or down by 1 hex per Phase. The pilot may choose to accelerate at any point during the Phase.

Example: A starship with SPD 3 and 4 THR starts out at rest: its Velocity is zero. On Segment 4 the starship has a Phase, and the pilot decides to accelerate using 2 THR. This changes the starship's Velocity to 2 hexes per Phase. The pilot decides to accelerate at the beginning of the phase, so the starship coasts forward 2 inches on Segment 4. The pilot could have decided to accelerate at the end of Segment 4, in which case the starship would not move this phase but its Velocity would be 2 and it would begin coasting forward on its next Phase (Segment 8). The starship does not move at all on Segments 5, 6, and 7 because it does not have a Phase.

FACING CHANGES

Changing a ship's Facing also requires THR. Changing Facing by 1 hexside (60 degrees) requires as much THR as the starship's current Velocity. Starships at rest, with Velocity zero, can change facing to any hexside without expending any THR. A starship moving at a Velocity of 1 hex per Phase may change facing by 1 hexside by using 1 THR. A starship moving at 10 inches per phase would need 10 THR to change facing by 1 hexside. Note that a Facing change has no effect on a starship's Velocity: it continues to coast forward in the new direction.

If a starship has too little THR to change hexsides, the THR expended towards a Facing change is accumulated up from Phase to Phase until it equals the ship's current Velocity. For example, a ship moving at a Velocity of 10 could expend 5 THR on one phase turning to the right. This would have no effect on the starship's motion in that phase, but if the starship again expended 5 THR turning to the right on a future Phase, the starship would be able to make a Facing Change. Often it is more practical to slow down before making Facing changes, just as it is when driving automobiles.

OPTIONAL STARSHIP MOVEMENT SYSTEM

Players who desire additional realism, at the expense of some extra bookkeeping, can use the optional Starship Movement System. Under this system, a ship's velocity is independent of its facing — a ship that is flying in a given direction can change its facing, but still continue coasting "forward." Players who wish to use this rule should use two counters for each ship: one to indicate the ship's current facing, and one to indicate the direction the ship is traveling.

At the beginning of his phase, a starship's pilot may choose to rotate the ship to any facing. This minor adjustment does not require any THR, but the ship must have working engines. This rotation does not have any impact on the ship's velocity or direction of movement; the ship will continue flying in the same direction and with the same velocity it had before rotating. Once the ship has rotated, all arcs of fire for weapons and defenses will be determined according to this new facing. The ship will maintain this facing until the pilot's next phase.

Note that no THR can be used except in the direction the ship is currently facing. For example, if a ship has rotated a full 180 degrees (and is thus flying backwards through space), then THR can only be used to slow the ship.



POSITION CHANGES

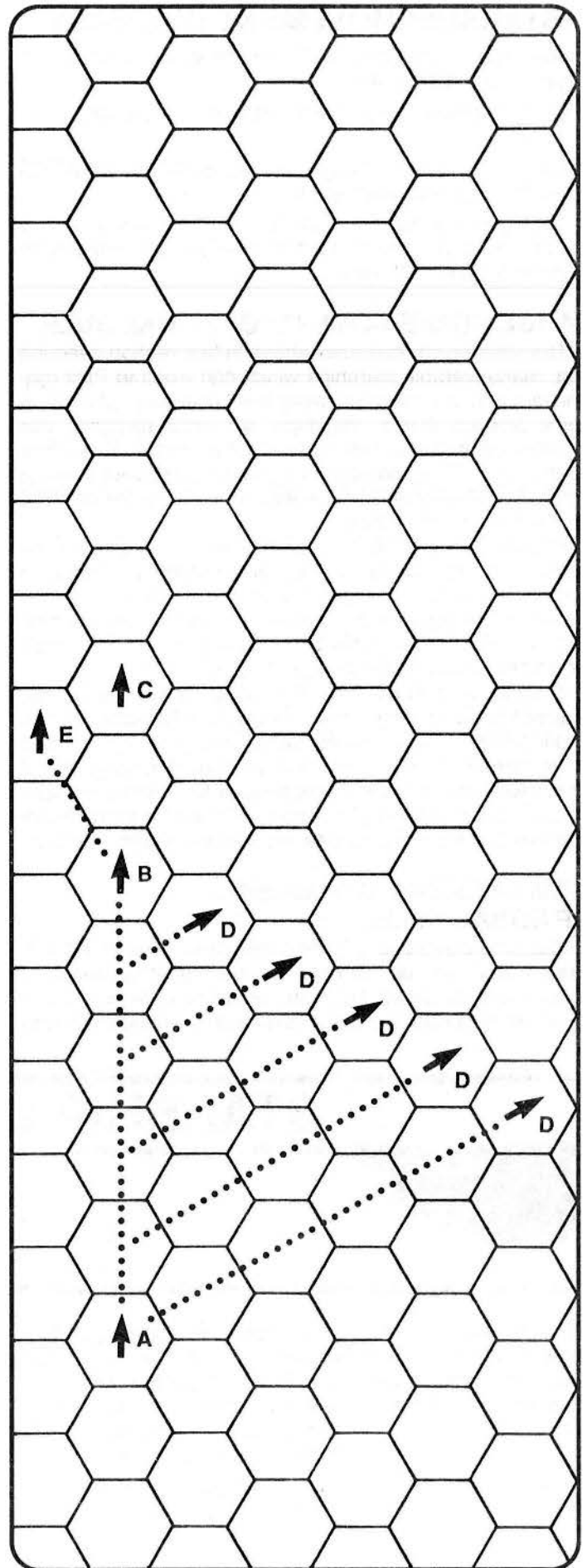
The last use of THR is to change a starship's Position. A Position change moves the starship a certain number of hexes on the map without changing its Facing or Velocity. Position changes are necessary when trying to get to a particular hex without performing a Facing change, or when a pilot wants to move the ship without building up Velocity. Position change is actually a shorter way of performing a 3-step maneuver: accelerating in the desired direction, coasting the desired number of hexes, and then decelerating back to the original Velocity.

For 1 THR used to change Position, the ship may move a number of hexes equal to half the ship's SPD. A Position change has no effect on the ship's Velocity or Facing. A Position change may be made in any direction, and must be made at the end of the starship's movement. A starship may never make more than one Position Change per Phase. Note that the starship making a Position change backwards doesn't really go forward and then move backward, but moves smoothly to its final location without overshooting.

STARSHIP MOVEMENT EXAMPLES

The Movement Examples Diagram shows various motions a starship might make. The facing of a starship is shown by an arrow, and the starship's Velocity is written next to the arrow. In all these examples, the starship starts in hex A with a Velocity of 5 inches per phase and upward Facing, as shown. The starship in these examples has SPD 3.

1. Coasting: If the starship uses 0 THR, it will coast to hex B, and end up with the same Facing and Velocity it had in hex A.
2. Accelerating: If the starship used 2 THR to accelerate at the beginning of its Phase, its Velocity will increase to 7 hexes per phase, and it will then coast to hex C.
3. Facing Change: If the starship uses 5 THR to turn to the right, it may change its Facing by one hexside at any point during its motion. Its Velocity does not change. The starship could reach any of the 5 hexes marked D, depending on when it made the Facing change. The starship could also coast forward to hex B and then make a Facing change (not shown on the diagram). The total number of hexes moved is 5, since the starship's Velocity has not changed.
4. Position Change: If the starship used 1 THR to change Position, it could move up to half its SPD of $3 \div 2 = 1.5$ hexes in any direction, without changing Velocity or Facing. For example, for 1 THR the starship could move two hexes to hex E, after coasting to hex B.



STARSHIP MOVEMENT SUMMARY

1. The total THR used each Turn may not exceed the starship's THR statistic.
2. Changing Velocity by +1 hex/Phase or -1 hex/Phase uses 1 THR
3. Changing Facing by 1 hexside uses as many units of THR as the ship's current Velocity
4. Changing Position by starship's SPD/2 in hexes uses 1 THR, must be done at end of movement, and can only be done once per Phase.

LARGE-SCALE COMBAT: OPTIONAL RULE

The starship combat rules above in this section describe fast, maneuverable starships which can execute Pilot maneuvers and fire weapons every few seconds (1 phase). In some science fiction, starships are more sluggish, like modern battleships, and combat takes place at a more stately pace. GMs who want a larger spatial scale for starship combat, and a longer time scale, should use the optional Large-Scale Combat rule.

In Large-Scale combat, starship hexes are larger: 1 hex = 16 km = 8000" normal scale. Each Segment of starship combat is 5 seconds long instead of 1 second, so 1 Turn = 1 minute. Nothing else is changed. Gs, THR, starship weapons fire, Pilot maneuvers and starship movement work exactly the same as for the normal scale.

All starship actions, including firing starship weapons, require 5 times as long to perform as normal actions such as hand-to-hand combat maneuvers. Since starship combat takes more time in this system, GMs should remember that characters aboard the ship get roughly 5 phases per ship's phase. Actions taken by characters aboard the starship will proceed at a much faster rate, relative to starship combat.

3-DIMENSIONAL MOVEMENT: OPTIONAL RULE

Starships can move in three dimensions while using a 2-dimensional hex map with this system. Starships above or below the map should be represented by putting a die or other marker under the starship miniature on the map, and

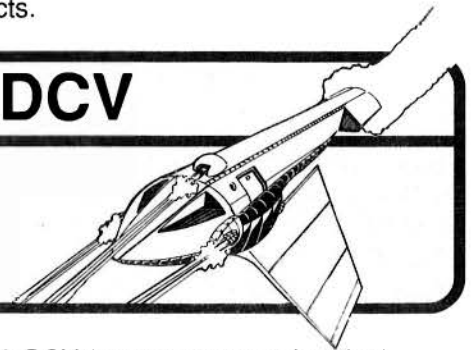
Arc	Effect
0 deg	Weapon fires only down 1 hex row, defense protects only against attacks from that direction.
60 deg	Weapon fires in a cone pattern starting 1 hexside wide, and widening 1" in all directions for each 1" away. For example, a weapon shooting at a target 3" away could be aimed 3" to the right, left, up or down. Defense protects only against attacks originating within this cone.
180 deg	Weapon fires only through 3 hexsides, and may be rotated up or down to hit any target on that side of the ship. The weapon may also be aimed straight up or straight down, but not both (specify at time of purchase). Defense covers 3 hexsides of a ship and either the top or bottom, but not both (specify at time of purchase).
360 deg	Weapon fires in all directions; defense protects against attacks from all directions.

two extra numbers must be recorded on scrap paper: the starship's Altitude and its Vertical Velocity. The starship's Altitude is its distance above (or below) the map in inches; ships above the map have positive Altitude and ships below the map have negative Altitude. The ship's Vertical Velocity is in inches/Phase upwards; ships moving downwards have a negative Vertical Velocity.

Starship Facing is still two-dimensional (towards a hex side); starships cannot face upwards or downwards. However, a starship may use 1 THR to change its Vertical Velocity by 1, and a starship may make a Position Change upwards or downwards.

The Arc of Fire/Defense Limitation needs further discussion when using 3-dimensional movement. The bonus for Arc of Fire/Defense is not changed, but the effects are extended to three dimensions. Here is an extended table of the Arc of Fire effects.

STARSHIP OCV AND DCV



If a character with Pilot skill is piloting, the starship's DCV is the Pilot's DCV. The Starship's OCV is the OCV of the gunner or gunners, who may be any characters who have Familiarity with Starship Weapons. If the same character is both piloting the ship and firing the guns, that character must choose one of the following penalties each Phase.

1. -2 OCV, normal Pilot skill (concentrate on Piloting)

2. -2 to Pilot skill, +0 OCV (concentrate on shooting)
3. -1 OCV, -1 to Pilot skill (split attention)

If the ship's computer is piloting, the ship has the computer's DCV. If the computer is shooting, attacks are made with the computer's OCV. The computer **cannot** be used as a complementary skill roll for piloting or gunnery during combat.

PILOT MANEUVERS

Pilot Maneuvers are tricky moves the pilot performs to dodge incoming fire, or to turn the ship towards an enemy starship in order to give the gunners a better shot. These maneuvers have no effect on the velocity or movement of the ship; they describe small motions of a ship within its hex. The starship pilot is very important in combat. If a starship is unpowered or has no working sublight engines, that ship coasts forward, uses no THR, and has DCV 0. The gunners have full OCV, for all the good it does them.

The simplest maneuver is the "Cruise" maneuver, which doesn't change the OCV of the gunners or the DCV of the ship, and requires no Piloting roll. Other Starship Maneuvers, such as Evade, require a successful Pilot roll to execute. The Pilot chooses a maneuver, then attempts a Piloting roll with the specified modifiers. If the Piloting roll succeeds, the ship gains OCV and DCV modifiers as listed in the Starship Pilot Maneuvers table, and the Range Modifier multiple listed. If the Piloting roll fails by 1 or 2, the ship becomes Exposed: its OCV and DCV are both decreased by 1. If the Piloting roll is failed by 3 or more, the ship is Out of Control: its OCV and DCV are both decreased by 3, and ship's weapons' Range Modifiers are halved.

The Pilot Maneuvers chart shows all the possible maneuvers, with the roll required to successfully execute them and their effects. The maneuvers may change the DCV of the ship, and also the OCV and Range Modifiers of all gunners shooting weapons from the starship.

STARSHIP PILOTING MANEUVERS				
Maneuver	Roll Required	OCV	DCV	R Mod
Cruise	None	+0	+0	x 1
Evade	Pilot	-2	+3	x 1
Hold Steady	Pilot	+2	-1	x1
Lock On	Pilot-2	+3/+0	-2	x 2 / x 1
Swerve	Pilot-2	-3	+4	x 1/2
CONSEQUENCES OF A FAILED PILOTING ROLL				
Exposed	Failed by 1 or 2	-1	-1	x 1
Out of Control	Failed by 3+	-3	-3	x 1/2

Cruise: The starship is following a moderately erratic course, which gives the starship the Pilot's DCV and the gunners their normal OCV. This maneuver does not require a Pilot roll to execute; even a character with 8- Pilot can Cruise with no chance of failure.

Evade: This maneuver is the equivalent of a Dodge: the ship moves erratically and unpredictably, making the ship harder to hit. The pilot must make a successful Pilot roll to perform this maneuver.

Hold Steady: The pilot is attempting to follow a steady course, while still maintaining some DCV. The gunners get +2 OCV, but the ship takes a -1 DCV penalty. The pilot must make a successful Piloting roll to execute this maneuver.

Lock On: The pilot is attempting to turn the starship with the motion of one "main target" enemy ship, holding that ship fixed in the gunner's sights. Gunners aboard a Locked-On ship have +3 OCV and 2x the normal Range Modifier when shooting at the "main target" ship, and +0 OCV and x1 Range Modifier when shooting at other targets. Since the pilot is no longer concentrating on evasive action, a Locked-On starship is more vulnerable, and takes a -2 DCV penalty. Other starships shooting at a Locked-On ship do not get any special bonus to OCV or range Modifier, but their attacks are more likely to hit because the DCV of the Locked-On starship is lower. Lock On is a difficult maneuver and requires a successful Piloting roll with a -2 modifier.

Swerve: This difficult maneuver is a more extreme form of Evade. The pilot is making short frantic, high-G turns in rapid succession to avoid enemy fire. The starship gains +4 DCV, but the gunners aboard a Swerving starship suffer a -2 OCV penalty and have half their usual Range Modifier. In addition, gunners may not Set, or gain any benefit from a previous Set maneuver when their ship is Swerving. Other starships shooting at a Swerving ship do not suffer any special penalty to OCV or Range Modifier, but their attacks are less likely to hit because the DCV of the Swerving starship is higher. The pilot must make a successful Piloting roll with a -2 modifier to execute this maneuver.

Exposed: The pilot has attempted a maneuver and failed, but only by 1 or 2. The ship is wobbling, facing the wrong direction, or in some other slightly disadvantageous position. Exposed ships can still use THR normally to move about on the map, but suffer penalties of -1 OCV and -1 DCV. The pilot must make a normal Piloting maneuver on the next ship's Phase to get out of the Exposed condition, as a zero phase action. If the Piloting roll succeeds, the pilot may then attempt any maneuver as usual. If the piloting roll fails by 1 or 2, the ship is still Exposed. If the roll fails by 3 or more, the ship goes Out of Control.

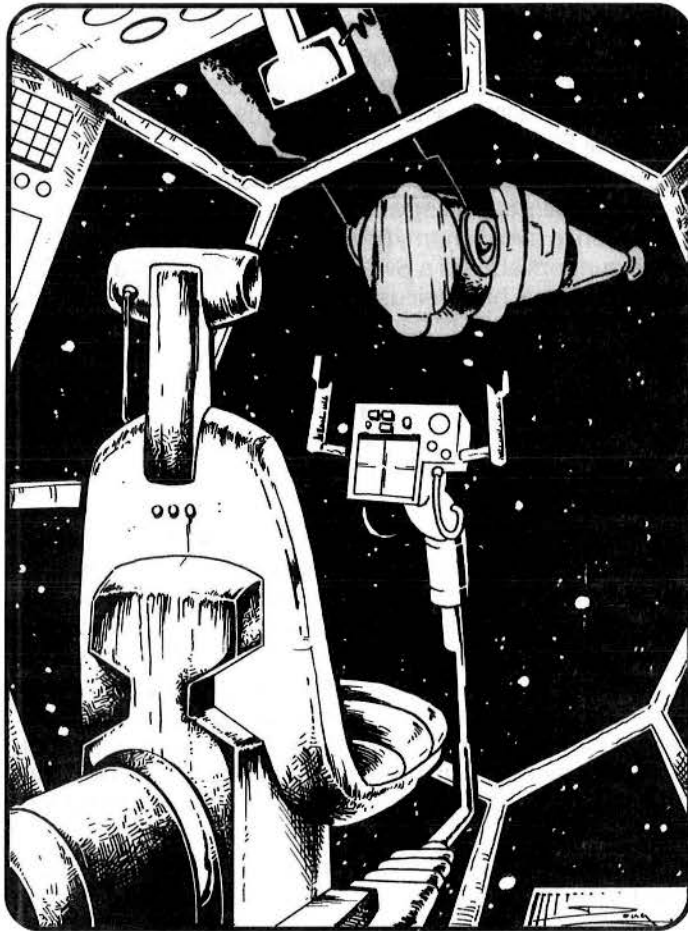
Out of Control: The pilot has attempted a maneuver and failed badly, by three or more. The ship is tumbling madly, and cannot dodge effectively: the starship suffers a -3 DCV penalty. The gunners aboard an Out of Control ship are trying to shoot at ships which appear to be flying rapidly in circles around their ship, and take a -3 OCV penalty and have 1/2 their usual Range Modifier. In addition, gunners cannot Set or gain any benefit from previous Set maneuvers while their ship is Out of Control.

To regain control, the pilot must make a Pilot skill roll with a -2 penalty. This roll restores the ship to Cruising. If the pilot wishes to execute another Piloting maneuver on the same phase as regaining control, all Piloting rolls take an additional -2 penalty.

Example: *Chiron is losing a combat, and decides to attempt a Swerve maneuver. His Pilot skill roll is 13-, so he must roll 11- because of the -2 modifier. He rolls 14, failing the roll by 3. Chiron's starship goes Out of Control. Chiron's normal DCV is 6, so his starship has a DCV of 6 - 3 = 3 when it is Out of Control. On the next ship's phase, Chiron attempts to regain control. To regain control, Chiron must roll a Piloting roll at -2, or 11-. He rolls a 9 and regains control. Chiron elects to Cruise this phase, and does not need to make another roll. If Chiron wanted to execute another Swerve maneuver immediately, he would need to make a Piloting roll at a -4 penalty instead of the usual -2. This would make his roll a 9-.*

CANCELING THE PILOT'S PHASE

The Pilot may cancel his or her next Phase to perform a defensive maneuver, but may never perform two maneuvers in the same Phase. A defensive maneuver is one which adds to the ship's DCV, such as Evade. The gunners do not lose a Phase when the Pilot cancels a Phase. Pilots can also, at their option, hold their phase.



STARSHIP GUNNER MANEUVERS

Pilots don't have all the fun in starship combat! Although the pilot's choices will change a gunner's OCV, the gunner's skill is still important in starship combat. The next chart shows the Starship Gunner maneuvers. Unlike Pilot maneuvers, no Skill roll is required to execute Gunner maneuvers, and they only change the Range Modifier and OCV of the gunner's attack. If a ship has several gunners, each gunner may choose a different Gunner maneuver on each phase. However, all the gunners on a ship share the OCV modifiers and Range Modifier multiples resulting from the starship's last Piloting action. For example, all gunners aboard a ship which is Swerving suffer a -3 OCV penalty and have their Range Modifiers halved.

All these modifiers remain constant until the pilot's next action, so teamwork is important. For example, when a starship is in a particularly good situation, the pilot should delay his or her action until after the gunners have fired.

STARSHIP GUNNER MANEUVERS

Maneuver	Shots	OCV	R Mod
Single Shot	1	+0	X 1
Double Shot	2	-3	X 1
Controlled Burst *	3	+0	X 1
Burst *	5	+2	X1/2
Full Autofire **	10	+4	X1/2
Set a Phase	0	+1	X 2
Linked Weapons	-	-1	per additional weapon

* Selective Fire weapons only
 ** Autofire and Selective Fire weapons only

EXPLANATION OF GUNNER MANEUVERS

Single Shot: Single shot is the simplest gunner maneuver. The gunner aims at one target and shoots once at it. The gunner's OCV and Range Modifier are unmodified, and one of the weapon's shots is used.

Double Shot: The gunner may fire twice at the same target, or at two different targets, in a single phase. Two separate attack rolls are made, and both rolls suffer a -3 OCV penalty. Any weapon which can shoot twice before reloading can be used for a Double Shot, except weapons which are Autofire only.

Controlled Burst: Controlled Burst fire uses only 3 shots and gives no OCV bonus. However, the target is hit once for every 2 the attack roll was made by, up to a maximum of 3 hits. The weapon has its normal Range Modifier when used for a Controlled Burst. Controlled Burst fire is only possible with weapons which have the Selective Fire advantage.

Burst: Burst fire works like Full Autofire, except that only 5 shots are used and the attacker gets only +2 OCV. The target is hit once for every 2 the attack roll was made by, up to a maximum of 5 hits. The weapon has half its normal Range Modifier. Burst fire is only possible with weapons which have the Selective Fire advantage.

Full Autofire: The gunner shoots off a full 10 shots at the target, and may hit several times. The gunner gets +4 OCV, and makes a single attack roll. If the roll succeeds, the target is hit. The attacker scores an additional hit for every 2 the attack roll was made by, up to a maximum of 10 hits. However, weapons fired Full Autofire have 1/2 their usual Range Modifier. Only weapons with the Autofire advantage or the Selective Fire advantage may be used for a Full Autofire attack.

Set a Phase: The gunner spends a full phase aiming the weapon, in order to get a better shot on a later Phase. This maneuver may be executed more than once, but the bonus does not increase. For example, a cautious gunner might spend several phases Setting while waiting for a target ship to move into a certain position. When the gunner finally shoots, the total OCV modifier is still +1 regardless of the number of Set maneuvers performed. The Range modifier of weapons is doubled after a Set maneuver. However, after each shot, the Set maneuver is used up: in order to regain the bonus, the gunner must spend another phase Setting. For long-range combat, the pilot should execute a Lock On maneuver after the gunner executes a Set maneuver, to give the gunner 4x the normal Range Modifier.

Linked Weapons: A character may choose to fire more than one weapon at the same target as a single Attack. When Linking weapons, the attacker suffers a -1 OCV penalty for each weapon after the first. For example, linking 3 weapons causes a -2 OCV modifier. If the attack roll succeeds, all the Linked weapons hit the target (roll Hit Locations separately for each weapon). If the attack roll fails, all the weapons miss the target.

USE OF TRACTOR BEAMS IN COMBAT

A ship may use Tractor Beams to move another starship around, or to keep a starship from moving. The attacker ship must make a normal attack roll to attach the Tractor Beam. The number of Gs in the Tractor Beam are subtracted from the G-force exerted by the target ship's THR each phase. If the target ship exerts more G-force than the Tractor Beam can withstand, the Tractor Beam breaks and has no effect that Phase. If the Tractor Beam's Gs exceed the target ship's G-force, the beam does not break and the ship cannot move under its own power. The target ship may still thrash about within the Tractor Beam, and execute Pilot maneuvers. For every 1 G by which the Tractor Beam's Gs exceed the target starship's G-force, the target ship may be moved 1 hex on the map, or its DCV may be reduced by 1 to a minimum DCV of zero.

Starships may spend most of their THR on a single Phase to escape a Tractor Beam by attaining a high G-force, but be unable to escape if the beam is reattached on the next Phase. Ships may also use their own Tractor Beams to break free. If the ship has a Tractor Beam with a greater number of Gs than the Tractor Beam holding it, it may shear the opposing Tractor Beam and break free.

There is no action-reaction with Tractor Beams; the attacking ship suffers no movement penalty when using a Tractor Beam.

USE OF TELEPORTERS IN COMBAT

Teleporters can be used to send characters or other objects onto a starship in combat, perhaps to serve as a boarding party or bomb. To Teleport characters or objects onto an erratically moving object, such as a spaceship in combat, an attack roll is needed. The OCV used is the OCV of the Teleporter operator, and the DCV is the DCV of the target ship. Teleporters have no Range Modifier, and suffer no OCV penalty when Teleporting anywhere within the Teleporter's maximum range.

The Teleportation may be targeted at a specific room on the target ship, or just generally at the entire starship. Targeting a specific room is only possible when the Teleporter operator knows the layout of the target starship, by using Deep Radar or some other means. The OCV penalties for targeting specific rooms are shown in the Starship Hit Location table. For example, Teleporting characters onto the Control Room of an enemy spaceship would require an attack roll with a -5 penalty, since the Control Room is a High-Tech room.

If a specific room was targeted and the roll was successful, then the teleportation was successful, and the cargo arrives at the targeted destination. If the roll was missed by 1 or 2, the teleported cargo arrives in a random location on the ship, and might hit a solid object such as a bulkhead (see below). If the roll is missed by more than 2, then the teleported cargo misses the target ship altogether, and is teleported into space.

If the cargo is teleported generally at the entire ship, it will arrive at a random location if the teleporter makes the to hit roll or misses by 1 or 2. If the roll is missed by 3 or more, the cargo is teleported into space.

Teleported cargo that arrives in a random location on the target ship (for whatever reason) will hit a solid object on a roll of 8-.

TELEPORT TABLE		
To hit Roll	Specific Target	General Target
	Cargo Arrives	
Successful	In targeted room	In random location*
Missed by 1 or 2	In random location*	In random location*
Missed by 3 or more	In space	In space
*If the cargo arrives in a random location, it hits a solid object on 8-.		

Teleporting into an object:

A character who teleports into a solid object "bounces" into the nearest open space, experiencing a shock. The shock does damage with no defense as detailed below:

TELEPORTING INTO AN OBJECT TABLE	
2d6 roll*	Damage with no defense
2-7	3d6 of d6 Stun only
8-11	2d6 of d6 Normal damage
12	1d6 of d6 Killing damage
*Subtract 3 from roll if specific room was targeted unsuccessfully	

Note that the damage is in "d6 of d6". For example, for 1 d6 of d6 K damage, roll a d6 and if the result is 3, the character takes 3d6 of Killing damage.

FTL TRAVEL IN COMBAT

FTL travel is not usually practical during combat. The exact nature of a campaign's FTL travel is up to the GM, but FTL travel during combat should be forbidden. Otherwise ships will always be able to run away from combat as soon as they start to lose.

In the Alliance, the campaign universe used for the scenarios in this book, starships must turn off engines for 5 minutes and float for 5 minutes at DCV zero to make accurate position measurements before each FTL trip. Then the pilot makes a Pilot roll to enter FTL travel. If the roll succeeds, the ship travels to the desired destination at its FTL speed (typically 2 or 4 Lightyears per day). If the roll fails, the ship may go off course, or the engines may even be damaged by a very bad roll (failed by 3 or more). The exact consequences of failed FTL Piloting rolls are up to the GM. In many campaigns it is sufficient for FTL to always work with no roll required, except when the plot demands a chance of failure.

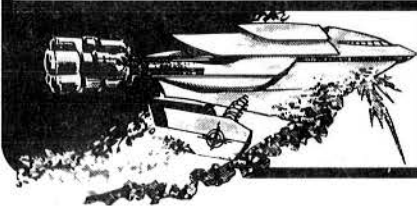
STARSHIP END AND REC

Weapons, engines, Force Fields and other devices on a starship draw power from the ship's Power Plant. In game terms, this power consumption is measured by the END cost of the devices. After every starship Phase, the engines draw END from the starship's batteries, depending on the THR used that phase. The END cost of THR depends on the ship's SPD, and is shown in the table.

Other ship's systems such as Sensors, Life Support, and Computers draw END only after Segment 12. Weapons draw END each time they are fired. In combat, it is useful to have pre-calculated the amount of END used per turn by all the Equipment on the starship, excluding weapons, and subtract this amount from the starship's REC. This quantity, called Free REC, is the actual amount of END available each turn to recharge batteries.

END COST OF THR		
Starship's SPD	END cost	END cost when Pushing
1	1 END/6 THR	+1 THR/+1 END
2	1 END/3 THR	+1 THR/+2 END
3	1 END/2 THR	+1 THR/+2 END
4	1 END/2 THR	+1 THR/+2 END
5	1 END/1 THR	+1 THR/+5 END
6	1 END/1 THR	+1 THR/+5 END
7	1 END/1 THR	+1 THR/+5 END
8	1 END/1 THR	+1 THR/+5 END
9	1 END/1 THR	+1 THR/+5 END
10	2 END/1 THR	+1 THR/+10 END
11	2 END/1 THR	+1 THR/+10 END
12	2 END/1 THR	+1 THR/+10 END

DAMAGE TO SHIPS



Starships take BODY damage the same way characters do. The starship's defenses are subtracted from the BODY done by an attack, and the remainder is subtracted from the starship's BODY total. Starships do not take STUN damage, and most starship weapons do Killing damage.

When the BODY total of a starship reaches zero or less, Piloting maneuvers get more difficult. For every 2 BODY a starship is below 0 BODY, all Piloting maneuvers take a -1 penalty. If a starship which is below zero BODY goes Out of Control, the starship Breaks Apart. If a starship's total BODY is reduced to the negative of its starting BODY total, that starship and all its equipment is completely destroyed, and the ship Breaks Apart.

BREAKING APART

Starships which Break Apart become totally useless; the ship cannot use any engines, weapons, or equipment, and provides no Life Support. Exception: the GM may rule that small, self-contained equipment such as the ship's computer and radio continue to operate on Stored Power for a while, or that small rooms continue to hold air for a limited time before it leaks away.

Any starship equipment with the Volatile Limitation has a 14- chance of exploding when the starship Breaks Apart, which may be modified up or down by the GM. Surviving characters end up floating in space or clinging to pieces of wreckage.

ABSTRACT DAMAGE

GMs who want fast, simple combat should use the Abstract Damage system. GMs who want more detailed starship combat should use the optional Starship Hit Location system instead.



In the Abstract Damage system, ships which have taken some damage but have some BODY left continue to function unimpaired in all ways. Characters are never hit by shrapnel, and devices on the ship are not destroyed until the ship Breaks Apart.

OPTIONAL HIT LOCATION SYSTEM FOR STARSHIP COMBAT

This optional system gives greater realism and more flexibility to starship combat, but it is more complicated and takes more time than the Abstract Damage system. GMs may not want to bother with Hit Locations for combats not central to the plot, or when there are a large number of ships in combat.

Each time a starship takes damage, roll 3d6 and consult the Starship Hit Location chart to find out what part of the starship was hit. The BODY which penetrated the starship's defenses is multiplied by the BODY X multiplier, and other special effects of damage occur depending on the hit location, as detailed below for each location.

If the chart indicates a location not present on a given ship, roll again. For example, most shuttlecraft don't have any Living Quarters or Weapons.

HIT LOCATION CHART FOR STARSHIPS			
3d6 Roll	Location	BODY X	OCV Mod
3-7	High-Tech Rooms	x1	-5
8	Weapons	x1	-7
9-10	Cargo Space	x1/2	-3
11	FTL Engines	x1	-6
12	Living Quarters	x1	-5
13	Power Plant	x1	-6
14+	Sublight Engines	x1	-4

HIT LOCATION EFFECTS

Cargo Space: Storage space on the ship which is not pressurized or heated. Some cargo may be lost or destroyed, but the ship takes relatively little structural damage.

FTL Engines: Damaged FTL drives may still be used, but take -1 to the piloting roll for every 1 BODY taken.

High-Tech Rooms: If a starship has several High-Tech Rooms, choose among them randomly. The damaged room immediately suffers Explosive Decompression. Each item of equipment in the damaged room has a chance of 5 + BODY done to the room or less on 3d6 of being damaged. Damaged equipment cannot be used until it is repaired by Damage Control or some other means. Characters in the room take 1d6 normal Physical damage for every 1 BODY done to the room.

Living Quarters: If a starship has several Living Quarters, choose among them randomly. The damaged room immediately suffers Explosive Decompression. Characters in the room take 1d6 normal Physical damage for every 1 BODY done to the room.

Power Plant: The Power Plant provides END to power all devices on the starship which cost END, including the engines. Damaged Power Plants continue to work at reduced output; the starship loses 1 REC for every 1 BODY done to the Power Plant.

Sublight Engines: This location represents external parts of the engines such as rocket tubes or external fuel tanks. Damaged engines may still be used, but lose 1 G for each 2 BODY taken. The THR of the starship drops as shown on the THR table (see Starship Construction). When the engine's Gs fall to zero, the sublight engines are useless. Starships with 0 G cannot execute any piloting maneuvers, and fall to DCV 0.

Weapons: If a ship has more than one weapon, choose among them randomly. The weapon has a chance of becoming useless equal to 5 + BODY the weapon has taken or less on 3d6. This chance is rolled only once each time the weapon takes damage. If the weapon does not become useless, it continues to operate normally.

EXPLOSIVE DECOMPRESSION AND VACUUM DAMAGE

Explosive Decompression occurs whenever a pressurized room takes BODY in starship combat. In one Segment, all the air rushes out of the room. Loose objects are sent flying out into space, and characters who wish to avoid the same fate must make a DEX roll and then a STR roll to grab a solid object and hang on, with any modifiers the GM deems appropriate. Characters who are strapped in will not fly out into space, and do not need to make any rolls. Some military commanders prefer to make all personnel wear spacesuits, and pump the ship's air into storage tanks before combat begins, to avoid Explosive Decompression.

An unprotected character (i. e. not wearing a spacesuit) who undergoes Explosive Decompression takes 6d6 normal Physical damage immediately. Natural PD subtracts from the BODY and STUN of this attack, but PD derived from body armor does not. Once a room is emptied of air, unprotected characters take 2d6 NND STUN damage each phase from cold, low pressure, and suffocation. Characters may lower their SPD to 2 in order to take damage more slowly, just as drowning characters do. Once a character is unconscious, that character takes 2d6 normal STUN and BODY damage each Turn, after Segment 12, with no defense. The average character will therefore take 2 BODY and 7 STUN each Turn in vacuum, and will die after about two minutes.

PUSHING FOR STARSHIPS

Any ship's system which costs END may be Pushed to have a greater effect temporarily, at a higher END cost. The END cost for Pushing is 1 END per Point added. This is 5 times the usual END cost.

Pushing requires a Mechanics skill roll. If the Mechanics roll fails, the device has its normal effect with no added Points, but 10 END are used up anyway (wasted). If the Mechanics roll succeeds, the device may gain up to +10 Points of effect for a cost of 10 END. For each -1 the skill roll was made by, the device may gain an additional +2 Points of effect for +2 END cost. The GM may choose to allow larger amounts of Pushing in extreme situations, such as trying to get enough THR to avoid being sucked into a black hole.

THR can be Pushed in the same manner, but the END cost of Pushed THR depends on the starship's SPD, as shown in the END Cost of THR table.

Example: Zakul's starship passes an enemy starship in Fly-By combat. Since Zakul knows that he'll only get one shot, he decides to Push his weapon's damage. Zakul's weapon is an 8d6 Killing laser, which costs 24 END per shot. Zakul must make a Starship Repair roll to Push; his skill roll is 13- and he rolls a 10, succeeding by 3. Zakul may Push for up to 16 Points of effect for +16 END. He decides to add +1d6K (15 Points of Effect) which costs +15 END. Zakul's laser now does 9d6K damage and costs 24 + 15 = 39 END per shot.

Example: Chiron's starship has SPD 3 and 3 Gs, so its THR is 12 and normally each 2 THR used costs 1 END. When Pushing, each +1 THR costs +2 END, as shown in the END Cost of THR table. Chiron is flying the starship in combat, and on Segment 4 he uses 6 THR to speed up to a Velocity of 6 hexes/Phase, which costs 3 END. On Segment 8 he changes Facing by one hexside (60 degrees), which uses up the remaining 6 THR and costs an additional 3 END. On Segment 12, a previously unnoticed enemy starship appears dead ahead. Chiron wants to stop his ship on Segment 12, but he has already used up all 12 of his THR available this Turn. Chiron decides to Push the engines to get more THR. Pushing requires a Mechanics roll. Chiron's Mechanics skill is 11-, and he rolls 10, making his roll by 1. Chiron may spend up to 12 END Pushing, which will get him +6 THR. Chiron uses all 6 THR to slow down, and his starship stops on Segment 12.

USING BODY FOR END: OPTIONAL RULE

Starships which have exhausted their stored END and still want to operate devices which cost END may attempt to overload the ship's Power Plant to produce more END. With a successful Mechanics roll 5 END may be produced, and an additional 5 END for every -1 the Mechanics roll was made by. However, the Power Plant takes 1 BODY for every 5 END produced in this manner. As always, the Power Plant loses 1 REC for each 1 BODY it takes. If the Mechanics roll fails, no extra END is produced, and the Power Plant loses 1 BODY (and 1 REC).

DAMAGE FROM G-FORCE

Ships move faster and turn sharper corners if they have a high SPD and THR, but the occupants may suffer from the G-force. G-force is a consequence of acceleration; if a starship speeds up suddenly or makes a sharp turn, its occupants feel heavier and may even take physical damage from the increased weight of their own bodies.

Any character in an acceleration couch (standard on all starships) can tolerate a G-force up to 3 + that character's CON/5 without taking damage. For example, a person with a CON of 10 can take 5 G's without damage. Characters lying on the floor or other hard surface can only tolerate a G-force of CON/5 before taking damage. If the G-force exceeds this limit, the character takes 1d6 normal physical damage each phase for every 2 Gs above the limit.

Optionally, GMs can adjust this damage to reflect the gravity of the individuals home world; Heavyworlders, for example, could survive two extra levels of G-force before taking damage.

The full G-force rules are rather complicated, but they are particularly simple for SPD 3 and SPD 4 starships. We recommend that GMs use this simple rule and restrict the campaign to SPD 3 and 4 starships at first.

SIMPLE G-FORCE SYSTEM FOR SPD 3 AND 4 STARSHIPS

Each phase, the G-force is equal to the ship's THR used that phase. For example, a SPD 3 starship with 3 Gs has 12 THR to use each Turn. If all 12 are used in a single Phase, occupants experience a G-force of 12 Gs.

ADVANCED SYSTEM FOR OTHER SPD VALUES

The G-force is determined from the THR used, as shown on the G-Force table. For example, a SPD 1 ship which uses 1 THR causes only 1/12 G of G-Force, while a SPD 12 ship using 1 THR causes 12 Gs! The 1 G per 1 THR entries for SPD 3 and SPD 4 ships are approximations. GMs who want greater accuracy may wish to use these values: SPD 3: 3 Gs per 4 THR used and SPD 4: 4 Gs per 3 THR used.

G-FORCE TABLE	
Ship's SPD	G-Force
1	1 G per 12 THR used
2	1 G per 3 THR used
3	1 G per 1 THR used
4	1 G per 1 THR used
5	2 Gs per 1 THR used
6	3 Gs per 1 THR used
7	3 Gs per 1 THR used
8	4 Gs per 1 THR used
9	7 Gs per 1 THR used
10	8 Gs per 1 THR used
11	10 Gs per 1 THR used
12	12 Gs per 1 THR used

SAMPLE STARSHIP COMBAT



The starships used in this example are both Enigma Exploration Vessels; this vessel is listed in the sample starship section. To simplify the example, END costs are not discussed.

The pilots and gunners statistics are shown below.

PILOTS		
	Grus	Tessa
Pilot Skill	13	13
DEX	18	14
DCV	6	5
SPD	3	3
GUNNERS		
	Jolly Roger	Parallax
OCV	5	6
DEX	14	18
SPD	3	3

Assume the gunners have no Combat levels, and are familiar with Starship weapons.

1) ENGAGEMENT

Spotting Each Other: Grus and his band of pirates are on their ship, the Jolly Roger. One of the crew is scanning the solar system for ships to raid. Another ship, called the Parallax, enters the quadrant, piloted by Tessa and her crew. Tessa is driving the ship at 1 G, and thereby increasing the Range Modifier Multiple by x100. Hence, the Jolly Roger's sensors, which normally have a Range Mod of -1/3" have a Range Mod of -1/300". The Parallax is within 400" of the Jolly Roger, so the crewmember has a sensor roll of $12-1 = 11$ or less. He rolls a 10, and spots the Parallax.

Engaging the Battle: "Surrender or die!" yells Grus over the radio.

"Ha! I'll destroy your ship," responds Tessa, and both ships converge towards each other (Converging Combat).

The ships are placed on the hex map. Grus will go first, since he has the highest DEX (but he could elect to wait if he wishes). Grus determines the facing of the Jolly Roger (he chooses towards the middle of the map), and chooses a velocity of 3. Tessa chooses a position on the other side of the map, facing Grus, and a velocity of 2.

2) THE BATTLE

Phase 12: Combat begins on phase 12. The two ships start out 20 hexes away from each other.

On DEX 18 (Grus' DEX), Grus accelerates by 1 (up to a 4 velocity), and the Jolly Roger moves 4 hexes forward (towards the Parallax). The gunners opt to wait for the pilots to move. Grus chooses to execute a Hold Steady maneuver (+2 OCV, -1 DCV). He must make a piloting roll to perform this maneuver. He rolls an 8, and makes it. On DEX 14 (Tessa's DEX), Tessa accelerates by 1, and the Parallax moves 3 hexes forward (toward the Jolly Roger). Tessa elects to perform a Cruise maneuver (+0 OCV, +0 DCV). She does not need to make a piloting roll to Cruise. The ships are now 13 hexes apart.

Now the gunners decide to go. The Parallax gunners move (we'll call them gunner #1 and gunner #2). Gunner #1 (firing the BX Plus Missile Launcher) has an OCV of 6. The Jolly Roger has the pilot's DCV: Grus' DCV of 6, but Grus executed a Hold Steady maneuver, decreasing the ship's DCV by -1. The ship has a DCV of 5. The gun has a Range Mod of -1/3", and since the ships are 13 hexes apart, there is a -4 OCV penalty. So the Attack roll is $11+6-5-4=8$ or less. Gunner #1 rolls an 11, and misses! Gunner #2 decides to Set a phase, which will add +1 OCV on the next action.

The Jolly Roger gunners (we'll call them gunner #3 and gunner #4) decide to fire. Gunner #3 (firing the BX Plus Missile Launcher) has an OCV of 5, but Grus executed a Hold Steady maneuver, so the gunner gets a +2 on his roll for an OCV of 7. The Parallax has its pilot's DCV, in other words Tessa's DCV of 5. The gun has a Range Modifier of -1/3", and since the ships are 13" apart, there is a -4 OCV penalty. The Attack roll is $11+7-5-4=9$ or less. Gunner #3 rolls a 9, and hits! The BX Plus does 6d6 K AP (Killing Armor Piercing), and the roll is 6, 5, 4, 3, 3, and 2, for a total of 23 BODY. The Parallax's DEF is 31 (15 in Armor, 16 in force field), but because the attack is Armor Piercing, the Parallax gets only 1/2 its DEF — 16. The damage taken by the Parallax is $23-16=7$ BODY. Gunner #3 rolls on the Hit Location Table, getting a 15, he hit the Sublight engines. The engines lose 1 G for every 2 BODY taken. The ship only has 3 Gs, and hence the ship's Gs fall to zero. Tessa can no longer maneuver the Parallax. The Parallax is a sitting duck!

A quick summary of the next few segments:

On segment 4, everyone including the ships will move (because they are all SPD 3). The Jolly Roger may accelerate, decelerate, or change facing at the pilot's DEX (Grus' DEX of 18). The Jolly Roger gunners will try to disable the Parallax. The Parallax will be unable to perform any maneuvers because its Sublight engines are broken, and will simply coast forward at its original SPD of 2 (its DCV is 0). The Parallax gunners will try to shoot back in defense.



STARSHIP DEVICE SUMMARY



Listed below is a summary of Starship Devices. The Point, mass in kilograms and END cost/Turn is listed for each device.

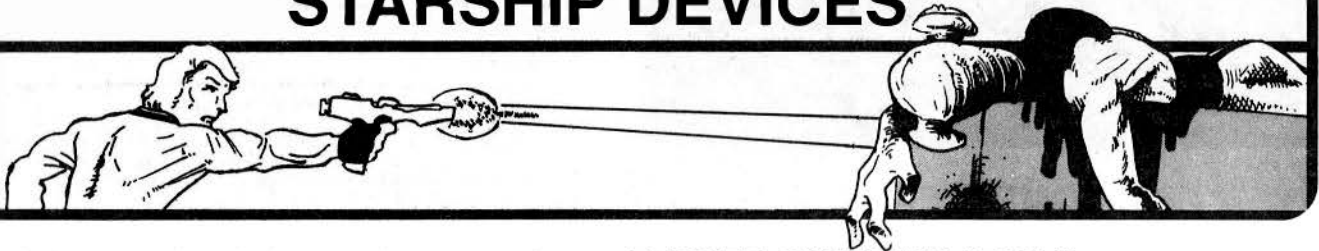
Name	Pts	Mass	END	Notes
Terra Firma 3 Gs	30	100	6	Artificial Grav.
Combat Pilot Suit	12	25	0	Cancels 10 Gs
Flicker Communicator I	10	25	2	Standard Equipment
Flicker Communicator II	18	50	4	+3 pts Jamming Def.
Flicker Distress Beacon	12	25	0	
Peace Radio Jammer	22	50	4	-2 to Sensors rolls
Generic Computer	6	25	1	
Theris M&M Computer Plus	20	50	4	Standard Equipment
Theris M&M ONYX III	60	800	12	Excellent Computer
Carefree Damage Control	9	25	2	13-
TM Telescope Plus	15	25	3	Standard Equipment
TM Super Sensors	25	50	5	
Deep Radar	15	25	3	
Force Field Analyzer	20	50	4	
Starnoise Invisibility Shield	15	100	12	Hides whole ship
Repulsor Meteor Deflect	20	50	4	13- to deflect meteors
Instant Care Robodoctor	20	50	4	1 BODY / 6 hours
Sleeper Suspended Anim.	10	25	2	carries 10 frozen people
Corona Teleporter	37	1600	30/use	8 people, 250 km., not available in the alliance
Mantis Tractor Beam	37	400	10	

STARSHIP WEAPONS

The following starship weapon properties are listed below: Name, Point cost, OCV Modifier, Range Modifier in starship inches (64" or 128 meters), Damage, Shots before reloading, Reload time, Mass in tons (1 ton = 1000 kg. = 2200 pounds) and Arc of Fire in degrees. The Beam Weapons do not have Limited Shots, but use some of the starship's END each time they are fired.

Projectile Weapons									
Name	Pts.	OCV	RMod	Damage	Shots	Reload	Mass	Arc	Notes
BX Small	43	+0	-1/3"	5d6K	6	1 Turn	1.6	360	
BX-6 Mini	67	+0	-1/3"	6d6KAP	6	5 min.	1.6	60	14- Act.
BX Plus	70	+0	-1/3"	6d6KAP	6	1 Turn	25	180	14- Act.
Stinger Auto	75	+0	-1/3"	5d6K	32	1 Turn	25	180	14- Burnout, Volatile: 17d6 Explosion when damaged or Burnout roll fails, Selective Fire
XP-10 Plasma	86	+0	-1/3"	10d6KEX	1	1 Phase	3200	180	14- Act., Slow Missile
Beam Weapons									
Name	Pts.	OCV	RMod	Damage	END	Mass	Arc	Notes	
Particle Beam	79	+0	-1/3"	6d6K	27	25	180	14- Act. Attack vs. Limited Defense: Force Fields	
Focussed Beam	60	+0	-1/3"	2d6K	18	6.4	360	14- Act. , Attack vs. Limited Defense: Doubly Hardened Armor	

STARSHIP DEVICES



The list below contains devices and weapons for starships. To equip a starship, players may take these devices as they are, or modify them to suit their needs. A description of each device is given, as well as the device specifications. The Point cost or cost multiplier is given next to the specifications. Usually starship devices are paid for with Points, not Credits. If the Credit cost of a device is needed for some reason, remember that all of these devices have the modifier "Scale Change", which multiplies all ranges by 64x, masses by 64x, and Credit Costs by 1000x.

ARTIFICIAL GRAVITY

THE TERRA FIRMA ARTIFICIAL GRAVITY GENERATOR (STAR VOYAGER EQUIPMENT)

This generator works for the whole spaceship. It can cancel or add up to 3 Gs. The Gs can be used to compensate for high accelerations, or just to provide a normal-gravity environment while traveling in space.

Cancels 3 Gs — 30 Pts.

Mass: 100 kg.

END Cost: 6/Turn

Total Point Cost: 30

COMBAT PILOT SUIT (GENERAL STARSHIPS, INC.)

This suit cancels out 10 Gs for a single person, and is usually used on single-person fighter spacecraft. The suit has compartmented bags filled with silicone oil which distribute the G-Forces evenly on the wearer's body, making high G maneuvers more tolerable. It cannot be used to add Gs, which is a -1/4 General Limitation. This device is an exception to the usual rule that devices cannot buy Reduced END and has the Advantage Reduced Endurance cost to reflect the fact that it requires no power to operate.

Cancels 10 Gs for 1 person — 10 Pts.

Advantage:

Reduced END (2 levels) — +1/2

Limitation: can't add Gs — -1/4

Mass: 25 kg.

END cost: 0/Turn

Total Point Cost: 12

COMMUNICATORS

FLICKER COMMUNICATOR I (STAR VOYAGER EQUIPMENT)

The Flicker Communicator has both sound and video, and travels at Faster-than-light speeds.

FTL Video — 10 Pts.

Mass: 25 kg

END Cost: 2/Turn

Total Point Cost: 10

FLICKER COMMUNICATOR II (STAR VOYAGER EQUIPMENT)

The Flicker Communicator II has all the features of the Flicker I, but is directional and has 3 points of Jamming Defense.

FTL Video — 10 Pts.

Directional — +5 Pts.

3 Points of Jamming Defense — +3 Pts.

Mass: 50 kg.

END Cost: 4/Turn

Total Point Cost: 18

FLICKER DISTRESS BEACON (STAR VOYAGER EQUIPMENT)

This small device broadcasts a short, pre-programmed message such as "Theris Distress Beacon 10423 Activated: Please send Aid" once per minute, on FTL waves. They are commonly included on starships and rigged to go off automatically in the event of a crash, to summon help. Of course, the beacon might also summon enemies.

FTL Radio — 8 Pts.

Advantages:

Stored Power for 1 month — +2

Limitations:

Distress Beacon — -1

Mass: 25 kg

END Cost: 0 (uses Stored Power)

Total Point Cost: 12

COMMUNICATION JAMMERS

THE PEACE RADIO AND VIDEO JAMMER (INTERPLANETARY ELECTRONICS CO.)

The Jammer produces interference on all Radio and FTL wavelengths. Further details about Jammers are given in the Device Capabilities section.

-2 to target's Electronics — 15 Pts.

Starship Sensors Rolls

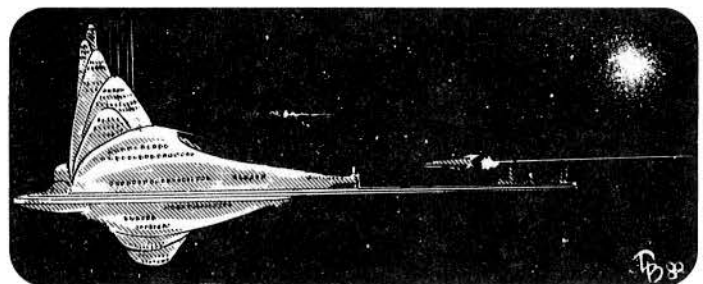
Advantages: x4 Range Modifier

(-1/12 hexes starship scale) — +1/2

Mass: 50 kg

END Cost: 4/Turn

Total Point Cost: 22





COMPUTERS

THE GENERIC COMPUTER (INTERPLANETARY ELECTRONICS CO.)

This is a relatively simple computer, available on any advanced planet. This computer can drive the ship on routine flights, as long as no emergencies arise. Its SPD of 1 may seem too slow for safe piloting, but it maintains a held move for emergencies. If some emergency arises, the computer will try to continue towards its destination with the best plan its 10- INT roll can come up with. Furthermore, since it may only run one program at a time, it turns off all entertainment when landing, checking its position, or making course corrections. The 8- entertainment programs represent a dreary, small selection of movies, music and games: it has only an 8- chance of having any particular item.

THE GENERIC COMPUTER			
Val	Char	Cost	
3	INT	3	Can run 1 Program
0	DEX	0	
1	SPD	0	
Cost Skill			
	Autopilot Skills		
2	Navigation 11-		
1	Sensors Operation 8-		
1	Pilot 8-		
1	Tradespeak (for voice commands)		
	Entertainment Skills		
1	Popular Movies 8-		
1	Popular Music 8-		
1	Video Games 8-		
	Programs		
1	Drive Ship from A to B (A and B must be on the Navigation Maps)		
1	Show Entertainment		

Mass: 25 kg

END Cost: 1/Turn

Total Point Cost: 13 computer Points for 6 Points.

THERIS MANUFACTURING & MINING ALPHA PLUS COMPUTER

This computer is artificially intelligent, and of average quality. This computer functions as an autopilot and navigator, but is not very good at these functions. It is intended for small to medium sized ships, and is a very common computer in the Alliance.

ALPHA PLUS COMPUTER			
Val	Char	Cost	
8	INT	8	Can run 2 Programs
10	EGO	20	
0	DEX	0	Disadvantages
1	SPD	0	
13			Protects Humans (very common, total)
7			Obeys orders (very common, total, x1/2)
OCV 3;DCV 3			
Cost Skill			
3	Pilot 11-		
3	Mechanics 11-		
1	KS: Star Maps 11-		
1	KS: Starship Navigation 11-		
3	Sensors Operation 11-		
2	Planetology 11-		
3	Scholar		
1	KS: Phychi books 11-		
1	KS: Popular Music 11-		
1	KS: Popular Movies 11-		
1	KS: Medicine 11-		
1	KS: Alien cultures 11-		
1	KS: Phychi culture 11-		
1	KS: Alliance 11-		
Programs			
1	Drive ship from A to B		
1	Show Entertainment		
1	Search Library for Information		
1	Automatic Sensor Sweep		
1	Evade Enemy and Flee		
1	Test Ship's Systems		
3	Programs to be added by the user		

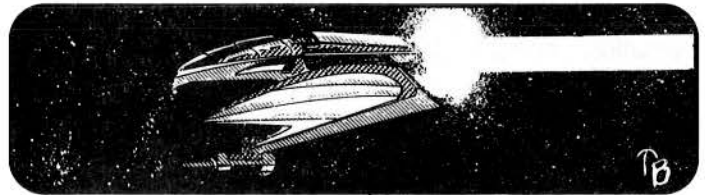
Mass: 50 kg.

END Cost: 4/Turn

Total Point Cost: 40 computer Points for 20 real Points.

THERIS M&M ONYX III COMPUTER

This enormous, intelligent computer can provide all the computing services needed on a large starship, including piloting the ship or firing the weapons (but not both at the same time). It includes an Encyclopedia Galactica, which includes extensive articles about every planet and race in the explored region of the Galaxy, as represented by its many Knowledge skills. The Onyx III can explain its functions to novices, and often extolls its own virtues. The mass of this computer includes all the cooling equipment, connections to the starship engines, and other support equipment.



ONYX THREE COMPUTER

Val	Char	Cost	
15	INT	15	Can run 3 Programs
10	EGO	20	
8	DEX	24	Disadvantages
2	SPD	2	13 Protects Humans (very common, total)
			7 Obeys orders (very common, total, x1/2)
			2 Self Preservation Instinct (common, strong, x1/4)
Cost Skill			
3	Pilot 11-		
1	Ship's guns		
3	Mechanics 11-		
4	KS: Star Maps 15-		
3	KS: Starship Navigation 14-		
3	Sensors Operation 11-		
	Sciences		
2	Planetology 11-		
2	Astronomy 11-		
2	Biology 11-		
2	Chemistry 11-		
2	Pharmacology 11-		
2	Physics 11-		
2	Robotics 11-		
2	Xenobiology 11-		
3	Electronics 11-		
3	Cryptography 12-		
3	Translation 12-		
3	Scholar		
1	KS: Phychi books 11-		
1	KS: Popular Music 11-		
1	KS: Popular Movies 11-		
1	KS: Popular Video games 11-		
2	KS: Medicine 12-		
3	KS: Alien cultures 13-		
3	KS: Phychi culture 13-		
3	KS: Alliance 13-		
3	Linguist		
2	Phychi		
2	Kindred		
2	Shadu		
1	Imen		
	Programs		
1	Drive ship from A to B		
1	Sweep Area for other starships		
1	Attack target		
1	Show Entertainment		
1	Search Library for Information		
1	Evade Enemy and Flee		
1	Test Ship's Systems		
1	Translate language		
1	Explain all ship's functions		
3	Programs to be added by the user		

Mass: 800 kg.

END Cost: 12/Turn

Total Point Cost: 121 computer points for 60 real points**DAMAGE CONTROL****THE CAREFREE DAMAGE CONTROLLER (STAR VOYAGER EQUIPMENT)**

This machine can repair one piece of damaged equipment on a 13- roll in one Turn (12 seconds). However, it does not restore BODY to the equipment; this requires more extensive repairs.

13- to repair damage in 1 Turn — 9 Pts.

Mass: 25 kg.

END Cost: 2

Total Point Cost: 9**DETECTORS****THERIS MANUFACTURING STARSHIP TELESCOPE PLUS**

This telescope can detect starships and other objects in space by collecting the visible light they reflect or radiate. The spectroscopic analysis is useful for identifying particular stars for more accurate navigation. Its Range Modifier when looking for small objects such as drifting spaceships is -1/3" (starship scale). Large or bright objects such as planets and spaceships using rocket engines can be detected at much larger distances, as described in the Starship Combat rules.

Light Detector — 5 Pts.

Locate (forms an image) — +5 Pts.

Analyze (spectroscopic) — +5 Pts.

Mass: 25 kg.

END Cost: 3

Total Point Cost: 15**THERIS MANUFACTURING SUPER PLUS STARSHIP SENSORS**

These are more sophisticated sensors, and can detect more types of energy including visible light, radio, UV, and IR.

Detects: visible light — 5 Pts.

Low Frequency (IR) — +2 Pts.

Very Low Freq. (Radio) — +2 Pts.

High Frequency (UV) — +2 Pts.

Very High Freq. (X-rays) — +2 Pts.

Sound (external to ship) — +2 Pts.

Locate (forms Image) — +5 Pts.

Analyze (Spectroscopic) — +5 Pts.

Mass: 50 kg.

END Cost: 5

Total Point Cost: 25**INTERPLANETARY ELECTRONICS DEEP RADAR**

This Radar unit can scan a planet or starship, and gives a 3-dimensional image including the outside of the object and its interior. However, this Deep Radar Sensor cannot see into objects with Hardened Defenses.

Detects: Radar Emissions — 5 Pts.

Locate (forms Image) — +5 Pts.

Analyze (3-dimensional image) — +5 Pts.

Mass: 25 kg.

END Cost: 3

Total Point Cost: 15

FORCE FIELD ANALYZER (THERIS MANUFACTURING)

This Sensor gives a detailed analysis of the Force Fields that protect a starship or other object. With a successful Sensors Operation roll, these Sensors reveal a Force Field's Advantages and Limitations as well as the exact DEF of the Force Field. For example, if a Force Field has an Activation Roll, or is Hardened, then the Force Field Analyzer will reveal these facts.

Detects: Force Fields (Uncommon) — 10 Pts.
Locate (forms Image) — +5 Pts.
Analyze (finds DEF, Adv. & Lim.) — +5 Pts.
Mass: 50 kg.
END Cost: 4
Total Point Cost: 20

INVISIBILITY

STARNOISE INVISIBILITY SHIELD (GENERAL STARSHIPS, INC.)

When the shield is on, it draws power (12 END) and makes the ship invisible to normal vision, IR, and Radar. It has a fringe effect, which can be seen if a starship comes within 1 starship hex.

Invisible to: normal vision, IR, and Radar — 30 Pts.
Limitation: Increased END Cost (x2) — +1
Mass: 100 kg
END Cost: 12/Turn
Total Point Cost: 15

MISSILE DEFLECTION

THE REPULSOR (STAR VOYAGER EQUIPMENT)

The Repulsor can deflect meteors and other space debris, but not missile or laser attacks. It is not useful as a defense in starship combat, but is useful for spaceships such as salvage vessels which go into clouds of space debris often. The Repulsor works by deflecting the path of incoming objects with a small Tractor Beam. The Repulsor has 20 Active Points, and therefore is less effective against meteors which will do Damage Class 21 or more, as explained in the Missile Deflection description.

Deflects meteors on 13- — 20 Pts.
Mass: 50 kg
END Cost: 4/use
Total Point Cost: 20

ROBOT DOCTORS

INSTANT CARE ROBOT DOCTOR (THERIS MANUFACTURING)

This device is about 7 feet long. Its lid opens up, and the wounded person is placed inside. After 6 hours, the character will have recovered 1 BODY. Inside are scalpels, syringes, anesthesia, and so on — all the things necessary to perform surgery.

1 BODY recovered every 6 hours — 20 Pts.
Mass: 50 kg
END Cost: 4/Turn
Total Point Cost: 20

THE SLEEPER SUSPENDED ANIMATION CHAMBER (INTERPLANETARY ELECTRONICS, INC.)

The Sleeper serves as "Coach" class on sleazy spacelines. Characters are frozen, and do not age until they are taken out of the chamber.

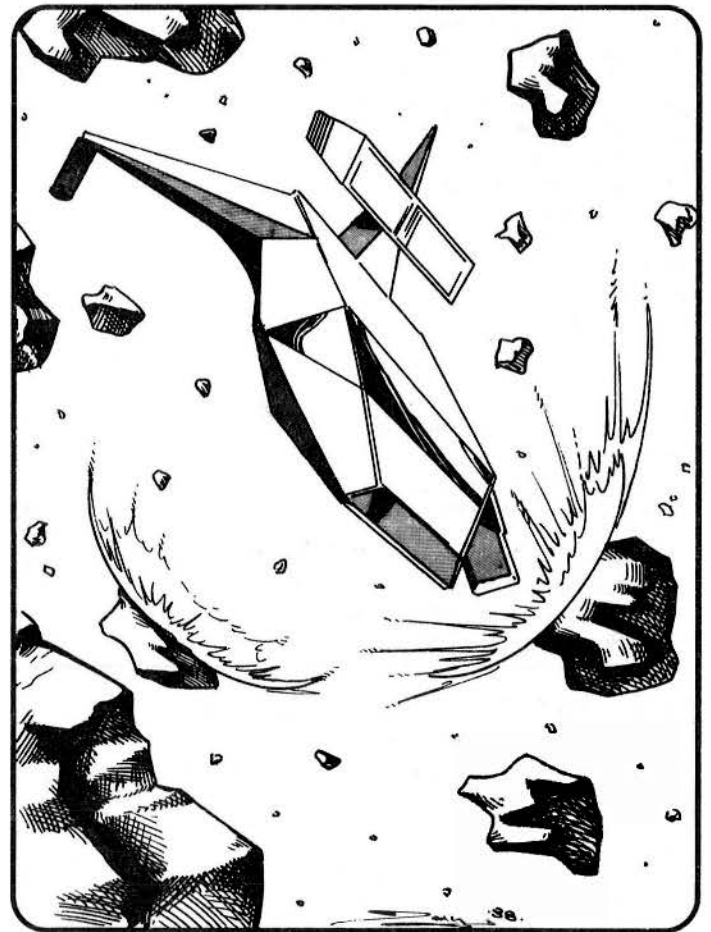
Carries 10 people — 10 Pts.
Mass: 25 kg. (empty)
END Cost: 2/Turn
Total Point Cost: 10

TELEPORTERS

CORONA TELEPORTER (STAR VOYAGER EQUIPMENT)

This Teleporter can send 8 people from ship-to-ship or from an orbiting ship to the surface of a planet, as long as they are within 1920" starship scale (about 250 km.). For more details, see "Teleporters" in the Device Section.

Teleporter (Base Range 15") — 30 Pts.
2x Range bought 6 times — +30 Pts.
2x mass bought 3 times (8 people) — +15 Pts.
Max range 1920" = 250 km.
Limitation: 2x END cost — -1
Mass: 1.6 tons
END Cost: 30/Use
Total Point Cost: 37



TRACTOR BEAM

THE MANTIS TRACTOR BEAM (THERIS MANUFACTURING)

This Tractor Beam can tow ships, or keep enemy ships from moving in combat. Details of the operation of Tractor Beams are given in the Starship Combat section.

5 Gs — 50 Pts.

Limitation: 14- Activation Roll — -1/2

Mass: 400 kg

END Cost: 10

Total Point Cost: 37

STARSHIP WEAPONS

The BX series of rocket launchers all shoot self-contained rockets at the target. All BX missile Launchers do Physical Damage.

BX SMALL ROCKET LAUNCHER

5d6K Physical Damage — 75 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Limitations:

6 shots/clip 1 Turn to reload — -1/4

Volatile (Active Pts./20 d6 normal explosion) — -1/2

Mass: 1.6 tons

END Cost: zero

Total Point Cost: 43

BX-6 MINI ROCKET LAUNCHER

6d6K Physical Damage — 90 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Advantages:

Armor Piercing — +1/2

Miniaturization 3 levels — +3/4

Active Points: 135

Base mass: 100 tons

Final mass: 1.6 tons

Limitations:

6 shots/clip 5 min. to reload — -1/2

14- Activation Roll — -1/2

60 degree Arc of Fire — -1

Mass: 1.6 tons

END Cost: zero

Total Point Cost: 67

BX PLUS ROCKET LAUNCHER

6d6K Physical Damage — 90 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Advantage:

Armor Piercing — +1/2

Miniaturization: 1/4 mass — +1/4

Active Pts.: 135

Base mass: 100 tons

Final mass: 25 tons

Limitations:

6 shots/clip 1 Turn to reload — -1/4

14- Activation Roll — -1/2

180 degree Arc of Fire — -1/2

Mass: 25 tons

END Cost: zero

Total Point Cost: 70



STINGER AUTOFIRE ROCKET LAUNCHER

5d6K Physical Damage — 75 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Advantages:

32 shots/clip, 1 turn reload — +3/4

Selective Fire — +1/2

Miniaturization: 3 levels — +3/4

Active Pts.: 169

Base Mass: 1.6 Ktons

Final Mass: 25 tons

Limitations:

Volatile (Active Points/10 d6 = 17d6 Normal Explosion when damaged or when Burnout occurs) — +3/4

180 degree Arc of Fire — +1/2

Burnout Roll 14- — +3/4

Mass: 25 tons

END Cost: zero

Total Point Cost: 75

PARTICLE BEAM

The Particle Beam does Physical Damage which is not stopped by Force Fields, but only by Armor. It never runs out of shots. Its power is drawn from the ship's END reserve.

6d6K damage — 90 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Advantage:

AVLD: Force Fields — +1/2

Miniaturization: 1/4 mass — +1/4

Active Pts. 135

Base mass: 100 tons

Final mass: 25 tons

Limitation:

14- Activation Roll — -1/2

180 degree Arc of Fire — -1/2

Mass: 25 tons

END Cost: 27

Total Point Cost: 79

FOCUSED PLASMA BEAM

The Focussed Plasma Beam is a very dangerous weapon because Force Fields of any kind, Armor and even Hardened Armor provide no defense against it. Only doubly Hardened Armor provides protection, so most starships have no defense at all against this weapon!

2d6K Energy damage — 30 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Advantages:

AVLD: defense is doubly Hardened Armor — +2

Limitation: 14- Activation Roll — -1/2

Mass: 6.4 tons

END Cost: 18

Total Point Cost: 60

XP-10 PLASMA CLOUD

The XP-10 forms a relatively large and slow cloud of ionized gas at a high temperature which does tremendous damage to a target starship. However, since it travels slowly, it may be dispersed by any weapon which does at least 5d6K damage before it hits the target. For further details, see the "Slow Missile" Limitation.

10d6K Energy damage — 150 Pts.

+0 OCV — +0

-1/3 hexes (starship scale) — +0

Advantages:

Explosion +1/2

Miniaturization: 2 levels +1/2

Active Pts.: 225

Base Mass: 50 Ktons

Final Mass: 3.2 Ktons

Limitations:

1 shot/clip 1 phase reload — -1

14- Activation Roll — -1/2

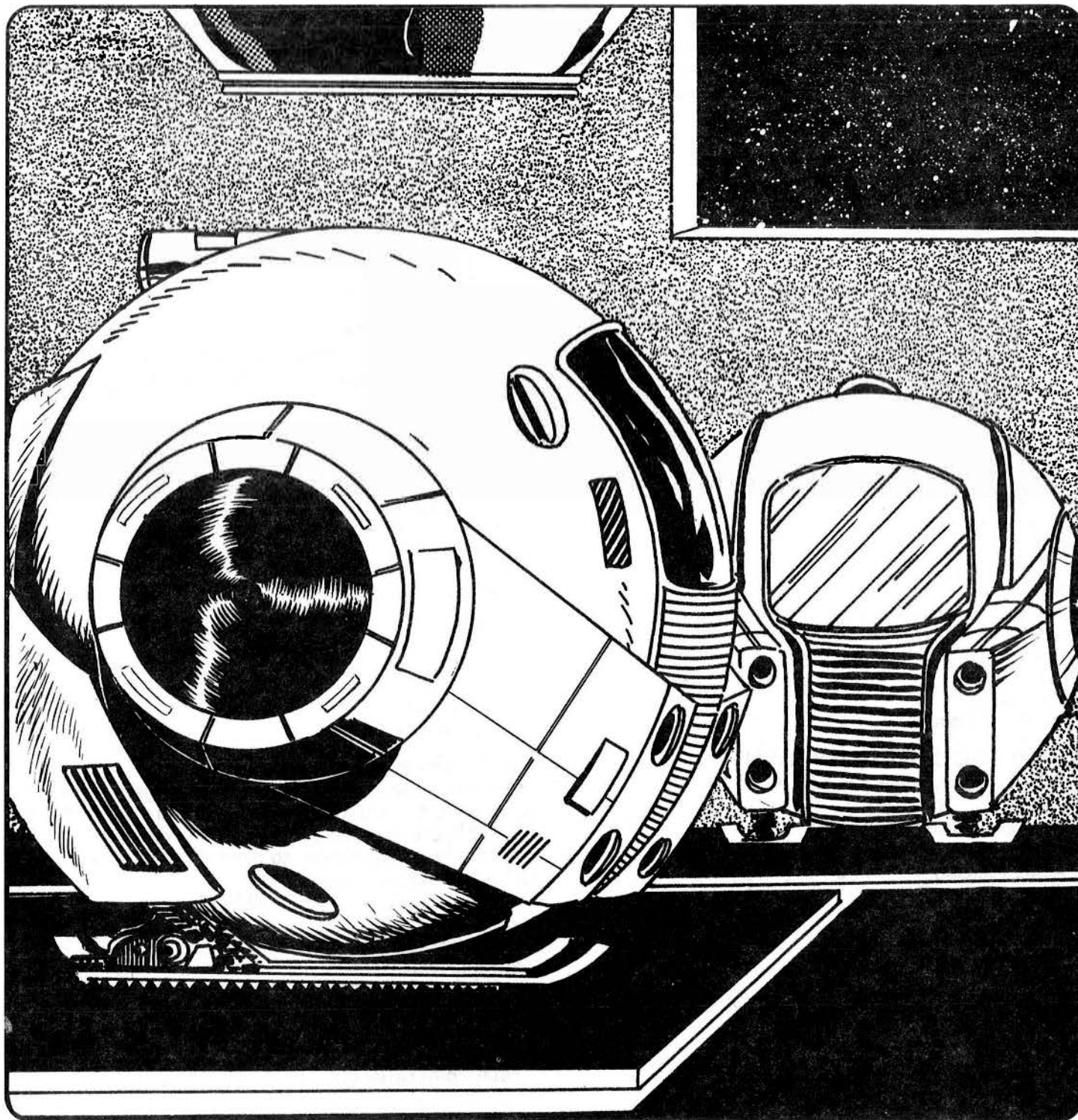
Slow Missile — -1/2

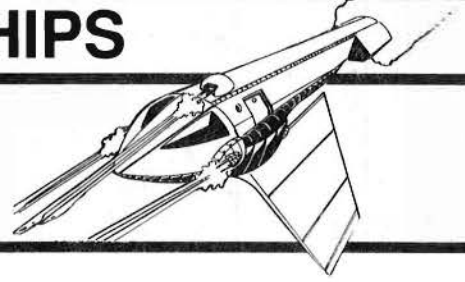
180 degree Arc of Fire — -1/2

Mass: 3.2 Ktons

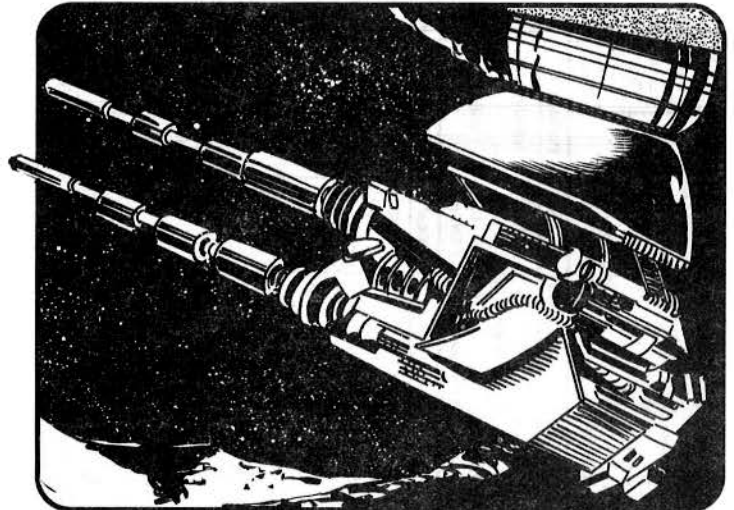
END Cost: zero

Total Point Cost: 86





The Lifeboat is so small that other ships shooting at it have 1/2 their usual Range Modifier.



LIFEBOAT			
Ship Mass: 12.5 tons Cargo Mass: 3.2 tons Basic THR: 24 END, 1 THR for 1 END G-force: 1 G per 12 THR Range Mod Multiple: x1/2		Size: 12.5 hexes Cargo Size: 4 hexes END Cost: 6 THR for 1 when Pushing Free Rec: 0 Phases: 12	
Value		Char	
Cost			
11	BODY	2	
10	DEF (Armor)	0	
0	DEF (Force Fields)	0	
0	END	0	
1	FTL (LY/day)	10	
2	Gs (Average)	20	
8	Life Supp (People)	8	
-1	MAN (+ to Pilot.)	-10	
10	REC (Power Plant)	10	
1	SPD	0	
3.2	Cargo Space (tons)	0	
1	High-Tech Room	0	
	Control Room		
0	Living Quarters	0	
Total Statistics Cost: 40			
Disadvantages			
Limited Fuel (20 days, common fuel)			13
Distinctive Looks (Obvious Markings on hull including serial number)			5
Warm-up Time (1 Turn)			3
Total Points of Disadvantages: 21			
Equipment		Location	Pts.
END			
Flicker Communicator 1 (Radio + FTL)		Control Rm.	10
Generic Computer		Control Rm.	6
Theris Manufacturing Telescope Plus		Control Rm.	15
Total Equipment Cost: 31 Pts.			
Statistics Cost: 40			
Equipment Cost: 31			
Disadvantages: -21			
Total Point Cost: 50			

STAR HORNET FIGHTER									
Ship Mass: 12.5 tons			Size: 16 hexes			Disadvantages		Pts.	
Cargo Mass: 3.2 tons			Cargo Size: 4 hexes			Limited Fuel (10 days, common fuel)		15	
Basic THR: 24			END Cost: 2 THR for 1 when Pushing			Distinctive Looks (Obvious serial number)		5	
END: 2 END/1 THR			Free Rec: 0			Can't Land: takes 1/2 BODY per landing		5	
G-force: 1 G per 1 THR			Phases: 4, 8, 12			Total Points of Disadvantages: 25			
Range Mod Multiple: x1/2									
Weapon	OCV	RMod	Damage	Location	Cost	#Shots	Reload		
BX mini Rocket Launcher	+0	-1/3"	6d6KAP	Control Rm	90	6	5 min.		
14- Activation Roll: 60 degree Arc of Fire									
Value	Char	Cost	Equipment	Location	Pts.	END			
11	BODY	2	Flicker Communicator 1 (Radio + FTL)	Control Rm.	10	2			
13	DEF (Armor)	9	Generic Computer	Control Rm.	6	1			
15	DEF (Force Fields)	20	Theris Manufacturing Telescope Plus	Control Rm.	15	3			
6	(Ablative)	0	Combat Pilot Suit (cancels 10 Gs)	Control Rm.	12	0			
0	END	0							
0	FTL (LY/day)	60							
6	Gs (Average)	0							
0	Life Supp (People)	0							
+3	MAN (+ to Pilot)	30							
24	REC (Power Plant)	24							
3	SPD	30							
3.2	Cargo Space (tons)	0							
1	High-Tech Room	0							
0	Control Room	0							
0	Living Quarters	0							
Total Statistics Cost: 175									
Total Equipment Cost: 110 Pts.									
Statistics Cost: 175									
Equipment Cost: 133									
Disadvantages: -25									
Total Point Cost: 283									

STAR HORNET FIGHTER (THERIS MINING & MANUFACTURING) 260 POINTS

This small, nimble ship has little fuel and no FTL drive. It is intended to be carried aboard a larger carrier ship, and sent off into combat, returning to the carrier for repairs, weapon reloading, and refueling. The Star Hornet has only 6 missiles, and must return to the carrier to reload. The Hornet's Pilot must wear a spacesuit, since there is no Life Support unit.

The Hornet has a total cost of 260 Points, or 130 Points when bought as a Secondary Starship. It is usually put into its own Launching Bay, for a total cost of 135 Points.

The Star Hornet is so small that other ships shooting at it have 1/2 their usual Range Modifier. The Hornet has no END batteries, but has enough REC to run all its devices and its engines continuously.

ENIGMA EXPLORATION VESSEL									
Ship Mass: 100 tons			Size: 125 hexes			Disadvantages		Pts.	
Cargo Mass: 25 tons			Cargo Size: 32 hexes			Limited Fuel (40 days, common fuel)		10	
Basic THR: 12			END Cost: 2 THR for 1 when Pushing			Slow Starter: 5 minutes warm-up time		5	
END: 2 END/1 THR			Free Rec: 33			Ownership: Friendly Agency		5	
G-force: 1 G per 1 THR			Phases: 4, 8, 12			Total Points of Disadvantages:		20	
Range Mod Multiple: x1									
Weapon	OCV	RMod	Damage	Location	Cost	#Shots	Reload		
BX Plus Missile Launcher	+0	-1/3"	6d6KAP	Wpn. Rm. 1	70	6	1 Turn		
14- Activation Roll, 180 degree Arc of Fire									
Focussed Particle Beam	+0	-1/3"	2d6K	Wpn. Rm. 2	60				
14- Act., AVLD (doubly hardened Armor), 18 END/shot.									
Value	Char	Cost	END	Equipment	Location	Pts.	END		
25	BODY	30		Flicker Communicator 1 (Radio + FTL)	Control Room	10	2		
15	DEF (Armor)	15		Flicker Distress Beacon	Engine Room	12	0		
16	DEF (Force Fields)	32	6	Theris M&M Computer Plus	Control Rm.	20	4		
56	END	28		Theris Manufacturing Super Sensors	Control Rm.	25	5		
2	FTL (LY/day)	15	3	Deep Radar	Control Rm.	15	3		
3	Gs (Average)	30	2	(3-d views of objects)					
8	Life Supp (People)	8		Carefree Damage Control	Engine Room	9	2		
+0	MAN (+ to Pilot)	0		(13-, 1 Turn)					
50	REC (Power Plant)	50		Instant Care Robot Doctor Sickbay	Engine Room	20	4		
3	SPD	30		(1 BODY/6 hrs.)					
3.2	Cargo Space (tons)	0		Force Field Generator	Engine Room	25			
5	High-Tech Rooms	8		Lifeboat	Engine Room				
2	Control Room			END Batteries					
2	Weapon Rooms								
4	Engine Room								
8	Lab/Sickbay	8							
4	Living Quarters								
2	Bedrooms								
2	Common Rooms								
2	Kitchen								
2	Lifeboat Room								
Total Equipment Cost: 266 Pts									
Statistics Cost: 254									
Equipment Cost: 266									
Disadvantages: -20									
Total Point Cost: 500									
Total Statistics Cost: 254									

ENIGMA EXPLORATION VESSEL (STAR VOYAGER EQUIPMENT) 500 POINTS

This medium-sized vessel is intended for a crew of 4-8. It is not a great combat ship, but can defend itself against pirates, small groups of unfriendly aliens, and so forth. This ship is commonly used by PCs on exploration, delivery, or investigation missions. There are 2 weapons on the ship, installed in 2 gunnery rooms. The weapons may be fired by a character in the gunnery rooms, or from the Control Room.

The Free REC assumes that only the Sensors, Computer, Life Support, and Force Fields are routinely left on during combat, drawing a total of 17 END each turn. The remaining REC may be used to recharge the END batteries or to power other devices, such as the engines or Particle Beam.

PHYCHI SCOUT CRAFT									
Ship Mass: 25 tons Cargo Mass: 6.4 tons Basic THR: 20 END, 2 END 1 THR G-force: 1 G per 1 THR Range Mod Multiple: x1					Disadvantages				
Size: 32 hexes Cargo Size: 8 hexes END Cost: 2 THR for 1 when Pushing Free Rec: 13 Phases: 4, 8, 12					Limited Fuel (40 days, common fuel) Slow Starter: 5 minutes warm-up time Ownership: Friendly Agency Mystery Disadvantage (perhaps 106 Unluck) Total Points of Disadvantages: 25				
Weapon	Char	OCV	RMod	Damage	Location	Cost	#Shots	Reload	Pts.
XP-10 Plasma Cloud Slow Missile, 14- Activation Roll		+1	-1/3"	10d6K	Wpn. Rm. 1	86	1	1 Phase	10
Focused Particle Beam 14- Act., AVLID (doubly hardened Armor), 18 END shot		+0	-1/3"	20d6K	Wpn. Rm. 2	60			5
Value	Char	Cost	END	Equipment	Location	Pts.	END		
16	BODY	12		Flicker Communicator 1 (Radio + FTL)	Control Room	10	2		
14	DEF (Armor)	12		Flicker Distress Beacon	Engine Room	12	0		
16	DEF (Force Fields)	32	6	Theris M&M Computer Plus	Control Rm.	20	4		
36	END	18		Theris Manufacturing	Control Rm.	25	5		
4	FTL (LY/day)	20	3	Super Sensors	Control Rm.	15	3		
5	Gs (Average)	50		Deep Radar	Control Rm.	15	3		
8	Life Supp (People)	8	2	(3-d views of objects)	Engine Room	9	2		
+0	MAN (+ to Pilot)	0		Carefree Damage Control	Engine Room	15	12		
30	REC (Power Plant)	30		(13-, 1 Turn)	Sickbay	20	4		
3	SPD	30		Starnoise Invisibility	Engine Room	15	12		
6.4	Cargo Space (tons)	0		Instant Care Robot Doctor	Engine Room	20	4		
5	High-Tech Rooms	8		(1 BODY 6 hrs.)	Engine Room	25			
2	Control Room			Force Field Generator	Engine Room				
8	Weapon Rooms			Lieboat	Engine Room				
4	Engine Room			END Batteries	Engine Room				
2	Lab Sickbay								
8	Living Quarters								
4	Bedrooms								
2	Common Rooms								
	Kitchen								
	Lieboat Room								
Total Statistics Cost: 228					Total Equipment Cost: 297 Pts.				
					Statistics Cost: 228				
					Equipment Cost: 297				
					Disadvantages: -25				
					Total Point Cost: 500				

PHYCHI SCOUT CRAFT (THERIS GOVERNMENT ISSUE) 500 POINTS

This medium-sized vessel is intended for a crew of 4-8. It is a very fast and stealthy ship and has an invisibility device. This ship is commonly used by government agents on secret missions. There are 2 weapons on the ship, installed in 2 gunnery rooms. The weapons may be fired by a character in the gunnery rooms, or from the Control Room.

The Free REC assumes that only the Sensors, Computer, Life Support, and Force Fields are routinely left on during combat, drawing a total of 17 END each Turn. The remaining REC may be used to recharge the END batteries or to power other devices, such as the engines or the invisibility device.

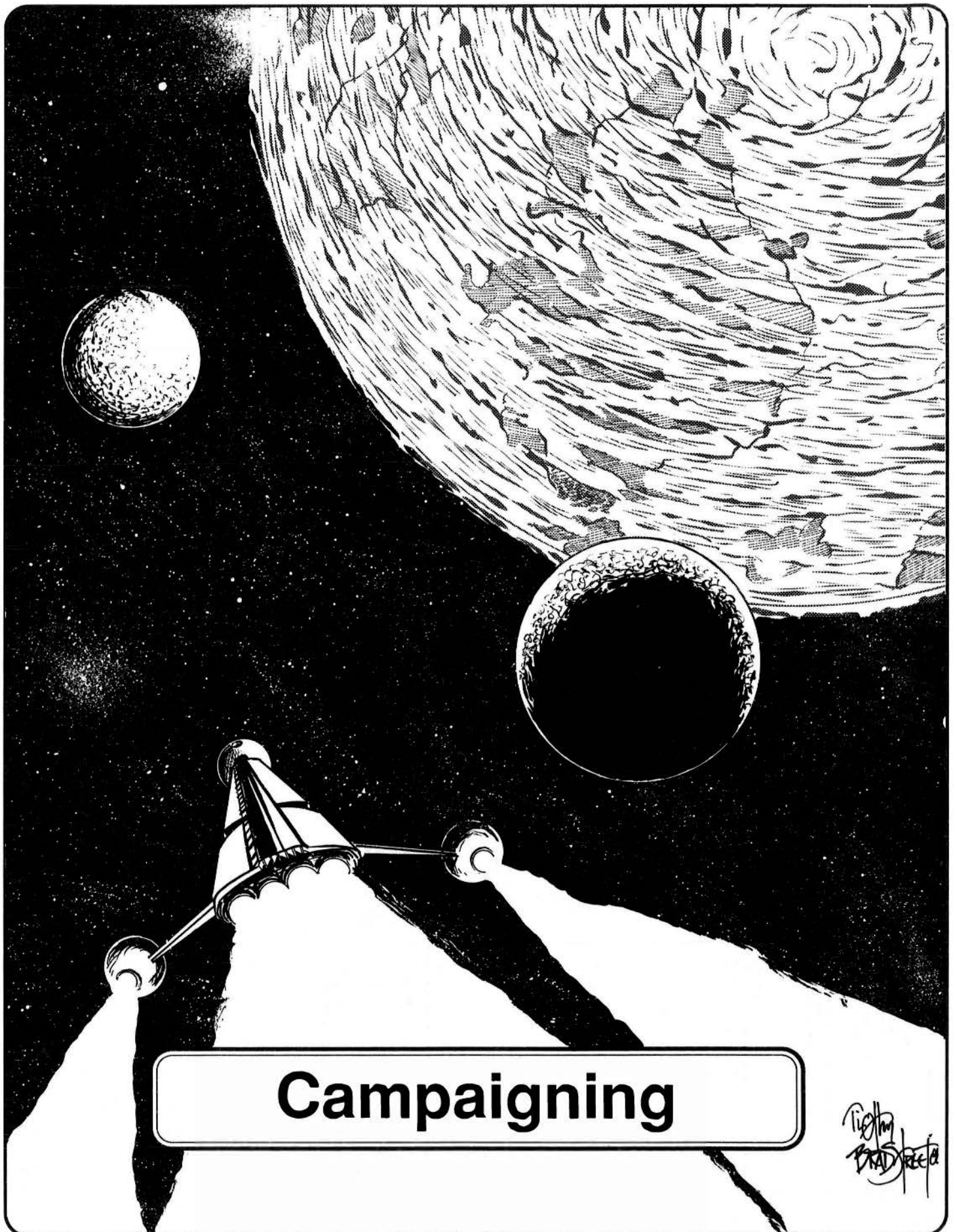
SMALL KINDRED WARSHIP									
Ship Mass: 400 tons Cargo Mass: 100 tons Basic THR: 16 END, 2 END/1 THR G-force: 1 G per 1 THR Range Mod Multiple: x2					Disadvantages				
Size: 500 hexes Cargo Size: 125 hexes END Cost: 2 THR for 1 when Pushing Free Rec: 16 Phases: 4, 8, 12					Can't Land: Ship destroyed, contents OK Total Points of Disadvantages: -10				
Weapon	Char	OCV	RMod	Damage	Location	Cost	#Shots	Reload	Pts.
XP-10 Plasma Cloud Slow Missile, 14- Activation Roll		+1	-1/3"	10d6K	Wpn. Rm. 1	86	1	1 Phase	10
Singer Autofire Rocket Launcher 14- Burnout, 180 deg. Arc of Fire, Selective Fire, Volatile, 17d6X when Burned Out or damaged		+0	-1/3"	50d6K	Wpn. Rm. 2	75	32	1 Turn	
Value	Char	Cost	END	Equipment	Location	Pts.	END		
34	BODY	48		+20 DEF Ablative Armor	Control Room	40			
20	DEF (Armor)	30		Flicker Communicator 1 (Radio + FTL)	Control Room	10			
0	DEF (Force Fields)	0	0	Flicker Distress Beacon	Engine Room	12	0		
50	END	25		Theris M&M ONYX III	Control Rm.	60	12		
2	FTL (LY/day)	15	3	Theris Manufacturing	Control Rm.	25			
4	Gs (Average)	40		(Kindred Clone)	Control Rm.	15	3		
64	Life Supp (People)	14	3	Super Sensors	Control Rm.	20	4		
+0	MAN (+ to Pilot)	0		Deep Radar	Control Rm.	15	3		
45	REC (Power Plant)	45		(3-d views of objects)	Control Rm.	20	4		
3	SPD	30		Force Field Analyzer	Engine Room	9	2		
100	Cargo Space (tons)	0		Carefree Damage Control	Engine Room	37	10		
7	High-Tech Rooms	12		(13-, 1 Turn)	Shuttlecraft	50			
	Control Room			Manits Tractor Beam	Shuttlecraft				
	Engine Room			2 Shuttlecraft	Engine Room				
	2 Weapon Rooms			END Batteries					
	Interrogation Room								
	Ship Repair Room								
	Science Lab								
32	Living Quarters	12							
	3 Prison Cells								
	Armory								
	2-room Captain's Suite								
	2 Officer's Bedrooms								
	Interrogation Room								
	Mess Hall (counts as 2 rooms)								
	Crew Barracks								
	(counts as 14 rooms)								
	Recreation Room								
	Storage Room								
	(counts as 4 Rooms)								
	2 Shuttlecraft Rooms								
Total Statistics Cost: 271					Total Equipment Cost: 439 Pts.				
					Statistics Cost: 271				
					Equipment Cost: 439				
					Disadvantages: -10				
					Total Point Cost: 700				

SMALL KINDRED WARSHIP 700 POINTS

This small military vessel is intended for a crew of 30. It is heavily armored, but its defenses are partially Ablative. It has a very good set of Sensors and computer, which are used to analyze the target ship continuously. The gunners will target vulnerable spots whenever possible, and the captain will talk to the opponent during combat — to accept surrender terms or just to gloat.

There are 2 weapons on the ship, installed in 2 gunnery rooms. The weapons may be fired by a character in the gunnery rooms or from the Control Room.

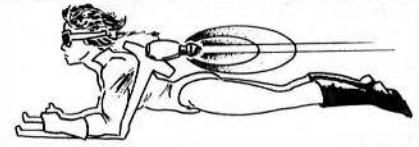
The Free REC assumes that only the Computer, Communicator, Life Support and all Sensors are routinely left on during combat, drawing a total of 29 END each Turn. The remaining REC may be used to recharge the END batteries or to power other devices, such as the engines or the invisibility device.



Campaigning

Right
Brad Street

CAMPAIGNING



In order to run a science fiction campaign, the GM must create a universe. This process involves the following steps:

1. Decide the theme(s) of the campaign (war, exploration, thievery, espionage, etc.).
2. Determine the level and role of technology in the universe.
3. Design the human (or main PC race) civilization.
4. Decide whether aliens exist or not, and if they do, design the aliens (and their civilizations).

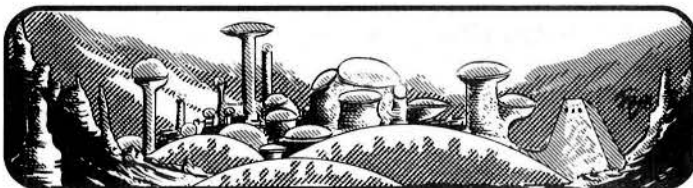
CAMPAIGN THEMES

What is the theme of your campaign: War, Exploration, Diplomacy, Trade, Thievery, Espionage, or Police Work? What is the motivation for your PCs? The players will be more comfortable if they have a well-defined environment in which to build their characters. Themes sometimes overlap. The GM may see several of these themes running through the campaign simultaneously (like war and espionage). A campaign may also evolve from one theme into another.

To determine the theme, the GM should decide what sort of adventures and scenarios he wants to run, and that the players want to play. Do you like deadlyfire-fights, tense tactical decisions, hard-bitten men and women engaged in combat, and the smell of cordite ozone? A war theme would probably be best, and the players could play soldiers, pilots, or support personnel. If you would rather promote intrigue and suspense, with multiple crosses and double crosses, then a good theme would be espionage. Is interacting with bizarre and alien cultures your thing? If so, choose an exploration theme that will allow the PCs to meet many and varied races.

In addition to choosing a theme, the GM must design his campaign universe. The easiest method is to use the Universe of the Alliance, which is provided at the back of this book. Alternately, GMs could choose a favorite universe from science fiction literature or film (see the Bibliography section). Finally, the GM could create his own universe, using the guidelines provided in this section. The choice of the campaign setting will of course have an important impact on the campaign theme, tech level, and so forth.

All of these themes are, of course, subgenres of the main genre, science fiction.



1. WAR

The Theme

This theme includes campaigns where there is a large scale war going on and the PCs are involved. The fighting may be because of a rebellion within an empire, colonization into hostile territory, or an invasion by hostile aliens. The players may be soldiers, mercenaries, explorers, spies, medical rescue teams, or diplomats.

Running This Theme

The GM will need to answer some questions. Who are the PCs fighting against? The PCs may be fighting to replace their dictatorial government with a democracy. In this case they probably belong to some secret organization. If they have spaceships, they may travel to other worlds to get support for their cause.

Often characters will not be fighting their own government, but will instead be battling invaders. The invaders may be humans, androids or aliens. The invaders may be secretly taking over or waging outright war.

Sgt. Barnes rechecked the magazine in his M-62 micro-launcher. To his right, Cpl. Westra was busily unjamming her autocannon, while ahead a computerized gatling laser was laying down a suppressing fire on the Spartid position.

Cpl. Westra looked up from her weapon. "The Gatling won't hold 'em for long. What's the plan Sarge?"

Barnes called the remaining members of D Squad to his foxhole. "It's time to take the fight to them, soldiers. Lock and Load ..."

Even if the war does not end during a campaign, the PCs should make significant progress towards pushing back the enemy. They should prevent the conquest of a planet, liberate other planets, steal valuable military secrets, or arrange peaceful cultural exchanges.

Wars may be fought in many ways. There may be gun battles, espionage, economic pressure, technology races, or even attempts to influence the media. It could be a cold war where no shots are exchanged or a hot war where battles are fought to the death.

Possible Scenarios

Possible scenarios would include catching an enemy spy before he delivers fleet movements, sabotaging the enemy's ultimate weapon, or rescuing a political leader from execution. In the universe of the Alliance, the PCs could help defend against a second invasion by the Ento. Perhaps the Kindred will make a bid for supremacy, plunging the Alliance into civil war. The PCs could fight the more subtle threat of the Dopplegangers, or malevolent androids.

2. BUSINESS

The side of the spaceship exploded from the pirates' missile. Conara smiled as the pirates boarded the Theris Mining and Manufacturing's ship. This was not the first time they had tried to steal a shipment, but due to the trap Conara had set, it would be their last.

The Theme

In this theme, the PCs all work for companies. The PCs may be scouts, mineralogists, security agents, explorers, executives, spies, or pilots. The players may own their own business, or be the lowliest of employees.

Running This Theme

A high technology world may have mega-corporations. Such corporations may do anything from manufacturing weapons to toys; they can mine new planets or even set up self-sufficient colonies. These corporations may span planets and even solar systems. They may have significant influence on the government. In some fiction, these corporations become the government. Businesses can be sources of spaceships and other equipment for PCs.

Possible Scenarios

Possible adventures would include discovery of new races to trade with, theft of business secrets, power struggles within the company, or preventing space piracy. Corporations may hire the PCs to search for new worlds, establish colonies, or solve crimes too sensitive for the police. However, the PCs may be watched by the corporation. In the Alliance, the players could be employees of Theris Mining and Manufacturing (TM&M), and work to solve the murder of a TM&M employee.

3. ESPIONAGE

The ambassador slumped into unconsciousness, spilling his drugged drink on the white rug. Andrea smiled to herself, and turned on her laser torch. The safe door turned white hot, and then melted, and Andrea gleefully scooped up the documents inside. Suddenly, she heard the pounding of guards' feet outside the door. She set the timer on her gas grenade, jumped through the window, and switched on her jetpack.

The Theme

In this theme, the PCs are spies, either free-lance or working for a certain government or corporation. Other possible player characters for espionage scenarios are not just spies, but also scientists, pilots, performers, thieves, and investigators.

Running This Theme

Futuristic spies may have fantastic devices, such as tiny communicators, sleep bombs in rings, truth serum lipstick, small jetpacks, and force field belts (see the Device list).

Spies may be hired by governments. In this case they may have access to more files and equipment. They will probably be watched by the government.

One of the interesting aspects of spy scenarios is that the characters are never quite certain who is on their side. Double agents abound, and faithful agents may be replaced, brainwashed, or tricked into helping the enemy. Even planets with non-aggression treaties spy on each other.

Possible Scenarios

Possible scenarios include theft of military secrets, overthrowing dictatorships, freeing imprisoned citizens, or infiltrating alien worlds. The PCs may also solve murders on cargo ships or stop a plot to release a deadly plague or alien. In the Alliance, the PCs could work for the Phychi intelligence service. Or they could be villains who try to undermine Phychi stability at the behest of the Kindred.

4. EXPLORATION

The Theme

Exploration can include many themes from war to diplomacy to espionage. Anything can happen — the whole universe is waiting. Possible player characters include scouts, pilots, scientists, or diplomats. The main goal of the campaign is to expand the boundaries of explored space.

Possible Scenarios Include:

Encountering new human races: Are these races friendly? In trouble? Have some unusual society?

Encountering bizarre aliens: These aliens may have strange powers or technology. An alien with strange psychic powers might take over the PCs' minds, or the PCs may be changed into non-corporeal beings. The PCs may find evidence of long gone superpowerful races.

Obtaining new supplies of minerals and power: The PCs search for rare minerals. They may become lost in space, attacked by wild alien animals, or chased by pirates.

The PCs may find the answers to long asked questions: What is the origin of the universe? Did humans come from the seeding of worlds by another life form? What is the end of the universe? Were there other universes before ours? They may find these answers from aliens, in ancient ruins, or they may fall through a black hole.

5. THIEVERY

The Theme

In this theme the players are pirates, catburglars, or con-men. The main thrust of the campaign is (high tech) theft and crimes.

Running This Theme

The players will usually enjoy this theme more if they are "good" thieves. Perhaps they are pirates raiding only the oppressive Empire's military vessels, or they could be con men who steal only from the enemy. The players may all be working for some government agency, and steal only from the intergalactic mafia.

In this theme, all the player characters have to agree that it's acceptable to be a thief. Their beliefs should be close enough for them to work together. For example, is murder acceptable? Kidnaping?

If the PCs get caught, they may be given the choice of jail or working for the government as spies.

Possible Scenarios

One possible scenario for the Alliance universe would involve a Kindred army general buying arms to overthrow a democratic government and establish himself as a dictator. The PCs could pose as arms dealers. They could sell the general scrap metal disguised as arms. The general loses his money for the coup, and the PCs have pulled off a fruitful con job.

6. POLICE WORK AND MYSTERIES

A scream broke the silence. Zil rushed to find the body of an alien diplomat with a strange star-symbol etched into the sandy ground beside her.

The Theme

In this theme, the players are police officers, government officials, private detectives, or reformed thieves. They may be solving mysterious murders, thwarting alien criminals, capturing interplanetary thieves, or tracing missing heirs.

PCs do not need to be police officers to be involved in a mystery. They may be suspects, victims, passersby, or friends of the victims.

Running This Theme

There are several different types of mysteries:

Murder: Who did it? How was it done? Why was it done? When and where was the crime committed? Who would want the person dead?

Theft: This could be theft of diplomatic pouches, rare jewels, high tech devices, or ancient alien artifacts.

Disappearances of people: Were they murdered, kidnapped, or never really there to start with?

Strange happenings: Noises in the night, hallucinations, strange marks, threatening messages. These may lead to kidnappings or murder.

Criminal Acts: This includes drug smuggling, selling slaves, con games, and other acts of crime.

Mystery Plots often follow a pattern:

Something mysterious happens: At this point a crime occurs, a body is found, an object is stolen. The PCs may or may not witness the action.

The Plot Thickens: This is similar to the horror theme. At this point more crimes or strange happenings occur. The PCs may be attacked or implicated. The PCs will probably be doing research, interviewing witnesses, and trailing suspects.

There may be some misleading clues, but more and more clues should start building a picture. At first, the GM should try subtle clues, and then make broader and broader hints if the players remain confused.

The Solution: It's important for the PCs to solve the mystery. Don't leave the players confused just because they missed one roll. To assure the players that they have solved the mystery, the criminal may confess when confronted with all the evidence, or a world class detective may arrive and confirm the PCs' solution.

In the grand climax the PCs may fight the villain face to face, rescue the missing person, or return the jewelry to the empress.

Possible Scenarios

One possible scenario would involve the theft of a sacred religious artifact from the Shadu, a very religious people. The PCs will find an assortment of clues, which lead the implication of the theft to a Phychi citizen (the Phychi are humans). As the PCs search deeper they find that the Phychi citizen was framed by a government official from a third race, the Kindred, who hoped to break the diplomatic ties between the Shadu and the Phychi.

7. DIPLOMACY AND POLITICS

The Theme

The players may be ambassadors, scouts, pilots, councilmembers, scientists, or spies. The adventures may consist of exploring new worlds and establishing diplomatic ties or preventing war with old enemies. Or player characters may get involved in politics on their own world.

Running This Theme

Player characters running for election may be difficult to gamemaster, but it is possible. The GM may wish to run the player solo, or run only a few players in such campaigns. In this case, adventures may consist of the PC's opponent trying dirty tactics, including making up lies about the PC, threatening the PC, stealing the PC's campaign fund, placing spies in the PC's headquarters, or framing the PC for a crime. If a player character actually were elected, there are other challenges. Will the military stage a takeover? Are other races threatening the planet? Has some bizarre religious group taken over the congress?

Possible Scenarios

The PCs' homeworld might need allies for help with a war. PCs may gain new allies by curing diseases, solving mysteries, or rescuing government officials. They may smuggle illegal aliens onto the planet for secret peace talks. PCs may even wish to influence elections. Should they let the anti-human candidate run for office or should they engage in a little blackmail? Could they switch one of their own citizens for their enemy's president?

In the universe of the Alliance, the PCs could uncover evidence that the Kindred have been secretly supporting a candidate in the Phychi national elections. How will they stop his impending landslide victory?

8. ARTIFICIAL INTELLIGENCE AND ANDROIDS

The faceless androids marched in a solid line towards the humans. They raised their hands as one, and beams shot from their fingers. The human's spaceship wavered, and then disintegrated.

"You will now stay with us, for the rest of your lives," said one of the faceless creatures.

The Theme

Androids, robots, and intelligent computers are a common theme in science fiction. If players wish to be artificially intelligent machines, then they can build their characters using the same rules as for aliens.

Running This Theme

Humans may develop computers to such an extent that they actually begin thinking for themselves. At first, such machines will probably be emotionless and just obey orders. Later the machines may develop self-will (have their own ideas and goals). The computers may start feeling emotions, such as love, hate, sorrow, joy, or frustration.

Such computers may be stationary, and shaped like boxes. Super-brain computers may be used by the government for controlling nuclear missiles, transportation, the weather, distribution of goods, and communication satellites. Such computers may decide to rule the world.

Other artificially intelligent machines may be androids or robots, which are mobile, and probably have arms and legs like humans. Androids could reproduce themselves through factories. There could be a whole race of androids, with their own cultures and politics.

Possible Scenarios

Possible scenarios include robots trying to conquer the humans for "their own good", the mysterious replacement of powerful leaders with androids, or the release of a microbe that turns humans into androids.

In the world of the Alliance, a TM&M exploratory team could discover an alien computer so intelligent that it dwarfs the human brain. When this super-computer begins to program other computers into its likeness, the PCs will have to step in, lest this computer "virus" overwhelm the Alliance.



9. POST HOLOCAUST: DISASTER AND SURVIVAL

The announcer spoke without emotion: "An alien spacecraft had been discovered orbiting Venus. An exploration team had been sent out. They found the rotting hulk of a starship, and a dozen bodies of strange aliens."

"At first the humans were overjoyed by the scientific discovery. Then Lt. Jeffries developed a strange white rash on her forearm. Soon several other crew members had it. The rash spread to other parts of their bodies. They died 2 days later."

"Earth Space Command ordered the exploration ship to stay away from earth. The captain disobeyed orders, and the vessel crashed in a corn field in Pennsylvania."

"And that is how the plague began..."

The Theme

In this theme, some disaster has happened or is going to happen. The player characters may be almost anyone, including doctors, government officials, explorers, warriors, or even the players themselves.

Running This Theme

There are numerous disasters that can cause the end of the world:

Plague: The disease may be deliberately manufactured by a person of your own race, or by extraterrestrials attempting to take over. The plague may originate from outer space through a meteor, from exploration of alien ships, or encounters with aliens.

Nuclear War: The GM should consider how the war got started, what nations or planets were involved, and the extent of the damage (all of the world, just some nations, or just some cities). What type of bombs were used? Neutron bombs kill living things but leave buildings intact. Hydrogen bombs destroy everything.

Fuel Shortage: This theme was more popular during the 1970s when there was an oil embargo. There are many sources of fuel including coal, wood, animals, oil, nuclear, solar (see the technology section). Which of these fuels are in short supply? Are many fuels in short supply? Survivors may fight over the remaining fuel and/or revert to a more primitive society.

Overpopulation: Lack of birth control has led to a baby boom. There are food shortages, housing shortages, power shortages, diseases, and rebellious citizens. Governments and society as we know it may be overthrown. Citizens may have to apply for a permit to have a child.

Monsters: Creatures have endangered human life. Perhaps the sea creatures revolt, or aliens may land and take humans as slaves. The PCs' job will be to stop the monsters, by diplomacy or war.

Natural Disasters (Comets, Tidal Waves, Earthquakes, etc): Strange scientists may cause earthquakes for monetary gain. Perhaps the planet passed through a hail of asteroids.

In this theme, the GM must decide if the holocaust has already happened, in which case the PCs can do nothing to prevent it. If so, the PCs' main goal may be survival. How long has it been since the holocaust? Have 100 years passed and strange new life forms evolved? Perhaps 10,000 years have passed, the humans have forgotten about the holocaust, and they are just digging up evidence of a highly advanced race that lived on their planet previously.

If the campaign is not post-holocaust, the disaster is occurring right now, and the PCs will have their hands full trying to avert it.

Possible Scenarios

The PCs may have to find a cure to a disease, or steal back a cure that a criminal is holding for ransom. Or the PCs may be flying to an asteroid to place charges on it to prevent it from hitting earth. If the GM is using the universe of the Alliance, the PCs could be part of an early Phychi exploration team that used suspended animation to travel between the galaxies. Upon returning from their century-long journey, the PCs could discover that the Alliance has been destroyed by a civil war or alien invasion.

10. HUMAN EVOLUTION AND MUTANTS

The Theme

In this theme, humans mutate into another life form. The player characters could belong to a wide variety of professions, depending on what other themes are in the campaign (such as war or espionage). The GM may wish to use the Alien Powers rules for describing mutant humans.

Running This Theme

Humans may not necessarily change form, but instead gain powers. They may discover their ability to teleport, read minds or project astral forms. When these mutant humans first start appearing, they may terrify the normal humans. Mutants may be imprisoned, killed, or used like pieces of equipment. Mutant detection equipment may be developed.

If mutants become commonplace and accepted, they will be considered valuable members of society. Mutants may be hired to catch criminals, negotiate deals, explore new planets, or detect new sources of minerals.

Humans may evolve into something different altogether, like energy beings with a group mind or technological creatures which add devices to their bodies like interchangeable parts.

Possible Scenarios

One possible scenario might include mutant PCs, wrongly accused of crimes (because normal humans hate the PCs' powers), being hunted by the planetary police. The PCs would have to find the real criminal and prove their innocence.



11. ANTI-UTOPIAS AND UTOPIAS

The Theme

Anti-Utopias include both worlds with a superpowerful government which ignores human rights and dreary, anarchic societies. The government may drug its citizens, place cameras everywhere, rewrite history, and alter fetuses to suit their social class. Sometimes the planet may be run by large mega-corporations which addict citizens to their products. Player characters are often citizens of the anti-utopia. A wide variety of PCs may fit the campaign, including the "common person".

Utopias are supposedly perfect cultures. Of course, one person's utopia is another person's anti-utopia. Utopias do not usually provide conflict for the PCs to resolve. However, the PCs could come from a utopian culture.

Running This Theme

The PCs may make plans to change or destroy the evil government. The government may suspect the PCs of being troublemakers, and may monitor or jail them. Sometimes the protagonists escape to another world. Often in these books the protagonist dies at the end, or, conversely, the GM may have the PCs take over the government instead. Once in charge the PCs will have to deal with power struggles and social decisions. Or they may choose to become explorers of other worlds.

This can be a difficult sub-genre to GM, as it involves more social commentary than other genres.

Possible Scenarios

In the Alliance there are numerous worlds with unusual governments. Perhaps the PCs could crash land on a planet where the government sees everything — the citizens live every moment in fear. The PCs could try to escape or overturn this corrupt society. One scenario might involve a plot to destroy the plant that produces the drugs used to keep the citizens doped up. This will be a major blow to the government's hold on its citizens, and could open the door for a rebellion.

Alternately, the PCs could be called upon to protect a pacifistic utopia from unscrupulous invaders or exploiters.

12. ALTERNATE DIMENSIONS

The Theme

Alternate dimensions could be anything new. Cats could have evolved into intelligent life instead of apes. What if the dark ages never happened? How about humans that change sex with the seasons? The campaign may contain magic, super heroes, intelligent earth vegetables, 14th century technology with psychic powers, or a world through a mirror.

Running This Theme

Can the PCs meet themselves in an alternate dimension? Their alternative selves may be very different: they may have different jobs, personalities, goals, loyalties, or morals. The doubles may switch themselves for the real PCs and go back to the PCs' original dimension. See the discussion on meeting yourself in the Time Travel subgenre.

Alternate dimensions may come in handy when the situation in the campaign universe has become bothersome. Has earth been totally obliterated? Have all the PCs died in one scenario? Are the PCs hunted by every group in the known universe? Just slip into another dimension.

The GM must decide what rules apply to the alternate dimension. Do the laws of physics apply? Is human psychology the same? Can anything happen through magic? Do gods really exist?

Some examples of alternate dimensions include:

Alternative Earth History: Humans are still normal, but their history is different. The government and society might be different.

Alternative Intelligent Life Forms on Earth: Such as the apes are intelligent and the humans are kept in zoos. Or all life forms, including humans, dogs, cats, fish, insects, and vegetables on earth evolve to become intelligent.

Alternative Human Physiology: Humans can never grow up. Humans have many or no sexes.

Magic Exists: Magic and technology may co-exist or magic may replace technology. Dwarves, elves, trolls, and faeries are real.

Gods Exist: The Greek gods are real! Deities may demand adoration and favors. Gods may actually be powerful aliens.

The Microscopic or Macroscopic World: Consider the microscopic world. What if PCs were shrunk to the size of a virus or enlarged to the size of a galaxy?

Possible Scenarios

A possible scenario would be to switch the PCs into another dimension without their knowledge. The dimension will be similar to theirs, yet subtly different. The PCs may do something like report to their boss, and suddenly be asked why they aren't using telepathy. They may be accused of being imposters or spies.



13. TIME TRAVEL

The Theme

Time Travel may itself be considered a whole genre in itself. The characters may travel into their future and see the fate of their race, or they may travel backwards to study history. Perhaps they will seek out the "old ones" who seeded the planets with sentient life.

Running This Theme

There are several questions to be answered about time travel:

1. Can PCs change the past? The PCs may be only able to view the past and make small changes in it, but not major ones. They may be able to stop someone's death in the past, but not prevent the Black Plague. If they can change major events, does this create an alternative world with a different future, or does it destroy the old world and fill its place with a new one?
2. Can PCs meet themselves? This may be a very amusing and interesting event. What if the PCs team up with themselves for a difficult assignment? It might be worth trying once.
3. Can a character kill their own great grandparents and still be born? Are characters somehow protected from non-existence by their time machine?
4. Can people and objects get stuck in time loops? Say Chiron goes into the future and finds a beautiful statue in the ruins of a house. He goes back in time and places the statue in his home. Where did the statue come from? Chiron investigates and finds the ruins he picked the statue out of was his own home. The statue was never made by anyone, it just exists in a time loop.

Possible Scenarios

Possible scenarios include people from the future warning the PCs about an impending disaster. Or the PCs may belong to some time-police organization. They need to track a criminal who went into the past to attempt to change the future, and set himself up as a dictator.

14. HORROR

The Theme

This theme includes grotesque alien monsters, bizarre interplanetary cults, and terrifying mysteries. The types of player characters that would fit into this theme would be reporters, scientists, pilots, detectives, military people, and anyone who can enjoy being chased and solving mysteries.

Running This Theme

Generally, these stories follow a pattern:

The Horror is Activated: The alien sneaks onto the space station, the meteor lands, the PCs discover an abandoned spaceship, a dimension is opened into another world, or the evil sentient device is activated. The PCs may or may not be involved yet. They may be called in after some mysterious disappearances, or they may be unaware that they activated the horror.

The Horror Manifests Itself: Objects and people disappear, strange noises or laughter is heard, and strange marks are found. The PCs are involved now. They may be chased by some unknown thing, or witness evidence of strange goings on.

The Problem Escalates: The strange happenings increase. There is no doubt now that there is a serious threat. Clues to the cause pop up. The PCs decipher an alien text. The creature is photographed (but only appears on the negative!) The alien ruins are further excavated, revealing a door with mysterious seals. The scientist analyzes and identifies a tissue sample. Give the PCs more and more clues until the solution becomes clear.

The Final Conflict: The PCs confront the horror. They solve the mystery, and understand the cause to the strange goings on. They figure a way of destroying, imprisoning or reasoning with the horror. They may be under some time limit ("we've got to stop this runaway starship before we're out of fuel"). Other aliens may help ("we've come to arrest a mental patient who escaped from our planet").

Types of Horrible Creatures

Mindless Monsters: These are animals, be they alien or earth born. The creature may have animal cunning, but it cannot be talked to. These creatures may attack humans for food, or they may be parasites using humans as hosts.

Sentient Aliens: These are horrible creatures with sinister plans. These creatures can be talked to and maybe reasoned with. There may be some logic behind their terrifying behavior: they need human brains to run their engines.

Human Based: This includes zombies, ghouls, wercreatures, or vampires. Humans might have stumbled onto some strange alien plagues, technology, or were experimented upon by immoral aliens. Perhaps a human found alien technology that could let him live forever if he drinks human blood, so he decides to become a vampire.

Insane Humans: This includes normal humans that have become criminally insane (like Jack the Ripper).

Atmosphere

The atmosphere of a horror story is important. Somehow PCs always end up walking alone down corridors of rotting alien spaceships. The setting is always poorly lit, and the sensor screens are cluttered with static. There is dripping water, and NPCs have mysteriously vanished. To scare the PCs, try unnatural fogs, cold spots, bleeding holoscreens, lights suddenly going out, strange, hideous pictures on computer screens, self-locking airlock doors, unexplained scratches in the starship floor, just glimpsed shapes in the shadows, and computers which come to life and take over the ship. Have the horror take over devices and play havoc with a high technology group. The PCs may have their spaceship suddenly warp out, their life support turn off, sensors malfunctioning, computers which threaten the crew and hear strange noises over the communicators.

Possible Scenarios

One possible scenario could have a creature sneak onto the PCs' spaceship when they land on an unexplored planet. One by one, the creature could kill NPCs, and take over their bodies. It could become the pilot of the ship, and turn the ship towards an inhabited planet where it could find more prey. The PCs would have to discover and capture the creature before it made it to human civilization.

15. CYBERPUNK

The Theme

In this theme, PCs are citizens of a degenerating society where the schism between privileged and non-privileged has grown to monumental proportions. In the underworld of back alleyways and sewer ducts, streetwise kids vie for personal power by selling themselves out as bodyguards, hitmen, and computer jockeys. But to be the best, these characters need expensive cybernetic implants which improve physical and mental performance.

Running This Theme

The motivations of the PCs will be the driving creative force for the GM. Will they be trying to scrape up enough money to leave the inner city and escape to the utopian orbitals? Or does the group want to be the best information courier force available, or perhaps the best drug runners.

It is the GM's job to set up the scenarios and obstacles. There will be brutal police forces, ruthless infiltrators, and hit squads, all employed by the elites to maintain their power base. PCs will also have to deal with rival cyberpunk gangs.

Possible Scenarios

The privileged have introduced a cruel disease that will wipe out the population of a troublesome city. Your group is trying to deliver the black market serum that will save them.

With fake IDs and clearance codes, the PCs are hired to infiltrate a luxury orbital recreational facility to kidnap a top business executive.

With the promise of great profits, PCs transport cybernetic parts from an underground manufacturer to a city, only to be attacked by thugs hired by a rival producer eager to get his hands on some new technology.

RESTRICTING CHARACTERS

After deciding the theme, the GM should determine what restrictions, if any, to place on the characters. These restrictions would help the characters fit into the theme of the campaign, and help guide the players in what characters to make. There are more guidelines in the Alien Creation Section.

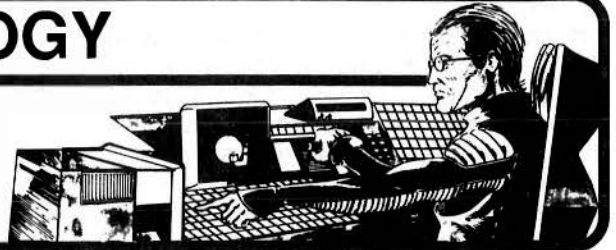
Example Restrictions: The characters must be willing to travel in space, able to pass unnoticed on a human planet, and be motivated to go explore alien worlds.

For example, the characters must all be good fighters, willing to break the law, and outlawed on their home planets, because they belong to a band of roving pirates.

Or the players must all be members of a particular planet's exiled royal family, or their supporters, because their goal will be to raise an army and recapture the throne.

These restrictions help the GM avoid problems. Take, for example, the last restriction. The campaign wouldn't work if half the player characters were trying to recapture the throne while the other half were trying to defend the current ruler. With this restriction, all the player characters are working towards the same goal. Although it is possible to run a "bring any character" gaming session or convention tournament, most long running campaigns work best with some restrictions.

TECHNOLOGY



DEFINING A CAMPAIGN'S TECHNOLOGY

One of the most important decisions a GM must make regards the role technology plays in the campaign. Is the campaign's technology essentially the same as contemporary technology, but the devices have different names? (A tight-beam blaster works like a .45 Automatic; people drive sky scooters to work instead of automobiles.) Or has technology fundamentally altered society, and therefore the campaign environment? (All people wear telepathy devices and can therefore never lie; immortality drugs have made all individuals paranoid about accidental deaths. Perhaps advanced cloning has allowed individuals to transcend the fear of death all together.)

None of these decisions is directly correlated to the campaign's level of technological advancement. It is possible to have an extremely altered society based on very low-level technology, as in George Orwell's *1984*. Conversely, a campaign could have an extremely advanced tech level but very few societal changes. What the GM must do is determine the relative importance of player characters to technology. In science fiction, the importance of individual skills — of individuals themselves — can decrease dramatically. When a computer or robot can function better than its human operator, then the human is no longer so important. Similarly, a gun that is self-firing and self-aiming tends to compensate for the shortcomings of its user: it is no longer so important to be an accurate marksman.

Hence, when defining the role of technology, the GM must first determine the role of the PCs. If he sees their actions as fundamental to the universe — if they will make a difference in the way the campaign universe functions — then technology must play a backseat role, regardless of its actual level of sophistication. It should function as a tool for the player characters to use to advance *their* goals.

Alternately, the GM may decide to allow technology to play a major role in the campaign. In this case, technology becomes a plot device, used by both the PCs and the GM. PCs can still have an important impact, but they are not crucial to the functioning of the universe.

Finally, the GM can decide to have technology be the fundamental basis of the campaign. The PCs might be completely inconsequential — replaceable cogs in an impersonal society. The entire campaign could revolve around the PCs' efforts attempting to prove their self-worth or importance.

DETERMINING A SOCIETY'S TECHNOLOGICAL LEVEL

Once the GM has determined the role of technology, then the actual tech level of each society should be established. Different societies and different races will develop technology in their own unique way. Societies may be advanced in one field yet primitive in another. One society may understand how to build highly advanced weapons, yet be unable to raise crops. Some planets may progress through development of technology in the usual stages, while another race may skip from burning wood directly to solar power. Some may have knowledge of a given technology, but not use it due to religious or societal concerns. Strange races may have bizarre technology, such as using the human emotions as a power source. Don't limit your imagination.

Look at the Society Sheet. This sheet lists questions regarding the Technology and Sociology of a society. This serves as a guide for developing a race. You need not answer every question.

Numbers are given next to each level of technology: the higher the number the better the technology. Most campaigns will be set at the Technology Level of 8, Space Faring Race. This is a race that has had FTL travel for at least 50 years, and has colonized other solar systems. Campaigns might also be set in level 9, Advanced Space Faring Race. Now the race has had space travel for hundreds of years, and has made huge advancements in other areas of technology, such as medicine and computers.

One rule of adding powerful technology: for each powerful device, there must be a defense to it. Otherwise, the campaign will become unbalanced. For example, if there are mind control devices in the campaign, then add a defense, such as a metal which blocks the mind control.

TECHNOLOGY	
Number	Age and Date
1	40,000 BC — Cave people
2	0 AD — Early Civilization
3	400 to 1500 AD — Middle Ages
4	1800s
5	1920s
6	1980s
7	21st Century
8	(Deep) Space Faring Race
9	Advanced Space Faring Race
10 and up	Powerful, God-like Race

TECHNOLOGY SUMMARY						
Age	Communications	Computers	Weapons	Power	Transport	Medical
Cave people	Language, Runners, Smoke Signals	Counting, Knives	Clubs, Spears	Animals	Animals	Spirit magic
Early Civilizations	Pictographs, Writing	Abacus, Numbers	Bows	Windmills	Wheeled vehic., Sailboats	Hippocratic
Middle Ages	Printing Press		Swords, Crossbows	Wood, Coal, Oil	Galleons	Anatomy, Surgery
1800s	Photographs, Telegraphs, Telephone	Automation	Revolvers, Cannons	Electricity	Railroads, Submarines	Vaccines, Anesthesia
1920s	Television, Satellites	Vacuum tubes	Automatics	Cryogenic	Planes, Autos, Hovercraft, Rocket Ships	Antibiotics, Organ Transplants, X-Rays, Psychiatry
1980s	Fiber Optics	Transistor	Computer Guided Missiles	Nuclear-Fission	Magnetic Levitation	Bionics
21st Century	Portable Visual Phones	Superconducting, Particle	Beams, Lasers	Solar, Fusion	Spaceships	Anti-virus
Space Faring	FTL radios	Robot Brain	Plasma Weapons	Bacteriological	FTL Ships	Appendage Trans.
Adv. Space	Instantaneous	Artificial Int.	FTL weaponry	Anti-matter	Teleportation	Regeneration
God-like	Mind to Mind	Super Brain	Emotion control	Black Holes, Emotions		Cloning, Reverse Aging, Mutation of form

The GM may consider how advanced the technology of a society is in the following areas; dates given in parentheses show when the technology was developed on earth:

1. COMMUNICATIONS

In general communication progresses as follows:

- 1) **Language:** Including the spoken word, eye movements, dance, or hand gestures.
Runners: People who run from city to city with messages.
Smoke signals, Drums, Fires
- 2) **Pictographs:** Part written language, part pictures.
Writing (3000 BC)
- 3) **Printing press** (1000 AD)
- 4) **Photographs** (1826 AD)
Telegraph (1840 AD)
Telephone (1876 AD)
Wireless Radio (1895 AD)
- 5) **Television** (1929)
Communications satellites (1962)
- 6) **Fiber optics and Laser communications:** Faster and clearer than by electricity or radio. Video phones are common. Holograms exist.
- 7) **Portable Visual Phones**
- 8) **FTL Radio:** Sends messages faster-than-light.
- 9) **Instantaneous Communicators:** Instantaneous communication anywhere in the galaxy.
- 10) **Mind-to-mind**

Are communications limited to sublight speed? If communications are limited to sublight speed, then planets would

lose touch with colonies outside of their solar system. It would be difficult to control a galactic empire.

Also consider whether the communications can be intercepted or not. A more advanced race may be sending messages in ways a primitive race could not understand (Cro-magnon humans would not intercept radio signals.) Also consider how well coded a race's communications are. Are their communications coded at all? If so, how difficult are they to decipher?

2. COMPUTERS

In general, computers progress as follows:

- 1) **Simple counting:** Using fingers or objects
- 2) **Abacus**
Written numbers (3000 BC)
- 3) ———
- 4) **Simple automation and calculating machines:** (1600s AD) Player pianos, big mechanical calculators.
- 5) **Vacuum tube computers:** (1930) Large, expensive, able to calculate orbits, motor car designs etc.
- 6) **Transistor Computers:** (1947) Small, cheap, and can be built into devices such as medical equipment or scientific instruments.
- 7) **Superconducting Computers:** Can see, do simple inductive reasoning, talk, and understand languages.
- 8) **Robot Brains:** Can see, think, and understand orders, but have no free will or emotions.
- 9) **Artificial Intelligence:** Now have emotions, complex reasoning, may develop a survival instinct.
- 10) **Super Brain:** A machine much smarter than a human.

The GM may also wish to state how common computers are on a planet. Usually, the more advanced the technology the cheaper and more common the computers are.

Super Brain computer may control whole planets, including the weather, transportation, distribution of goods, and nuclear weapons. A deranged Super Brain machine might kill off all of its creators and populate the planet with androids.

3. WEAPONS

In general weapons progress as follows:

- 1) **Clubs, rocks, Spears, nets, Knives** (40,000 BC)
- 2) **Bow and arrow** (30,000 BC)
- 3) **Swords, Maces:** (Middle ages)
Crossbows (1100s)
Cannons (1200s)
Blunderbusses, Muskets
- 4) **Revolvers, Rifles** (Wild West, 1800s)
- 5) **Automatic pistols** (20th century)
- 6) **Computer-Guided Missiles**
- 7) **Particle Beams, Lasers**
- 8) **Plasma Weapons**
- 9) **FTL Weapons**
- 10) **Emotion control, illusion and mind control weapons**

Weapons have been broken up into three categories: Handguns, Planetary Defenses and the Navy:

HANDGUNS:

How common are handguns? How cheap are handguns? If guns are more expensive, fewer citizens will own them. If guns are just being developed, they will be expensive and primitive. The people that do have guns may be highly respected.

Guns will generally be cheaper in a society that has highly advanced weapons. There will be a wide variety of guns available, from the exotic to the mundane. Also decide whether it is legal for a citizen to carry a gun. The GM may wish to write under "Laws" whether citizens may be armed or not. If gun control is practiced, guns will be expensive and may have to be bought on the black market.

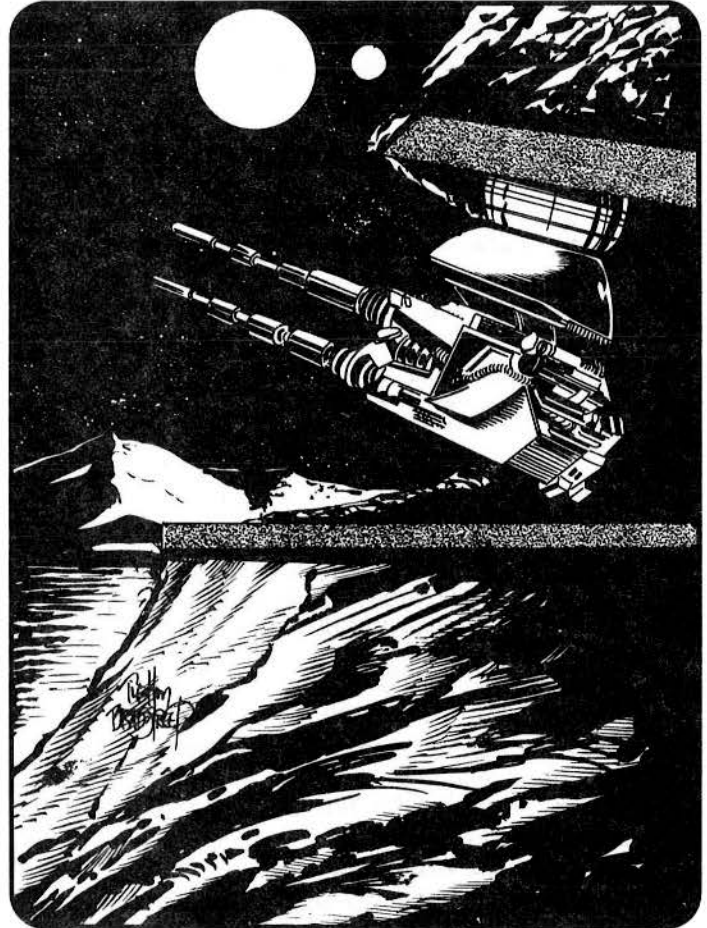
How much damage do handguns do? List the amount of dice damage a typical handgun does. Of course, on a planet there will probably be a variety of guns doing different amounts of damage, but you will want to know the average damage done. Usually, the typical gun damage will be about 2d6 killing or 6d6 normal. This is more than the damage done by 20th century earth pistols, which typically do 1d6+1 Killing or 4d6 normal. For a society with more powerful guns, give them a typical damage of 2d6+1K to 3d6+1K (7d6 to 10d6 normal). Handguns which do more than 3d6+1K would be from a very advanced race. If the race is less advanced than usual, list the typical handgun damage as less than 2d6 killing.

Number of shots per clip: This question determines how quickly a gun will run out of "bullets". Societies with more advanced weapons will usually have more shots/clip. This will come into play during combat, when characters need to reload.

PLANETARY DEFENSES

Planetary defenses are the huge, government owned weapons used for defending the planet from invasion. First determine whether a planet has any planetary defenses. Planets which do not have space travel will usually not have any planetary defense, unless they interact frequently with spacefaring races. Planets without space travel will usually only have ground troops or national defenses.

If a race does have planetary defenses, determine the range. The GM doesn't need to write down exact range, but should determine the range in a general sense.



Planetary Defenses range from:

Intraplanetary: These are useful for attacking ships and missiles within the atmosphere and on the planet only.

Planet to orbit: These are useful for destroying orbiting enemy starships.

Within the solar system: The planet's weapons are capable of hitting enemy ships as soon as they enter the solar system, even before the ships start orbiting the planet.

Out of the solar system: The planetary weapons can fire missiles which leave the solar system and attack targets in other solar systems. Planet-to-Planet warfare is possible, even if the planet is in another system. This is very advanced.

SPACE NAVY

How many ships are in the navy? There is no need to list the exact number, but decide if it is more or less than average. Does this race have the largest Navy in the galaxy? Also remember a Navy may consist of many cheaply built ships or a few excellent ones.

Regarding personal armor: To define how advanced a race is in armor technology, simply write down how much resistant defense, if any, the typical armor has. A resistant PD and ED of 6 is the usual defense in a space faring society. Also note whether the typical armor has minuses to DCV or Perception.

4. POWER SUPPLIES

In general Power Supplies progress as follows:

- 1) **Animal or Human**
- 2) **Windmills and Waterwheels**
- 3) **Wood**
Coal, Steam Engines,
Oil, Natural gas and Gasoline
- 4) **Electricity**
- 5) **Cryogenic Chemicals:** (liquid oxygen, nitrogen, etc.)
- 6) **Nuclear:** Fission of atoms.
- 7) **Solar:** also Nuclear Fusion of atoms.
- 8) **Bacteriological**
- 9) **Anti-matter**
- 10) **Black Holes**
- 11) **Emotions, Life forces, Thought**

Consider how dangerous the society's power supply is. For example, nuclear energy may cause radiation leaks. Bacteriological energy may be clean and safe, or it may mutate into some hideous disease. Black holes may be powerful sources of energy, but a mistake can lead to half the galaxy being destroyed.

The more bizarre sources of energy such as emotions, life forces, and so forth will only be used by very highly advanced civilizations or strange aliens.

5. TRANSPORTATION

In general, transportation progresses as follows:

- 1) **Pack animals, Sleds, Canoes** (5000 BC)
- 2) **Wheeled vehicles** (3500 BC)
Sailboats (3200 BC)
- 3) **Stagecoaches, Galleons, Junks** (1400s)
Submarines (first one in 1620.)
- 4) **Steamboats, Railroads** (1800s)
Automobiles, Zeppelins (early 1900s)
- 5) **Planes** (1903)
Hovercrafts (1950s)
Rocket ships (1960s): mostly planet to orbit.
- 6) **Magnetic Levitation Vehicles** (1980s): These are mono-rails that use magnetic fields to float above the rail.
- 7) **Space ships** (sublight speed), are capable of planet to planet travel in same solar system.
- 8) **FTL Space Ships**
- 9) **Teleportation**

These are only guidelines; there could be societies that never developed boats and only have land vehicles (if they come from a planet that has no large bodies of water). Maybe they rely on public transportation, while private ownership of vehicles is only for a privileged few.

Teleportation: Teleportation can radically change a campaign. Characters may teleport into bank vaults, or away from fights. If the teleporters are good enough, the train, car, and plane industries may collapse. People will no longer die from vehicle accidents. However, people may die from teleporting to the same space at the same time as another person. There may be "teleportation ports", that have "landing pads" and scheduled teleportation trips.

List limitations on any teleportation, such as teleportation is possible only to a place the character can see or has previously seen, only with 10 minutes preparation, or only with large (1 ton) teleporters. Consider the range of the teleporters: half-mile, intraplanetary, or planet to planet. If the race has teleportation devices, decide whether these teleporters need a receiver. Note if the race has anti-teleportation shields or not. Military bases, banks, jewelry stores, and research building may have such force fields to protect themselves from intruders.

6. MEDICAL TECHNOLOGY

In general medical technology progresses as follows:

- 1) **Spirit Magic:** Voodoo, shamanism, beliefs that spirits cause illnesses.
- 2) **Hippocratic Medicine:** discovery that diseases have natural causes, herbal treatments (400s BC.)
- 3) **Human Anatomy is studied** (1500s AD)
Surgery (mid 1500s)
Vaccinations (1796)
- 4) **Anesthesia** (1842)
X-Rays (1895)
Psychiatry (1900)
- 5) **Antibiotics** (1928)
Heart surgery, Organ transplants (1950s)
- 6) **Bionics, Artificial organs**
- 7) **Anti-virus Treatments**
- 8) **Whole Appendage Transplants** (replace arms and legs.)
- 9) **Regeneration of Body Parts**
- 10) **Genetic Engineering of Sentient Life:** but cannot mutate a person after birth. This includes Cloning.
- 11) **Reversing of Aging**
- 12) **Mutation of Form:** now capable of altering adults

Notice that in more advanced societies characters may have clones, replace lost limbs, and reverse their aging. The emergency care in advanced technology may be fantastic, perhaps even able to bring a character back from "death".

Reversing of aging: If aging can be reversed, will people ever die? Probably only from accidents. If people never die, will the government be led by the same people for 1000 years? The culture may be very conservative. Reproduction might be less common, or else there would be an overpopulation problem. Great scientists and artists may advance the culture tremendously, because geniuses would no longer pass away.

Mutation of form: Races which can mutate their form may be energy beings, or polymorphs. They may no longer need bodies.

7. MENTAL DEVICES (ILLUSIONS, MIND CONTROL, TELEPATHY)

Are there devices which perform mind control or telepathy? If so, hypnosis and/or drugs could be used to pacify the masses or reform criminals. Truth serum may be very advanced. There may be mental protection devices or anti-drugs: drugs which protect you from other drugs, such as an anti-truth serum drug.

Telepathy: If telepathy devices exist but are uncommon, they would be used by spies, law enforcement officials, rich business magnates, or government officials. To successfully commit a crime in such as society, the criminal would have to avoid suspicion all together. If anti-telepathy devices exist, important public figures and diplomats would wear them constantly.

If telepathy devices are common, then the culture would change drastically. It would be impossible to lie, cheat, or steal. Psychiatrists would understand mental disorders completely. Politicians could not gain power on false promises. If the protection from telepathy devices exist, and they were equally inexpensive, then society may get back to normal. Most everyone would wear anti-telepathy devices.

Mind Control: If mind control exists, the government might use it to "reform" non-conformists. Individuals could take a happiness pill before going on a date, or a hard-working pill before going to work. One person with a powerful mind control device could seize control of the government and turn all the citizens into obedient slaves.

Illusion: Illusion devices may fool guards into thinking their boss is giving them orders to let the PCs go. Movie theaters could have 3 dimensional illusions for entertainment. Paintings could be moving illusions of rolling country sides. The president of a world may really be an illusion created by someone intent on taking over the planet.

8. OTHER DEVICES (INVISIBILITY, HYPNOTIC TEACHERS, AND SO ON)

This category is for unusual technology or any technology that does not fit into the above categories. The GM may list any technology that makes a certain culture unique and interesting.

Invisibility: Invisibility, like mental powers, is a powerful capability. The GM may wish to make invisible characters visible to infrared or ultraviolet devices. If invisibility is common, then institutes will be on guard for people using invisibility devices. They will have pressure plates, IR cameras, or similar devices to spot invisible characters.

Hypnotic teachers: The GM must decide whether these exist and how well they work. Players who use hypnotic teachers must keep track of what they have learned and how fast they forget. Hypnotic teachers can be a useful plot device. They can enable a character to learn a language or a special skill quickly for the duration of a scenario.

Transmutation of matter: This is the ability to change matter from one form to another (air into chair, plastic into gold). This would be for highly advanced races, which might be capable of instantly changing their own forms.

DECIDING ABOUT FASTER THAN LIGHT TRAVEL

One of the most important decisions the GM must make is whether FTL travel exists in the campaign. What theme the GM has chosen will affect whether FTL exists or not. Most campaigns have FTL travel, but it is possible to play a *Star Hero* campaign with only sublight ships.

IF NO FTL TRAVEL EXISTS

In a society without FTL the players are usually restricted to one planetary system. There may be some exploration of other stellar systems, but the trip would take decades. Many science fiction books lack FTL, and the action takes place in our Solar System. Characters could explore Saturn's moons, or terraform Mars. Characters could also be on a "generation ship", a large spaceship intended to travel for decades, with people spending most or all of their lives on board.

IF FTL TRAVEL EXISTS

If FTL does exist in the campaign, the GM must determine how fast ships can travel. The speed of FTL directly affects the size of the campaign universe. If FTL travel is relatively slow, then the settled universe (known space) would likely be small, with a dense population. Conversely, if FTL travel is extremely fast, then the known universe might be immense, and constantly expanding. There could be low population density, and a frontier mentality.

It is also important to determine exactly how the FTL functions. Can ships fight while in hyperspace? If not, all space duels will be fought near planets or other valuable locations. Is there more than one way to travel FTL? (Perhaps humans use advanced technology, amoeba people use enhanced mental powers, and a mystical race uses magic.) If two ships are using different FTL technology, can they contact each other, or are they in "different" hyperspaces?

LEVELS OF EXPENSE FOR STARSHIPS

Very Expensive: An FTL ship costs \$50 million or more. This is the cost of a serious military vehicle, like a submarine, destroyer, or the space shuttle. Few individuals can own one. Only governments or the largest corporations own ships, and passage on these ships is only available to the very rich. Therefore, each planet must exist within its means; no planet can rely on extensive imports from elsewhere. Most adventures would probably take place on one planet. Exploration will be very slow.

Expensive: FTL ships cost \$1 million to \$50 million. This is the cost of a large commercial airplane. Now very rich individuals and businesses can afford a ship, though less than 0.1% of the population will own one. Only the most wealthy player character would own a ship outright. Players may have a ship through a company they work for, by combining several rich PCs' money or by extensive loans from a bank. Most people can afford a trip to another planet, and planets will have extensive trade with each other. New planets will be discovered and explored at a moderate rate. Unscrupulous businesses will find it profitable to pillage backward planets.

Moderate: FTL ships cost \$100,000 to \$1 million. This is the cost of an expensive home. Upper-class families can afford to own a ship, as they might own a private jet on modern Earth. Perhaps 1% of the population own a ship. The player characters could own a ship, and even low-income individuals can afford passage on a ship once or twice a year. Every planet within about a few months' travel will be described in an encyclopedia and people may even commute from one planet to another. Friendly alien races will be completely intermixed with each other.

Cheap: FTL ships cost \$100,000 or less. This is the price range of an RV, summer cottage, or a boat. 5% of the population own a ship. Player characters most likely own at least one ship between all of them, or perhaps even 2 or 3. Companies will expand to cover many planets and solar systems ("McPhychi's fast food" is on every city of every planet in the explored regions of the galaxy).

The expense of a ship includes both the cost of the materials and labor needed to build it, and the wages of the pilot.

DEFINING SOCIETIES



This section deals with defining societies for both humans and aliens. In order to help the GM in this endeavor, the Society Sheet has been provided.

HOW TO USE THE SOCIETY SHEET

The society character sheet is broken up into categories: individuality, cultural decisions, technology (see Defining Technology section), and politics. Players may use this sheet to define their alien character. GMs may use this sheet to describe alien worlds the players come across in their adventures. It is not necessary to fill in every blank on the society sheet. You may pick just a few of the questions and expand on those, emphasizing a certain interesting aspect of the society. Nor is one society limited to a single planet. If a race of aliens has spread onto several planets or even several solar systems, then one society character sheet may be used to describe all of their worlds. On the other hand, a society could occupy only part of a planet (like American society on 20th century Earth).

ASPECTS OF SOCIETIES

1. CULTURAL DECISIONS

Cultural decisions include the religions, philosophies, and attitudes of a society. Not all members of the race agree on these cultural issues, but the majority of people have reached a general consensus. Usually a race has adopted a more or less uniform code of social behavior by the time they develop interstellar travel. When answering these questions, indicate whether these cultural decisions are actual laws or just attitudes of the society.

Pacifist or Warlike?

Does this society consider war to be a good thing, a necessity, a last resort, or an unthinkable barbarism? Some races may consider fighting to be a passage of adulthood. Does only one of the sexes fight?

Some societies, like Sparta, may consider war their primary focus. Or like Rome, continuous conquests may be an economic necessity.

On the other hand, some races may prefer subjugation or death to fighting. Perhaps a race may be too slow or too stupid to be worth conquering — they are "unconquerable!"

Moral Imperatives

Moral imperatives may or may not be religious. A race may feel that no one should expose their ankles, speak in the presence of a superior, take inebriants, cut their hair, or own goods. How harshly punished are people who ignore these rules? How important is conformity?

Xenophobic or Friendly Towards Other Races?

Xenophobic means fear towards aliens (alien in the sense of extraterrestrials — offworlders could fear humans). Decide whether the society hates and kills all aliens, trades with aliens but refuses to let them on their planets, lets aliens on their planets but socially belittles them, accepts aliens, or welcomes them with open arms. Note which aliens they fear and which they like.

Is There Bigotry or Equality?

There are several forms of bigotry, including racism, sexism, and class distinction. An example of class distinction is the division of people into groups by nobility: King, Duke, Lord, peasant. A society could discriminate on any factor: IQ, skin color, sex, income, education, number of fingers, powers. Decide whether major or minor privileges are denied to the victims of discrimination, and whether people can move up and down in the classes or not.

Class Distinction is related to income distribution. Usually, the highest class has the most wealth, although there are exceptions (like a poor, but widely respected holy person).

Literature and the Arts

Some cultures may be known chiefly for their arts. They may become centers of teaching and touring. Decide if the society excels in painting, sculpture, music, dance, or writing. They could have new forms of art as the result of technology (video games, picture holograms, paintings projected telepathically, mind control music, interactive computer paintings).

The society's arts and literature may emphasize an aspect of the society; they could encourage complacency, god(ess) worship, greed, war, or emotional expression.

Is this race's art unusual? Perhaps this race expresses itself by telepathically communicating with trees, growing them into symbols. Perhaps their "art" is a mathematically beautiful equation, or a finely tooled piece of machinery.

Some cultures may reject all literature and art. They may prefer a cold, militaristic life.



2. GOVERNMENT

The politics in an alien society include the organization of the government, the rights of the individual, the economics of the society, and treaties with other worlds.

Is there an organized government?

Some societies may not have an organized government. Primitive cultures may have only tribes or city states like the Greeks. Aliens with group minds may have no organized government; they make decisions as a whole. There may be just anarchy.

Laws

Determine what rights citizens have. In totalitarian societies this is simple (Rights? Almost none!). A society may be oppressive in one way, but liberal in another. For example, a society may have class distinction but sexual equality.

Some examples of rights include: freedom of belief, speech, the press; right to assembly, bear arms, a fair trial, elected government officials, racial equality, sexual equality, sentient equality, travel.

The GM should also determine the methods of punishment. Is society harsh (execution for jaywalking)? Or is it a forgiving, gentle race?

You may also list here any oppressive practices in the society, even if they are not related to the law.

Is the government corrupt or honest?

This may indicate whether player characters can bribe officials, obtain blackmail tapes on the President and so forth. Government officials may publicly disapprove of behavior that they privately practice. Note whether the elections are fixed or honest.

How loyal are the people?

Note how strongly the people support their government. If the government does not enjoy popular support, it may be unstable, or easily overthrown. There may be underground groups and a large black market. Visitors to this type of a society may find the people sullen, hostile, or nervous. Player characters can easily find support for illegal activities.

A well supported government leads to a different environment. Citizens are cooperative and will gladly report illegal activities. Citizens may be very patriotic, readily giving their lives for the good of the state.

How are the most powerful officials chosen?

The government may be a democracy, a one person dictatorship, a cabinet dictatorship, a monarchy, or a theocracy. Perhaps government leaders are chosen by a ruling extraterrestrial race. The president may be genetically engineered, like a queen bee, or the society may be dominated by a single corporation. Perhaps IQ tests are given to the population and the most intelligent person is made the leader. Or maybe the race just psychically knows which person is next to rule. Another possibility would be a planetary combat tournament every 10 years to choose the leader.

What is the economic system?

Determine who owns the means of production and who decides how goods and services are distributed. In a capitalist economy, goods are produced by private citizens and distributed on an open market. There is business competition.

In a communist/fascist economy, factories are owned by the government, which decides the prices and distribution of goods. There are no privately owned businesses and no business competition.

A socialist economy is somewhere in between capitalism and communism/fascism. In a socialist economy, the government and some private citizens own factories. Goods are distributed on an open market, where price determines who gets the products.

In a corporatist monopoly, a few huge megacorporations control the stores and factories.

Major Imports and Exports

Trade may be very important to a planet. List the society's major imports and exports and who they trade with. Some planets may need to import essentials such as food or medical supplies, while others may only import luxuries.

A planet that exports a lot of goods may actually be more powerful than a military power. A world might be very careful not to offend other planets they trade with. Also, planets which trade with each other often have military agreements with each other. After all, it is in each planet's interests to protect their consumers/suppliers.

Military Treaties with Other Races

Decide if this society has powerful allies, and if these allies are really willing to fight for them.

Power Groups On Planet(s)

Power groups can be theological (such as a church), political (political parties), royal (a royal family) or economic (corporations). Do these power groups get along? Decide which group controls the planet. This is related to how the most powerful officials are selected. Often the more advanced a society is, the more power groups exist.

3. INDIVIDUALITY

What are the basic goals of an individual, in order of importance?

For example, humans are first interested in getting things necessary to sustain life: food, clothing, shelter. Then humans reach for a social position such as a mate, friends, respect of peers, or accomplishments. Aliens may have very different basic goals, such as a desire to serve the group mind, or to study only impenetrable math.

How independent are individuals?

Predatory creatures tend to be very independent, and live alone or in small groups, and may eat each other. Herd animals tend to form tribes, and have a social structure or "pecking order", but there is some possibility of independent action or thought. (Humans are herd animals in this system.) If the members of the society are social, how are social groups established? Are they based on family ties, social class, or occupation?

Animals with one tribe-mother, like ants and bees, may have unbreakable social castes, where an individual has almost no free will. All members of the race depend completely on this social structure for survival. The common

science-fiction "group mind" is an extension of this type of society, in which the entire anthill becomes an intelligent organism, but none of the individual ants are sentient.

Careers

Note whether individuals are assigned a job or choose their own. The government may assign jobs to individuals. Some creatures may have been genetically engineered for a certain job (and hence given no choice).

Does this society have unusual careers?

Leisure Time

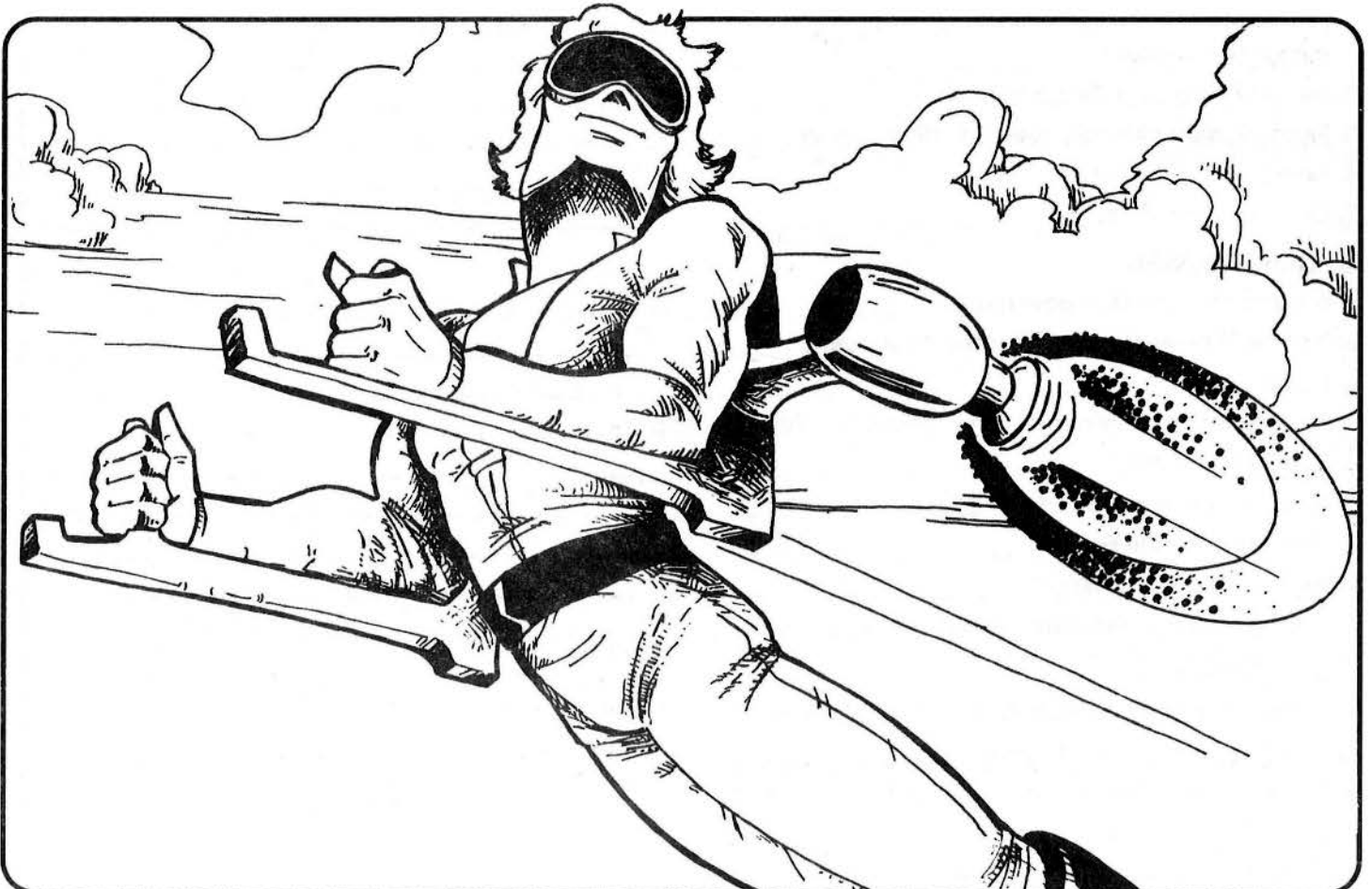
Note how much leisure time people in this society get and decide what people do with this time. In some societies, it may be considered immoral to be frivolous. Some creatures may have no leisure time. They just work and sleep, sleep and work (or perhaps never even sleep).

Emotions

Note whether this species is capable of emotions. Is it socially acceptable to express emotions? Some cultures might encourage expressing emotions with emphatic hand gestures, angry tantrums in public, or open acknowledgements of shame. Conversely, some cultures might fear emotions, and rely solely on logic. A society may encourage certain emotions, such as anger or arrogance, while discouraging others like fear, sorrow, or love.

4. ENVIRONMENT

Decide what aspects, if any, of the environment that the society lives in are unique.



SOCIETY SHEET

RACE DATA

1. Race name: _____
2. Race Description: _____
3. Planet(s): _____
4. Environment/Special Features: _____

TECHNOLOGY

1. Communications: FTL or Not? _____
2. Computers: _____
3. Weapons: _____
- Handguns: how common: _____, typical #d6 damage: _____, #shots/clip: _____
- Planetary Defense: range: _____
- Space Navy: how many ships: _____
4. Power supplies: _____
5. Transportation: _____
6. Medical Technology: _____
7. Mental Devices (illusions, mind control, telepathy): _____
8. Other (invisibility, hypnotic teachers): _____

SOCIOLOGY

A. CULTURAL DECISIONS

1. Pacifist or warlike? _____
2. Moral imperatives (Religion?): _____
3. Xenophobic or friendly towards other races? _____
4. Bigotry or Equality? _____
5. Literature and Arts: _____

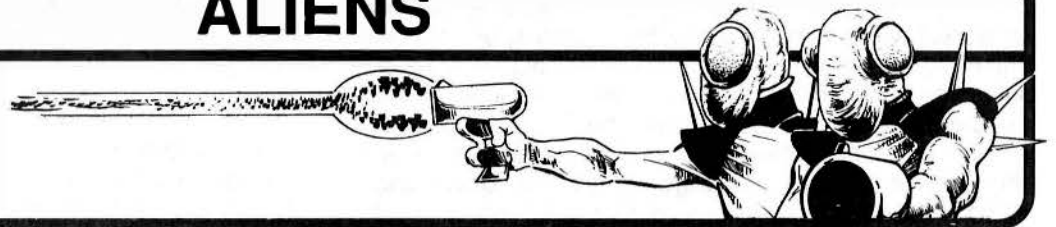
B. GOVERNMENT

1. Is there an organized government? _____
2. How are the most powerful officials chosen? _____
3. Laws: _____
4. Power groups on planet(s) (Theological, Business, Political): _____
5. Economic system? _____
6. How corrupt or honest is the government? _____
7. How loyal are the people? _____
8. Major imports and exports: _____
9. Military treaties with other races: _____

C. INDIVIDUALITY

1. Basic goals of individuals (wealth, social status, other?): _____
2. How independent are individuals? _____
3. Career (does the government or the individual choose it?): _____
4. Leisure time (how much and what do they do with it?): _____
5. Emotions (socially acceptable? Which are common?): _____

ALIENS



INTRODUCTION

The following chapter describes how to develop and construct aliens. It is divided into the following sections:

Players as aliens: This part discusses alien player characters, whether they should be allowed, and how bizarre an alien can be.

Defining the Alien Races: This section deals with defining the physical attributes of aliens, and how to create alien societies.

Construction of Aliens: This section gets down to the nitty-gritty game mechanics. It explains how to buy an alien's characteristics, (STR, DEX etc), and skills.

BUILDING ALIENS AND THEIR SOCIETIES

The GM must decide whether aliens exist in his or her universe. The GM must then decide how much interaction there is between aliens and humans. Lastly, the GM must design the aliens most commonly found in the campaign.

HOW MANY ALIEN RACES SHOULD I HAVE IN MY UNIVERSE?

There are advantages to having a restricted number of aliens. The fewer alien races, the more detailed each race can be. A few well developed alien races are much more interesting than a tome of meaningless alien names. The GM might want to have a maximum of 3, or perhaps 5, common alien races at the start. More alien races can be added to the campaign later as the players explore.

Conversely, a universe containing a large number of alien races can have its good points. The more races there are, the more options the players have for choosing alien characters. The universe will be more colorful, and the players can encounter myriads of strange creatures. What would a spaceport bar be like without its great collection of bizarre customers?

PLAYER CHARACTERS AS ALIENS

If aliens do exist in the campaign, can the player characters be aliens? Which alien races can they be? These are questions the GM must decide. Also, if players are aliens, all the players must have similar enough cultures so that they can work together.

Basically the GM has four choices of what races the player characters can be:

Only Humans: This is appropriate for campaigns taking place in modern times, or a few hundred years in the future. Often, such a campaign will center around Earth.

Humans and Near-Humans: Player characters can also be strong heavyworlders, low gravity humans and so forth. However, all the races are basically human in physique and mental outlook. This may be several thousand years in the future, but in an empire which started on Earth.

Humans and Aliens: Player characters can be humans or utterly alien creatures, such as intelligent vegetables, birds, amoebas, and so on. This would probably be many thousands of years in the future, when such alien species are members of the same society as humans.

Only Aliens: A campaign without humans would be unusual, but possible. This would be more difficult for the players and require much more work from the GM. For example, PCs could be star spanning gas clouds, robots, or godlike beings who manipulate entire races of lesser beings. The PCs could be the first worker ants with free will.

CULTURALLY ALIEN VS. PHYSICALLY ALIEN

Just because a character is an alien doesn't necessarily mean that he is extremely different from human PCs. An Alien can be physically alien but culturally similar to its human counterparts. It might have 4 arms and a tail, yet work 40 hours a week, pay income taxes, and get married. It could even be a human in a rubber suit (which would certainly be physically alien to earlier technological levels).



ALIEN CONSTRUCTION

Conversely, an alien could be physically similar to humans but totally different in a cultural sense. Perhaps the race has intentionally altered itself to *look* like humans, or was constructed to resemble humans (like androids). The "alien" could even come from a human society that reached maturity under completely different circumstances than the rest of the race. The cultural differences could be readily apparent, if the alien were unable to engage in intelligent conversation or tried to eat other sentient beings. Or the differences could be more subtle. (The alien might seem urbane and charming, but actually be trying to locate proper hosts for its parasitic offspring).

DEFINING ALIEN RACES

To define an alien race the GM must do three things:

- 1) Define the physical abilities of the alien race.
- 2) Define the society the alien lives in.
- 3) Determine the level of technology of the alien race.

PHYSICAL ABILITIES

The GM decides the following aspects of the alien race. The **Alien Sheet** is provided to aid the GM.

Physical abilities include:

Characteristics and skills: This category includes the typical alien's strength, intelligence, ego, and skills (the "everyperson" skills known by all). See the "Alien Construction" section.

Powers and their implications: See the "Alien Powers" section.

Food: An alien could be a carnivore, omnivore, vegetarian, or use solar energy, emotions, gravity, metals, or bacteria as food. Aliens may not need food at all.

Senses: How many senses does the alien have, and how acute are they? Can they see in ultraviolet or infrared?

Lifespan: Aliens could have lifespans of millions of years, or a few hours. Perhaps they pass on so much more of themselves to their children or companions that death means little to them. Perhaps they do not grow old, but have a terrible fear of accidents. Or they could be eternal and indestructible.

Reproduction: How many genders does the alien race have? Creatures could reproduce by fission, cloning, or by genetically designing offspring. They may all come from one race-mother, or they may never reproduce at all, and have an extremely long lifespan. The creatures could be produced by another race, by means beyond their control (like robots). Or, the reproductive cycle may be linked to other species.

Physical Description of the character: Draw a picture, give height, weight, smell, number of appendages, colors, texture, or whatever is relevant.

Environment: Do they live in space? Breathe methane? Underwater? In high gravity? Or perhaps inside another being, as parasites or symbiotes?

Some aliens may defy the categories above. Feel free to modify the categories to suit your tastes.

INTRODUCTION

The section includes all the information needed to build aliens. Usually, the GM will build all the aliens in the campaign, including the alien races the **players** may use for characters.

Aliens are built using the same characteristics and skills listed in the human character creation section, but in addition, aliens may have Alien Powers.

ALIENS:

- a) May have a different number of Hero points to spend.
- b) Have the same 14 characteristics as humans, but may have different starting values and maxima.
- c) May have different Everyperson skills.
- d) May have some Powers, possibly with limitations.
- e) May have access to different devices than humans.
- f) May have Racial Disadvantages.

ALIEN CREATION CHECKLIST

- a) **Character Conception:** Fill in the alien character sheet by determining the alien's lifespan, physical description, environment, and so forth (see the "Alien Sheet"). Also determine what type of society he, she, or it comes from (see the "Alien Society Sheet").
- b) **Build the typical alien.** Usually the GM will do this, although sometimes the player will build the typical alien instead. Once the typical alien is built, the player will buy the skills and characteristics that personalize the character.
- c) **Buy Alien Powers**, if any (see the "Alien Powers" section).
- d) **Buy Package Deals**
- e) **Buy Skills and Characteristics**
- f) **Determine the character's disadvantages.** During part b), building the typical alien, disadvantages typical of that species were chosen. Now determine the individual's disadvantages, if any.
- g) **Balance the character.**

TO CONSTRUCT A TYPICAL ALIEN

- (1) Decide the typical value of the alien's **Primary** characteristics (don't change their **Secondary** characteristics except to reflect the new Primary Characteristics) How strong is the typical alien? How smart? The starting values of the Secondary characteristics are calculated from the primary characteristics using the same formulae humans use.

Example: *The GM decides to build a race of two-legged sentient cat people. She gives the typical cat person 12 STR, 14 DEX, 12 CON, 9 BODY, 13 INT, 7 EGO, 13 PRE, 12 COM.*

- (2) Figure the cost of the characteristics just bought.

Example: For the cat people mentioned above, the cost is $2+12+4-2+3-6+3+1=17$ points.

- (3) Decide what the maximum values of the alien's characteristics will be. Note: both primary and secondary characteristics have maxima which may be different for aliens. These are figured the following way:

For every 3 character points the maximum is raised, the cost is +1. So to raise the STR maximum to 23, pay +1 point. To raise the DEX maximum to 22, pay 2 points (each point of DEX costs 3 points, so each point of increased DEX maximum costs 1 point)

Lowering the maxima gives the character points back. To lower the maxima, the character receives back 1 point for every 2 the maxima is lowered by. To make the maximum INT 18, the character gets back 1 point. To lower the DEX maximum to 16, the character gets back 6 points. Of course, individual aliens may buy characteristics above their racial maxima by paying double price, just like in human characters.

Example: For the cat people, the GM decides to increase maximum STR to 22, DEX to 24, CON to 22, INT to 23, and COM to 26. Since humans have a 20 maximum in all these characteristics, this is $2+12+4+3+3=24$ points of raised characteristic maxima, which costs 8 character points. Maximum BODY is lowered to 18 and EGO to 17, a change of $-4 + -6 = -10$ character points. This costs -5 points; that is, a 5 point disadvantage. The total cost of these changed characteristic maxima is $8-5=3$ points.

- (4) Decide if the alien has any inherent disadvantages.

These are genetic disadvantages, not environmental ones. The GM should try to avoid psychological disadvantages, as these tend to make all of the aliens seem similar.

Example: The GM decides that her cat people have clumsy hands — imperfectly evolved from paws. This is a Physical Limitation, which is frequently but slightly impairing; so it is worth 5 points.

- (5) Decide which skills the alien race would automatically have a familiarity in. Like humans, aliens may chose 7 familiarities for free. If the GM believes the typical alien has more familiarities than that, he or she may give them to the alien and keep track of the cost (1 point per familiarity) If the GM believes the typical alien has less than 7 familiarities, the character may get back points (1 point per familiarity sold back)

Example: The GM decides that the cat people have the following familiarities: climbing, concealment, deduction, disguise, paramedic, shadowing, stealth, and seduction. That's 8 familiarities, one more than usual. The character must pay 1 character point.

- (6) Subtract the cost of characteristics and skills from the number of character points given (usually 75 points). Add on points obtained from inherent disadvantages.

Example: 75 points

-17 points for characteristics

-3 points for characteristic maxima

- 1 point for familiarity

+ 5 disadvantage: clumsy hands

Total: 59 points left.

Now the GM knows how many points the player has left to spend to "build" a cat person.

Example: A cat person starts out with the typical characteristics, disadvantage(s) and skills of the cat race. The player then has 59 points left to buy skills, modify characteristics, and so on.

Players may change the physical characteristics, disadvantages, and familiarities of the typical alien, but the player must pay (or gain) points to do so. The player starts with the typical alien as the character's starting characteristics, instead of a typical human. From that, the player can modify it, just like he or she could a typical human.

Example: The player, Sam, decides his cat person is stronger than the typical cat person. He pays 6 points from the 59 points to get 18 STR. Conversely, Sam decides the character is not as attractive as most cat people, so he lowers the COM to 10, getting 1 point back.

ALIEN FORM

1) ALIEN POWERS:

2) SOURCE OF FOOD:

3) SENSES:

4) LIFESPAN:

5) REPRODUCTION:

6) PHYSICAL DESCRIPTION:

Height: _____

Weight: _____

Number of appendages: _____

Skin color: _____

Skin texture: _____

Other: _____

7) ENVIRONMENT NORMALLY LIVE IN:

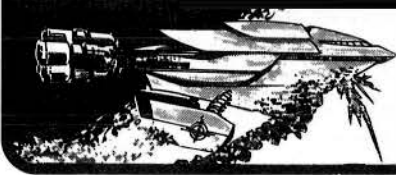
Gravity: _____

Air, land or water? _____

Atmosphere: _____

Temperature: _____

THE UNIVERSE OF THE ALLIANCE



The following is a "starter" universe that can be run immediately, although many GMs will wish to create their own campaign universe. This universe contains aliens. Faster-than-light travel is possible. The main human group is The Alliance, a union of humans. The Alliance contains planets that have had faster-than-light travel for about 300 years.

WORKING PLAYERS INTO THE UNIVERSE

Players should probably choose human and near-human characters. "Near-humans" can still be alien, but are not bizarre and incomprehensible to humans. The GM will probably want the characters to live on Theris, one of the Phychi worlds populated by humans (the introductory scenario begins on Theris).

The GM does not need to tell the players every detail of the universe. The GM should give a general overview of the the 3 main power groups in The Alliance (Phychi, Shadu, and Kindred).

THE ALLIANCE

The Alliance is a union of 87 planets. Most of the planets are inhabited by humans and near-humans. The main purpose of the Alliance is military defense. The Alliance provides protection against invasion from outsiders, especially aliens. The Alliance members agree not to wage war against each other.

The groups in the Alliance generally cooperate. They do not all have the same laws, but they do have a few things they all agree are crimes. They will extradite individuals accused of murder, kidnaping of Alliance citizens, theft of very expensive things (like spaceships), or deserting from the Alliance military.

Giving guns and technology to lower-tech races is not forbidden, but it is illegal to give races anything so far beyond them that they cannot produce it locally. This, in theory, should prevent unbalancing of less advanced cultures. New planets should be surveyed by an Alliance official before trade or other arrangements with private companies begins. However, some of the groups in the Alliance pretend to follow these rules while secretly breaking them.

Each planet in the Alliance is allowed self-rule, but must contribute soldiers and military hardware to the Alliance space navy. However, the Alliance is a shaky one. Its members vie for power. Espionage between Alliance members is common. Societies try to promote their ideologies and to dominate The Alliance.

Language: Each society in the Alliance has its own language; for example the Phychi speak Phychi and the Shadu speak Shadu. To cope with this problem, an artificial language was constructed called "Tradespeak". Tradespeak is the universal language of the Alliance. It is not as complex as native languages, and has no dialects (although individuals do have accents). Because it is simple, the maximum number of points of tradespeak a character can have is 2 points.

THE ALLIANCE HISTORY

The numbers are dates according to the Alliance calendar. The Kindred, Shadu and Phychi are all human races.

-100 to 0: The Kindred, Shadu, and other human races develop space travel and expand their spheres of influence through colonization or domination of other planets. Several small wars and incidents occur between the Kindred and Shadu. The Kindred and Shadu discover that neither of them can gain dominance.

0: The Alliance is formed. At this time it includes 52 planets: 20 Shadu, 17 Kindred, and 15 independents. This ends virtually all human-human wars and permits faster exploration and expansion.

70 to 80: The Alliance has first contact with an insect race named the Ento. The Ento are incomprehensible and hostile to humans.

80 to 110: Racial war between the Ento and the humans. Many new human races join the Alliance during this period, including the Phychi. The Ento are defeated, but not destroyed. They are driven back to their original territory.

211 to Present: No major wars have occurred for about 100 years, although there still are small skirmishes with the Ento and other races. Currently, a cold war is taking place between the Phychi and the Kindred.

STRUCTURE OF THE ALLIANCE

The Alliance contains three main power groups (detailed descriptions are given later):

Kindred	17 Planets
Phychi	3 Planets
Shadu	20 Planets

Current Alliance Members

Kindred	17 Planets, 1 Race
Kindred Satellites*	15 Planets, 8 Races
Shadu Republic	20 Planets, 1 Race
Independents	35 Planets, 10 Races

Total: 87 Planets 20 Races

* Planets which have voted with the Kindred on 95% or more of the initiatives in the High Council for 20 years.

The term "race" is used here in the sense of different human races. The Phychi and Imen are considered among the "Independents". The Alliance is "ruled" by the High Council.

THE HIGH COUNCIL

The High Council is the principal governing body of the Alliance. Members are elected from their home planets, one per voting planet. Voting planets are those held by a race at the time they join the Alliance. Planets gained by a race after joining do not contribute votes or council members.

The High Council has three principal duties: maintaining the Alliance's Armed Forces, arbitrating disputes among Alliance members, and declaring interplanetary mandates. These mandates include laws, formation of new organizations, and declarations of war.

THE INDEPENDENT PLANETS

The 35 independent planets are planets in the Alliance not under the direct control of the Kindred or the Shadu. The Imen and the Phychi are considered independent. There is a wide variation of societies among the independent planets. Many of these worlds are democratic with plentiful citizen rights. Some of the planets are dictatorships, theocracies, monarchies, or just plain anarchical.

The GM may wish to develop his or her own version of some of the independent planets. The important thing is that many of these worlds may provide safe haven and help to player characters.

PHYCHI SOCIETY

Race name: Phychi (Fitch-ee)

Planet(s): 3 planets, **Theris** is their capital world.

The Phychi are a race of humans analogous to modern American society. The player characters will probably live on Theris (the Phychi capital world) and may even work for the Phychi government.

TECHNOLOGY

- Communications:** The Phychi have FTL radios, which are well coded.
- Computers:** They have computers with robot brains. The Phychi have a large network of computers, with a computer in almost every home.
- Weapons:** Laser guns
Personal Armor: 6 PD and ED
Handguns: are uncommon (10% population has them)
typical #d6 damage: 2d6K, 6d6, or 3d6 NND
Planetary Defense: range: within solar system
Space Navy: how many ships: average amount
- Power supplies:** Bacteriological (and more primitive power sources, such as electricity, solar, and chemical)
- Transportation:** They have FTL space ships. On the planet, the Phychi have large, efficient networks of public transportation, including subterranean (superconducting) magnetic levitation devices and moving sidewalks (slidewalks).
- Medical Technology:** They have whole appendage Transplants
- Mental Devices:** They have truth serum, but it's rare and only used by the government.
- Other:** They have hypnotic teachers.

SOCIOLOGY

1) CULTURE

Due to advanced medicine, a Phychi's lifespan is 150 to 200 years. Although Phychi planets have many different intermingled races on them, the stereotypical Phychi is healthy with clear features and high cheekbones.

The Phychi are a cosmopolitan, open-minded people. They are educated, well informed, and among the richest people in the Alliance. The capital world, Theris, has everything. The Phychi have sexual and racial equality and almost no class distinction. They enjoy the arts and sciences.

The Phychi are one of the friendliest races towards aliens in the Alliance (aliens walk freely on Phychi planet). There are many religions and ideologies on Theris. Atheism is also common.

They grow most of their food in tanks (which explains why many Phychi delicacies are repulsive to others).



2) GOVERNMENT

The Phychi government is Democratic — they have a congress and a president (which are elected). The president serves for 5 years and may run for reelection. Members of congress serve for 4 years, and have no limit on how many terms they can serve. The Phychi have one vote to each citizen (all citizens have the right to vote).

The Phychi are capitalist with some socialism. They have privately owned businesses, free trade, but welfare and a national health plan. They are also persuasive diplomats, and often make deals with the Shadu planets and independent planets of the Alliance. The Phychi have one of the best intelligence organizations in the Alliance. These two facts are the basis for most of their power. The Phychi government is the antithesis of the Kindred government, and the Kindred dislike Phychi on "moral" grounds.

Citizenship: Phychi citizens are guaranteed many rights, including freedom of speech, religion, ability to travel, and so forth. These rights, however, do not always extend to non-Phychi citizens. The Phychi have an efficient police force, which quickly captures people who attack or steal from Phychi citizens. Those who perpetrate crimes upon non-citizens are not punished, but may be extradited to their homeworld or the victim's homeworld.

Citizenship is obtained by being born on a Phychi planet. A person can acquire citizenship (even if not born on a Phychi world) by undergoing 2 years of military service, paying a large fee, or convincing the government that he or she is worthy of special treatment. All Phychi citizens (male and female) must undergo 2 years of military service, which could range from clerical duties to espionage to active service on a space ship.

Exports and Imports: The Phychi trade with almost anyone — Alliance members, non-members, and aliens. The Phychi export technology, science and information. Some literature and arts are also "exported". Theris is a good news media source, and Phychi planets are often tourist sites. Theris imports cheaper products from poorer planets as well as some consumer goods.

Military treaties with other races: The Phychi are members of the Alliance. Because the independent planets fear the Shadu and the Kindred, the Phychi can often swing independent Alliance planets in their favor. Sometimes the Phychi can convince the Shadu to side with them (the Shadu don't trust the Kindred), which is helpful against the Kindred.

POWER GROUPS ON PHYCHI WORLDS:

Reactionaries: They wish Theris to return to older times. They especially hate aliens. The Reactionaries want to curtail personal liberties and make the Phychi more militaristic, perhaps even imperialistic. Twenty years ago, the Reactionaries were in power. They issued restrictive laws like internal passports, which decreased the ability for other races to spy on the Phychi, but were despised by the citizens. The citizens voted them out of power, and now the Progressives make up most of the congress.

Theris Mining and Manufacturing: Theris Mining and Manufacturing (TM&M) is a megacorporation expanding over many worlds and even has offices outside of the Phychi planets. The main purpose of TM&M is to expand and grow, gaining money and power. The executives at TM&M wish to revoke laws prohibiting unethical business practices — including anti-pollution laws and laws against exploitation of lower technology worlds. TM&M has influence over several powerful government officials. They have some ties with the reactionaries of Theris (the two groups do each other "favors").

KINDRED SOCIETY

Race name: Kindred

Planet(s): 17 planets, Garro is the capital planet.

The Kindred are a race of militaristic humans, analogous to the Mongols. Although, they are members of the Alliance, they have little regard for human rights. The Kindred do not like the Phychi or aliens (and therefore probably dislike most player characters). Their technology level is slightly lower than the Phychi, as shown below.

In the campaign, the PCs will probably have unpleasant brushes with the Kindred. A PC may be a Kindred, but he or she would probably not subscribe to typical Kindred values (unless all the PCs subscribed to Kindred values).

TECHNOLOGY

1. **Communications:** They have FTL radios (average difficulty coding system).
2. **Computers:** They have transistor computers
3. **Weapons:** Laser guns and ion rifles. Kindred guns tend to be volatile

Personal Armor: 6 Hardened PD and 6 Hardened ED

Handguns: how common: very common (All military personnel carry them)

typical #d6 damage: 2D6K

Planetary Defense: range: within solar system

Space Navy: how many ships: They have one of the largest space navies in the Alliance — only the Shadu navy rivals them.

4. **Power supplies:** nuclear and solar
5. **Transportation:** FTL space ships
6. **Medical Technology:** Anti-biotics
7. **Mental Devices:** Truth serum, but only for government purposes.

SOCIOLOGY

1) CULTURE

The Kindred are divided into royalty and commoners. A man (and his family) can gain a noble title through military prowess, but most nobles get their titles through birthright.

Kindred society is riddled with bigotry. They practice extreme sexual discrimination (Kindred women are virtually unseen by other races). Women are not considered human beings, but only housekeepers and baby producers. However, Kindred men secretly fear women of other races. Also, the Kindred generally do not understand or trust races other than their own, even other human races. The Kindred especially dislike the Phychi, and consider them immoral and weak. They also hate and distrust aliens, and try to kill them.

Literature and Arts: Kindred literature and art are rather primitive, since quiet contemplation is not encouraged by the society. The most respected art form is the epic poem, usually glorifying war and the military life.

TM&M's main plan right now is to exploit as many non-Alliance worlds as possible. Phychi law prohibits the domination, exploitation, or radical disturbance of low tech worlds by businesses, but TM&M still illegally gives weapons to low-tech worlds in exchange for goods and raw materials.

Progressives: The Progressives are a strong force in the Phychi government. They wish to strengthen diplomatic relations with aliens, and to move the Alliance towards more rights for citizens. The Progressives dislike the oppressive practices of the Kindred (and are equally disliked back by the Kindred). Because the Progressives revoked oppressive laws like internal passports, they have made it easier for other planets to smuggle spies onto Theris. The Progressives are presently the group in power, although the power groups are closely balanced.

Political Action Groups: There are many political action groups on Phychi planets. These groups range from environmental protection groups to human rights groups to anti-alien groups. One group, the "Human Purity League" tries to prevent all contact with aliens. In fact, they sometimes perform terrorist acts. Another group, called "Wings of Power" is a religious organization that worships Rheri (see "Rheri"). A third group is "Sentient Unity", a group which strives to develop deeper relations between humans and aliens (see "Imen"). Such groups do not directly control power, but have significant influence over the Phychi government and even the Alliance High Council.

3) INDIVIDUAL'S LIFE

Individuals are usually independent, career oriented and have a large amount of leisure time. Leisure time activities are varied, from the cultural ballet to frivolous, holographic video games. Phychi worlds have many sub-cultures, and many Phychi are involved in political action groups and social clubs.

4) THE ENVIRONMENT ON PHYCHI WORLDS

Centuries ago, long before the Phychi had developed interstellar travel, the Phychi homeworld was lush and fertile. However, this natural wealth was not all for the good, as it attracted the attention of the Tucanids, an expansive alien race. When the Tucanids invaded, the Phychi were unable to defeat them by conventional means, and it seemed certain that Theris would be conquered. In a last desperate move the Phychi hid underground and exploded nuclear devices on the planet's surface. In addition to destroying millions of invading Tucanids, the explosions also greatly decreased the value of Theris. After only a few weeks, the surviving Tucanids fled back into space, leaving the Phychi to their barren, radioactive planet.

In the years since the war, the level of radioactivity has slowly returned to near normal, but the environment has not. Theris is mostly a desert planet, with huge shifting dunes and sandstorms. The government has begun to reclaim the huge desert by extensive planting programs and by reintroducing the original flora and fauna.

Numerous plants and animals are unique to the Phychi planets. One plant, the Kyre plant, is a spherical variation on the terrestrial cactus. During cloudbursts the plant swells as it stores water inside itself; between rains it slowly shrinks back. Animals called Neeps are prized pets; a Neep resembles a terrestrial spider monkey, but with a hard carapace over its chest. Neeps are extremely affectionate.

"The Last Soldier", an ancient epic poem, exemplifies Kindred cultural ideals. The hero is the last survivor of an army regiment, and he fights on alone. Since his peers were killed, he decides that the enemy officers deserve to be treated as equals. He steals the clothing of a fallen foe, and then enters the enemy camp. He announces his true identity to an officer, and challenges him to a duel. After a series of duels, he fights the enemy general hand-to-hand, and both parties are mortally wounded. After a long dying speech, his enemies bury his body next to the general with full military honor.

Medicine: Kindred regard sickness and injury as a test of character, and generally sneer at medical help. They immunize their children to prevent widespread disease, but rarely treat adult medical complaints. First aid for battlefield injuries is permitted, but rudimentary. Men proudly bear scars and missing limbs obtained in duels or battles. For this reason, their lifespan is shorter than other Alliance races. Few Kindred live past 100 years, and military men usually die by the age of 60 in duels or battles.

Moral imperatives: The Kindred believe the strong should rule, or even destroy, the weak. The extolled virtues are those of warriors: bravery, loyalty to the Kindred race, and respect towards equals and superiors. Lying is considered undesirable, so Kindred spies have little prestige compared to fighting men. Men are required to join the military for at least 5 years. It is considered a high honor to remain in the military as a lifetime career.

Kindred men have a strong code of honor. If a person saves a Kindred's life, the Kindred is honor bound to return an equal favor. The Kindred tend to honor agreements. Duels are common among the Kindred and are regarded as the most honorable way to settle disputes. Of course, this honor is an ideal, and many Kindred soldiers and even government leaders will perform treachery and deceit when they don't expect to get caught.

Kindred women are, in effect, slaves, and have no code of honor — their only "morality" is to obey their masters. They are often unhappy with their masters, and try to escape to uninhabited regions or other worlds.

2) GOVERNMENT

The Kindred are ruled by a King (always male), who advances from among the nobles by defeating the previous King in a duel. Once each year, the nobles have an opportunity to formally challenge the King; otherwise, the King is forbidden to duel. When a King is popular, many years will pass without a challenge, but dying in such a duel is the most honorable way for a King to end his reign.

The Kindred do not agree with all the rules of the Alliance and secretly exploit and oppress low-technology worlds. In fact, the Kindred would love to dominate the Alliance — they have not directly attacked any Alliance worlds, but secretly plan to overthrow those governments which do not bend to their will. Kindred spies are on most other Alliance worlds. However, their spy force is not as good as the Phychi's, due to the fact that the Kindred secret service has no women, and spying is considered dishonorable.

Kindred citizens have few rights — they are not permitted freedom of speech, the right to vote, or a choice of where to live. Nobles do not have to accept challenges to duel with low-class citizens. However, if a noble kills or steals from a commoner, he is tried and faces execution as any commoner would. Nobles may carry weapons at all times; commoners are not normally permitted to own guns.

The economic system is socialist; food and consumer goods are produced in privately-owned factories and sold by citizens, but the government and military control most large industrial companies. The Kindred planets are mostly closed to outsiders. Some tourists, traders, and diplomats are allowed on Kindred worlds, but they are carefully watched.

Major imports and exports: The Kindred have to import most of their advanced technology, because their scientific and technical equipment tends to be outdated and poorly made. They export a small amount of specialty foodstuffs and low-tech consumer goods.

Military treaties with other races: The Kindred were among the founding members of the Alliance. Occasionally, they try to get the Shadu to side with them on political issues, but find the Shadu confusing and unpredictable. The Kindred will ally with other humans if an alien threat appears.

The Kindred have "satellite" worlds: worlds they have dominated. These worlds are partly self-ruling, but must obey Kindred dictates, including giving money and goods to the Kindred. These worlds bitterly hate the Kindred oppression, and have many resistance groups on them.



POWER GROUPS ON KINDRED WORLDS:

The Nobility: The nobility currently rule the Kindred, and have for three centuries. The men in the noble family are often also officers in the military. All Kindred, even the military, will be careful not to offend the nobility.

The Military: The Kindred military is the largest in The Alliance. Sometimes the non-noble military leaders attempt to usurp power from the nobility.

The Rebels: The rebel group is well organized, and wishes to turn the Kindred society into a democracy. They long for civil rights, tolerance of aliens, decreased military influence, and closer relations with other planets. So far, the Kindred government has been unable to destroy the Rebel Group, because there are always discontented Kindred citizens. More than half of the Rebels are escaped women and soldiers stripped of their rank. They are organized and dedicated — but the government is constantly hunting them down. They hide out in caves, safehouses, and wilderness areas. Without strong external aid, the Rebels are not likely to overthrow the government at present.

3) INDIVIDUAL'S LIFE

Most of the Kindred people are farmers, industrial workers, or military personnel. The farmers live in small towns, with little news or information media, while the industrial workers live in dreary cities. The military men live on bases or on space navy ships.

Individuals have little access to high technology. There are few consumer goods available, and education is minimal, except for the nobles. Most Kindred commoners work hard just to obtain the bare necessities of life. Small luxuries such as exotic food or clothing are status symbols, and are considered very precious.

The Kindred government has the right to dictate an individual's job and place of home, but usually people do what their father did. Marriage is a political matter; fathers are very concerned with the social standing of prospective grooms. Men may only have one wife, but most husbands are unfaithful. This is regarded as a minor indiscretion, and tolerated. Unmarried women who are not virgins are regarded as "fallen women" and usually become mistresses or prostitutes.

Women may hold jobs, but only specified low-paying positions, and they are always dependent on men because they may not own land or houses. Women's jobs include services for other women (such as being seamstresses or midwives) and the worst kinds of farming, factory labor, menial service.

4) THE ENVIRONMENT ON KINDRED WORLDS

Kindred worlds are obtained through conquest, so they vary from jungle worlds to ice planets. For strategic reasons the Kindred often have colonies on inhospitable worlds (such as frozen wastelands or active volcanoes). These colonies require constant imports of food and technology to survive.

One animal unique to Kindred worlds is the Falcot. Falcots are flying creatures that resemble hawks, but have a spiked tail which they use to spear prey. Falcots are used by Kindred as pets or for hunting, and they can be trained to attack on command.



SHADU SOCIETY

Race name: Shadu

Planet(s): 20 planets, Shadra is the capital world.

The Shadu are a race of humans. Their society is a strange mixture of old religion and new technological advancement. They have a very stratified society, with 9 classes (similar to modern day India), yet sexual equality. They believe in the "Atman", who is both a god and a goddess, and controls random events. The Shadu are relatively well educated and technologically advanced, but their society is closed, with restrictions on the number of visitors allowed on their planets.

The GM, keeping in mind that the Shadu are erratic, may wish to use them in the campaign as a balance to the Kindred's power.

TECHNOLOGY

- Communications:** They have FTL radios, and average quality coding of messages.
- Computers:** They have superconducting computers.
- Weapons:** Laser guns
Personal Armor: 6 PD and 6 ED
Handguns: how common: rare (less than 1% of the population carries guns)
typical #d6 damage: 2D6K
Planetary Defense: range: within solar system
Space Navy: how many ships: They have one of the largest space fleets in the Alliance. Only the Kindred rival them.
- Power supplies:** Bacteriological (and more primitive power sources)
- Transportation:** They have FTL space ships
- Medical Technology:** The Shadu have antiviral treatments.
- Mental Devices:** They have truth serum. (Possessed only by the government.)

SOCIOLOGY

1) CULTURE

The Shadu are obsessed with randomness. They often determine decisions by randomly drawing sticks: 5 sticks are partially concealed in a case. One to four of the sticks are marked, and the rest are blank. This way, they can determine percentages of 20%, 40%, 60%, and 80% (nothing has a chance greater than 80%). This system is used for elections, passage of laws, formal government decisions, and trying criminals.

Children are uniformly educated until age 21, and then take a battery of tests which determine their chances in the "Career Lottery". A person chooses 4 possible careers, and officials randomly determine whether the person gets their choice job or not. A person who does not receive a job of his or her choice in the lottery becomes a Class 1 laborer.

The Shadu do not allow aliens on the planets (except in rare cases). However, the Shadu may be willing to make treaties with aliens.

Moral imperatives: Their primary religious belief is that a collective unconscious of their race, the Atman, orders and controls all apparently random events. Shadu are supposed to be moral in all things. They are forbidden to take non-medicinal drugs of any kind, even alcohol. Premarital sex is acceptable, but cheating on a spouse is a crime.

2) GOVERNMENT

Shadu is a theocracy. There are two ruling bodies: the First Council and the Congress. The First Council is the highest authority, and has five Class 9 governors as members. The Council is "elected" by the people — that is the amount of votes they get determines their random chance of winning. Also, each member takes a random 20% chance of losing his or her appointment each year. For these "elections", every citizen gets one vote, regardless of class. The First Council acts as the Supreme Court, and also determines the final chance of success of any laws passed by Congress. The Congress, which passes laws and determines the budget, contains 50 class 8 governors, whose chance of appointment is determined by popular vote. Both ruling bodies are approximately 1/2 female and 1/2 male.

Laws: Shadu do not have freedom of speech or religion. Drugs are totally illegal, except for medicinal purposes. Adultery is punishable by demotion to a lower class, imprisonment, or even death.

Citizens who commit crimes (such as impersonating a higher class citizen or performing an immoral act) present their case without a lawyer before a panel of judges. These judges must listen to both sides, then determine the probability of guilt. They present the defendant with 5 partially concealed sticks — if he or she draws a marked stick, the accused is guilty.

Shadu citizens are allowed to move to other race's worlds, but must return each year for a ceremony of purification, and request permission to leave again. Citizens who leave without official permission, or do not perform the purification ceremony, lose their citizenship and are never allowed back on a Shadu world.

Economic system: The Shadu do not have a free market system, and the government determines how goods are distributed (usually by class). However, businesses are owned by private citizens. Most restaurants and stores restrict their customers to certain classes.

Major imports and exports: The Shadu import and export a wide variety of goods, from information to raw materials to high-tech products. However, they have many restrictions on importing "immoral" goods (such as alcohol or tobacco).

Military treaties with other races: The Shadu are members of the Alliance. They have not shown any allegiance to any other power group in the Alliance. In fact, they frequently abstain from voting, or vote randomly.

POWER GROUPS ON PLANET(S):

The First Council: described above

The Congress: described above

The Higher Class citizens (class 7, 8 and 9): The higher class citizens have positions of power — they are owners of large corporations, military leaders, diplomats, or politicians. Upper class citizens do not always have the same goals, but they do like the class system which gives them the finer things in life at the expense of the lower class citizens. Although the government has final say in all things, it still must please the higher classes.

Rebel groups: There are various rebel groups on Shadu worlds, and they do not have a common goal. Some of the rebel groups are just black market operations, while others wish to change their society from a closed, oppressive theocracy to a more tolerant, civil-rights minded society. There are even some Shadu, *The Followers of the Truth*, attempting to establish a more all-dominating theocracy. Many of these groups seek off-world help.



3) INDIVIDUAL'S LIFE

The Shadu are somewhat well-educated (depending on their job). They have some consumer goods and entertainment. Because of their emphasis on randomness, gambling is a popular leisure time activity. Shadu are more subdued in their emotions than the Phychi, but more expressive than the Kindred. Giddy or silly behavior is considered wrong. However, smiling or enjoying yourself is acceptable.

Shadu society has 9 stratified socioeconomic classes. Class 9 is the "upper class", and Class 1 is the lowest class. People in Classes 1 and 2 consist of about 50% of the population. They live in rural areas, perform manual labor, and have a low standard of living.

Classes 3 thru 6 consist of about 40% of the population. They tend to live in cities, working on industrial jobs, teaching, or service work. Some of them may own "lower class" stores. This group has a higher standard of living than classes 1 and 2, and they receive some imported goods.

SOCIOLOGY



Classes 7 thru 9 form the remaining 10% of the population. They are government officials, newspaper owners, managers of factories, and owners of stores catering to the upper class. They have great wealth and power, and have access to many creature comforts. Their greatest danger is to fall into temptation, and get caught performing immoral activities.

A Shadu may marry someone of a lower class than themselves, but will be demoted to their spouse's class.

4) THE ENVIRONMENT ON SHADU WORLDS

The Shadu, too, have many worlds, but they prefer self-sufficient worlds with a stable economy and a large class of manual laborers. Shadu worlds are mostly of temperate climate, and are covered with forests and farmlands.

IMEN SOCIETY

Race name: Imen

Planet: only 1 planet, named Nem

The Imen have only 1 planet, and are the most disorganized race in the Alliance. They all appear to be congenital idiots. Their government is a mess, their industries are inefficient, but the natives seem completely unconcerned. Yet somehow they survive, and are even considered a valuable member of the Alliance by certain groups. In fact, the natives are not truly stupid, they are just stubborn anarchists who rebel against authority.

TECHNOLOGY

1. **Communications:** They have FTL radios. Imen coding abilities are very poor.
2. **Computers:** They have transistor computers.
3. **Weapons:** Laser guns.
 - Personal Armor:** they don't produce it.
 - Handguns:** how common: rare, very few people carry guns (less than 1% of the population).
 - typical #d6 damage:** 1D6+1K
 - Planetary Defense:** They have no planetary defenses.
 - Space Navy:** Imen have no space navy.
4. **Power supplies:** Solar
5. **Transportation:** They have FTL spaceships.
6. **Medical Technology:** They have antibiotics.

1) CULTURE

The Imen are a very odd race. They are the most inefficient, unproductive race in the Alliance. They have virtually no laws, rules or moral imperatives. Imen businesses are a horror to behold — they have no quality control, and workers often show up late, if at all. In addition, the machinery is poorly built and there is irregular distribution of goods.

The Imen are considered by many to be a very stupid race. In reality, many of the Imen are quite bright, and capitalize on the fact that people, thinking Imen to be fools, do or say things in front of an Imen they shouldn't.

And the secret to it all: it works. The Imen do not restrict visas to or from their planet. Their planet, Nem, has become a haven for hunted individuals. Nem is the place for espionage, making secret deals, forming rebel groups, running from the law, publishing banned books, and buying goods normally illegal on other planets. Nem is often swamped with tourists.

Few Imen are bigots. They have sexual and racial equality, and no class distinction. Most Imen do not care (or even notice) what race an individual is, be it human or alien.

2) GOVERNMENT

Nem is a democracy; one citizen, one vote. Nem has a President and a 10 person elected council, all of whom are elected simultaneously every 2 years. Together they make decisions, and the president has veto power.

Laws: There are very few laws, and even fewer police. The police exist only to hunt down murderers and protect government officials — they do not deal with other crimes. Despite this lack of official protection, crime is not a major problem on Nem. The Imen, as a race, find criminal activity to be more trouble than it is worth. If citizens want protection from criminals, they subscribe to private security agencies, who hunt down and punish thieves, con men, muggers, and so on. There are many of these agencies on the planet; they are of differing quality. The poorer security services have discount rates, and almost any Imen citizen can afford at least some security service.

Economic system: The Imen are capitalist, although there are long delays before paychecks are delivered and the wrong employee often gets paid. Luckily, neighbors are very friendly and will loan money or food. No one goes hungry on Nem.

Military treaties with other races: The Imen are members of the Alliance, but are not considered allied to either the Shadu or Kindred. The Imen are friends of the Phychi and several other independent planets.

The Imen are indeed "unconquerable". No other planet has the ability or patience to rule them.



POWER GROUPS ON NEM:

The President: The president for the last 16 years is Beulah, a woman who looks surprisingly like a 45 year old, overweight housewife. However, looks are deceiving; Beulah is really a genius, if not simply for the fact that she can run Nem. Beulah understands the Imen people. She knows about the powerful wheeling and dealing that takes place on her planet. She personally knows powerful people in the Alliance, and will help with clandestine operations. In fact, Beulah knows so much that she has some influence over other worlds and the Alliance High Council.

Beulah is agreeable, honorable, and good-natured. Unlike government officials on other worlds, Beulah is quite accessible. To talk to her is simply a matter of going to her office or home, both of which look quite normal, but are well protected from electronic listening devices. Beulah is quite popular among the Imen people.

Council: The 10 person council is an ever changing group (they only have 2 year terms), and usually consists of odd individuals. Many of the council members are heads of special interest groups, and work to promote their one idea.

Organizations: There are many organizations on Nem. Here a person may find odd radical groups, rebel groups from other worlds, and special interest groups. The most noted of these is *Sentient Unity*, an interplanetary organization supporting friendship with aliens. They believe humans should accept aliens into the Alliance, and they will gladly break laws to help aliens. *Sentient Unity* is one of the strongest organizations on Nem.

3) INDIVIDUAL'S LIFE

The Imen are very frivolous, and have a great deal of leisure time. On Nem, there are not many sophisticated entertainments. Nem contains a lot of video parlors, comic book shops, movie theaters, amusement parks (manufactured off planet), and parades. The Imen are not reserved. They feel free to express a wide range of emotions but generally act like blissful idiots.

The Imen pick their careers in a somewhat random manner. It's more a matter of what job they stumble into than a careful choice.

4) THE ENVIRONMENT ON NEM

Nem, having a brighter sun than Earth, is a hot, jungle world. Nem's axial tilt is nearly 90 degrees (much greater than Earth's 23 degree tilt) and hence Nem rotates while "laying on its side (like Neptune)". As Nem revolves around its sun, sometimes the north pole faces the sun, sometimes the equator faces the sun, and other times the south pole is pointed towards the sun. Hence, sometimes the days are 24 hours long, sometimes they are shorter, and sometimes they last for months. To the Imen, their sun appears to make corkscrew patterns in the sky — which is probably the source of the myth that the sun is a golden chariot being pulled by runaway horses (and driven by a drunken charioteer).

The axial tilt also causes the poles to melt and refreeze each year, leading to intense tidal waves and hurricanes. Most of the Imen cities are inland and near the equator of the planet.

OUTSIDE THE ALLIANCE



There are alien and human races that do not belong to the Alliance. We have listed six alien races, including their technology, society, physical description, and typical alien. Each one of these races could be played as a player character, except the Rheri, depending on the GM's campaign. However, all the races, except the Heavyworlders and the Dopplegangers, are very distinctive looking, and could not pass for human.

SOME OF THE RACES OUTSIDE THE ALLIANCE:

Dopplegangers
Ento
Hawks
Heavyworlders
Rheri
Ylem

DOPPLEGANGERS

Race name: Dopplegangers

Planet(s): 5

Dopplegangers evolved from Mimic plants, which are unintelligent plants which change their form into an image of the last creature that touched it. Dopplegangers are intelligent plants, and they too can imitate others. They are a devious race, and enjoy fooling others. A typical Doppleganger is an amoral and selfish creature. Therefore, PCs are not usually Dopplegangers. If a PC is a Doppleganger, he or she is usually an exceptionally virtuous one.

DOPPLEGANGER PHYSICAL DESCRIPTION

The following description is of a Doppleganger in its natural state, that is, when it's not imitating something.

- 1) **Alien powers:** Dopplegangers can Shapechange and have Life Support (are photosynthetic).
- 2) **Source of Food:** Since they are plants, a Doppleganger needs sunlight or strong artificial light. They also need water. A Doppleganger may eat food like a human, but derives little nutrition from it. Dopplegangers eat only to keep up the disguise of imitating a human.
- 3) **Senses:** Dopplegangers have some senses like a human: sight, smell, touch, and hearing. However, Dopplegangers have no sense of taste — something that might give them away if they are imitating a human. Their sense of smell is quite good; it is how they recognize each other.
- 4) **Lifespan:** Dopplegangers live about 100 years.

- 5) **Reproduction:** Dopplegangers contain both sex organs inside their bodies. They can both carry children and fertilize other Dopplegangers. It takes 2 Dopplegangers to reproduce. They simply form the right organs when needed.

6) Physical Description:

Height: 6 feet (about 2 meters)

Weight: 220 pounds (100 kgs)

Number of appendages: In natural form, they have 2 arms and 2 legs. Their arms are slim and end in long, delicate fingers. They have 10 fingers, and 2 opposable thumbs. Their fingers are arranged in a circle on their hand. A Doppleganger's feet branch like a tree into 12 toes, and they walk on tiptoe.

Skin color: Dopplegangers are pink, green, or yellow.

Skin texture: Younger Dopplegangers are supple and smooth. Older ones have coarser skin.

7) Environment they normally live in:

Gravity: They live in a gravity similar to Earth's.

Air, Land, or Water?: Dopplegangers live on land.

Atmosphere: They live in an atmosphere similar to Earth's.

Temperature: They can take a wide variety of temperatures, about as much as a human.



TECHNOLOGY

1. **Communications:** Dopplegangers have FTL radios.
2. **Computers:** They have transistor computers that are more advanced than Earth's, but not as good as superconducting computers.
3. **Weapons:** They have laser guns.
Handguns: how common: Few Dopplegangers carry any weapons, preferring to use their protective shapechanging ability; typical #d6 damage: 2d6 K
Planetary Defense: range: planet to orbit
Space Navy: The Doppleganger navy is of average firepower and number of ships.
4. **Power supplies:** They have bacteriological and solar power supplies.
5. **Transportation:** They have FTL space ships.
6. **Medical Technology:** Dopplegangers have perfected regeneration of body parts for their own race (probably because they are plants). They have not yet perfected this for other races.
7. **Mental Devices:** They have no mental devices.
8. **Other:** Dopplegangers do not have invisibility, hypnotic teachers or transmutation of matter.

SOCIOLOGY

1) CULTURE

The Doppleganger Ancestors: Dopplegangers evolved from Mimic plants. The Doppleganger homeworld was once devoid of Dopplegangers and populated only by Mimic plants and other unintelligent life. Another alien race, the Drogs, came to the planet and conducted biochemical experiments there. The Drogs were intrigued by the Mimic plants, and experimented on them. No striking results were found. The Drogs eventually moved on, not realizing they had started a mutation of the Mimic plant that became the Dopplegangers.

The Dopplegangers do not know that the Drogs created them, and the Dopplegangers do not particularly like the Drogs, but they do know they evolved from the mimic plants. The Dopplegangers carefully tend Mimic plants and study them in the interest of getting back to their — uh — roots.

Dopplegangers can shapechange, so how do they recognize one another? They do so by smell. Each individual has his or her own scent. Dopplegangers can recognize other races in this way also.

How Pacifist or Warlike? Dopplegangers would rather trick another race than go to war. However, they will fight wars when necessary. During wars they place many spies on the enemy worlds, and may even substitute Dopplegangers for their enemy's leaders.

Xenophobic or Friendly? Dopplegangers welcome other races, if only for the pleasure of fooling them or perhaps imitating them. They enjoy being sneaky and tricky. A scout ship may land on a Doppleganger planet and take off with one less crewmember and one more Doppleganger!

Bigotry? Dopplegangers have no racism or sexism (after all, they can change their sex). They have a small amount of class distinction. Rich Dopplegangers get more respect than poorer ones. Most of all, Dopplegangers who have executed a grandiose, tricky plan or con are highly respected.

Moral Imperatives They have few moral imperatives. Dopplegangers disapprove of acts of violence, and praise cleverness.

Literature and Arts Dopplegangers like to perform and watch plays. Of course, they are good actors, at least as far as make up goes, because they can change their bodies to suit their characters. They enjoy playing roles.

Dopplegangers also enjoy a performing art called "Living Statue". This consists of a Doppleganger standing before an audience and changing its form into beautiful and interesting shapes and colors.

2) GOVERNMENT

How are the most powerful officials chosen? The Dopplegangers have a democracy. They have a president and 21 senators. The voters like presidential candidates who seem clever and tricky.

Laws Criminals who show cleverness are given lesser sentences than other criminals. However, Dopplegangers dislike crimes of violence, such as murder, kidnapping, or rape, and punish them severely (long imprisonment or execution).

Economic System The Dopplegangers are capitalist. They have no welfare and few social programs. Of course, Dopplegangers don't need food, so welfare is not greatly needed.

Treaties with other races Dopplegangers are very open to making economic treaties with others. They are good at business transactions and enjoy bargaining.

They are also open to military treaties with other races. The Dopplegangers are friends with the Ylems, perhaps because Dopplegangers can't imitate Ylems (who are too small and have Telepathy).

The Exile of Dopplegangers Dopplegangers are often exiled from other planets, as their ability to mimic other's forms is considered dangerous. Because Dopplegangers are often tricky, they are not always trusted by humans or other races. For example, the Kindred and the Shadu do not let Dopplegangers on their planets.

3) INDIVIDUAL'S LIFE

Many Dopplegangers are business people, criminals, spies, and detectives. They often travel to other worlds in search of wealth, exciting jobs, and victims for trickery.

Dopplegangers do not usually enter into marriages. Also, they have reproductive choice and are able to refrain from being fertile. Since they have a choice of sex, they also have a choice of which partner carries the child. Generally, Dopplegangers prefer amorality and selfishness to affection and altruism.

4) ENVIRONMENT ON DOPPLEGANGER WORLDS

Dopplegangers come from planets that are especially well-suited for plant life. The gently rolling hills are covered with thick forests, while the lowlands sport lush jungles. The gentle weather patterns are marked by predictable afternoon rain showers; the rest of the day the sun shines through a clear greenish sky. The winters are mild and short, especially in the equatorial regions where the majority of Dopplegangers live.

DOPPLEGANGER CHARACTER SHEET

Val	Char	Cost	Max & Cost	75+	Disadvantages
15	STR	5	25 (2)	5	Contempt for other races: Common, moderate
11	DEX	3	21 (1)	8	No sense of taste: Occurs all the time Slightly impairing
10	CON	0	20	5	Exile from some worlds including Shadu and Kindred 11-, Strongly punished.
10	BODY	0	20	6	Discrimination: Humans are suspicious of Dopplegangers. Sometimes 11-, Major rights denied
15	INT	5	25 (2)		
10	EGO	0	20		
10	PRE	0	20		
10	COM	0	20		
3	PD	0	8		
2	ED	0	8		
2.1	SPD	0	4		
5	REC	0	10		
20	END	0	50		
23	STUN	0	50		

Cost Power or Skill

- 20 Shapechange
 10 Life Support: Dopplegangers are photosynthetic. They do not need to breathe, but absorb gases through the skin.
 4 +2 smell perception rolls
Every Doppleganger skills
 Climbing 8-
 Concealment 8-
 Deduction 8-
 Paramedic 8-
 Disguise 8-
 Shadowing 8-
 Stealth 8-
 KS:Sculpture 8-
 (1 extra every Doppleganger skill costs 1 point)

Characteristic costs:	18
Power Costs:	23
Skill Costs:	5
Disadvantage Bonus:	-24
Total	22
75 - 22 = 53 points left to individualize character	

ENTO SOCIETY

Race name: Ento

Planets: 15

The Ento are a race of giant insects. Entos are emotionless creatures trapped in their rigid caste system of workers, soldiers, and queens. It is possible for a PC to be an Ento, but he or she would probably be a mutant Ento, and would not obey the queen. The GM may wish to use the Ento as evil invaders threatening the other peaceful races of the galaxy.

TECHNOLOGY

- 1. Communications:** They have FTL radios, and well coded messages.
- 2. Computers:** They have transistor computers.

3. Weapons: Tasers

Handguns: how common: Only soldier Ento carry guns, typical #d6 damage: 4d6 NND

Planetary Defense: range: planet to orbit

Space Navy: how many ships: Ento have a moderate number of starships in their navy. Many of their ships were destroyed during the war with the humans, and they are slowly building their fleet back.

4. Power supplies: They use solar energy.

5. Transportation: The Ento have FTL space ships, and also magnetic levitation devices that resemble trains floating a few inches above a monorail.

6. Medical Technology: Their medicine is a bit cruder than the Alliance's, as the Ento place little value on life (except for the queen). So far the Ento have advanced understanding of Ento anatomy, and not much beyond that.

7. Mental Devices: They have none.

SOCIOLOGY

1) CULTURE

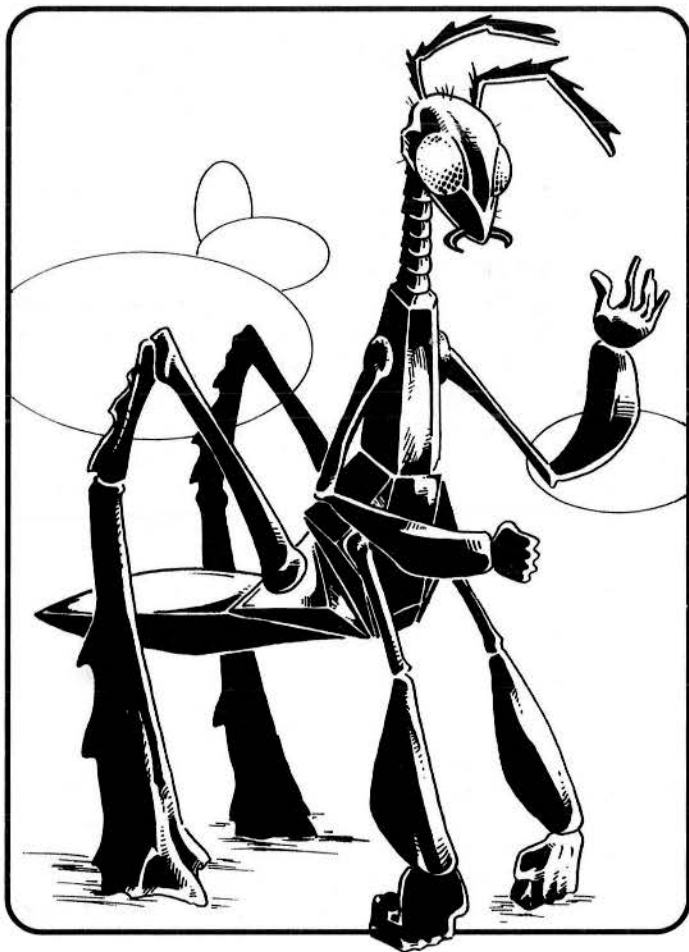
The Ento have castes: queens, soldiers, nurses, technicians, food producers and builders. A queen is the ruler and mother of her colony; the nurses care for the eggs a queen lays. The soldiers protect the other Ento, and help colonize, while the food producers harvest food and care for animals. The technicians design and operate spaceships, communication satellites, weapons, vehicles, and so forth. The builders construct buildings, and help the technicians.

The Ento have blunted emotions. They exist to serve their queen and to expand their colony, and most Ento mindlessly obey orders. An individual usually has only one or two functions, and does not consider doing another job. The workers rarely, if ever, encounter other creatures who have emotions, and perhaps Ento simply do not consider it a part of life.

The Mutant Ento: The Ento have high rates of mutation. Hence, some are born with higher intelligence and awareness. These Entos often wish to express emotions, explore literature and arts, and break down the caste system. Sometimes mutant Ento are destroyed by order of queen for being "different".

The Young Queens: Normally a queen only lays soldier and worker eggs, but she occasionally lays an egg that develops into a young queen. After maturing, the young queen leaves the colony with several males and starts her own colony (usually on another planet). These young queens are the ones that encountered members of the Alliance. Incapable of empathy, the queens could only see that they wished to expand their empire, and ignored the needs of the humans. They fought with the humans, and were eventually defeated (see Alliance history). They now avoid colonizing in or near human solar systems, but intend to eventually conquer the humans.

Sometimes the young queens' colonies fight each other. Some colonies have slaver Entos, which attack the nests of other queens in order to steal the eggs. They bring the eggs back to their own colony, and when they mature, the captives are not forced into slavery, but consider themselves to be members of the slaver's colony. The young queens almost never attack the ruling, eldest queen (see below).



2) GOVERNMENT

How are most powerful officials chosen? The entire race of Ento is ruled by the Gold Queen. She is the oldest of all the queens, and is their mother, grandmother, or great-grandmother. She has lived for thousands of years, and rules from the Ento homeworld. Although the young queens rule their own colonies independently, they must obey orders from the Gold Queen. She usually ignores skirmishes between the young queens.

Economic system: The Ento produce few goods other than food and colonization technology. There is no money. All receive equal shares of food by size (the Queen and the soldier Ento are larger than the other Ento, and hence get more).

Military treaties with other races: The Ento have no military treaties with other races, but all the queens form a loose military alliance.

Imports and Exports: There is some importing and exporting between the Ento queens' colonies. Other than that, Ento do not have trade agreements with other races.

POWER GROUPS IN THE ENTO EMPIRE:

The Gold Queen (described above)

Young Queens: They young queens dislike the Gold Queen, and wait impatiently for her death. Usually, the oldest of the young queens will fill the Gold Queen's place when she dies. However, a young queen may fight for the throne, either by challenging the competing queen to a fight, or by pitting her armies against the other queen's armies.

The Mutant Ento: The mutant Ento are not a very powerful group. However, they are more intelligent than the normal Entos, and because they are different the queen has difficulty predicting their actions. They have become more of a threat to the queen since the contact with the humans. Perhaps the mutant Ento have gotten "dangerous" ideas about citizen's rights from the humans. The mutant population is slowly growing, due to the high rate of mutation.

3) INDIVIDUAL'S LIFE

An Ento's job is determined before hatching. An individual's goal is simply to do its job, and then go to sleep. Most Ento feel reverence towards the queen — they gather to watch the queen at her palace, or as she travels by.

4) ENVIRONMENT ON ENTO WORLDS

Due to their body chemistry, Ento prefer to live in twilight, thereby avoiding the extremes of hot and cold. Many Ento live on planets that rotate very slowly; the Ento population moves to stay just ahead of the advancing sunrise. On more typical planets, Ento tend to congregate in the glooms of the polar winter. When the seasons change, the entire Ento population undertakes a mass migration to the other pole.

Physically, Ento worlds are flat, with few mountains or volcanoes. Ento cities are built on vast plains of cracked mud. Farming and agricultural regions are in the more fertile plains.

ENTO CHARACTER SHEET

Ento are insect like creatures approximately the size of humans.

- 1) **Alien powers:** All Ento have 2 Extra limbs, and the Enhanced sense Tracking Scent. Soldiers and queens have armor, while only queens have Mind Control.
- 2) **Source of Food:** The Ento grow fungus, fruits and vegetables on farms, and make honey from flowers. They are vegetarians.
- 3) **Senses:** They have poor sight, but a good sense of smell. They can also feel, hear, taste and touch. Ento can communicate through smell by releasing chemicals, or by speech with sounds like squeaking or buzzing. With practice they can speak human languages.
- 4) **Lifespan:** The queens live 1000 to 2000 years (or even longer). The workers live 5 to 10 years.
- 5) **Reproduction:** The Ento have two sexes: male and female. The workers do not reproduce. The queen reproduces by mating with a drone and then laying eggs. The queen keeps a small harem of fertile men.
- 6) **Physical Description:** Tall

Height: Workers are 5 feet. Soldiers are 6 to 7 feet tall. Queens are about 14 feet tall.

Weight: Workers weigh about 180 lbs. Soldiers weigh about 220 lbs. The queens weigh about 3000 lbs.

Number of appendages: Ento have 6 appendages: 2 arms, 2 legs, and 2 appendages that function as either arms or legs.

Skin color: Workers are brown or yellow. Soldiers are red, black, or brown, depending on which planet they were born on, as soldiers tend to have a skin color that blends with their environment. Queens can be any color. The ruling queen is called the Gold Queen because of her color.

Skin texture: Ento have a hard exoskeleton, with stiff hairs sparsely placed over their bodies.

Other: They resemble a cross between an ant and a crab. Entos can walk on 2 legs or 4 legs, depending on their needs.

7) Environment they normally live in:

Gravity: The gravity of Ento worlds is 75% earth normal.

Air, Land, or Water?: Ento live on the land. When building a city, part of it is underground, and the rest is a hive like structure towering high into the sky.

Atmosphere: They live in earth normal atmosphere.

Temperature: Ento prefer temperatures around 75 degrees Fahrenheit. They will die if left long in extremes of cold or hot (below 40 or above 95 degrees).

HEAVYWORLDER SOCIETY

Race name: Heavyworlders

Planets: 4

The Heavyworlders are similar physiologically to humans and were in fact once humans. These humans colonized several high-gravity worlds, and evolved into the short, strong Heavyworlders.

The Heavyworlders are similar to Vikings, and live in small tribes. This race is a possibility for player characters.

TECHNOLOGY

1. Communications: They have printing presses, and some FTL radios left by extraterrestrials.

2. Computers: Simple automation

3. Weapons: Cannons, and also laser weapons from extraterrestrials.

Handguns: How common: rare, typical #d6 damage: 2d6 K

Planetary Defense: They have no planetary defense.

Space Navy: They have no space navy.

4. Power supplies: They use wood, animal, and "human" power.

5. Transportation: Galleons and Stagecoaches, although FTL ships from other worlds land on their planets.

6. Medical Technology: They understand basic Heavyworlder anatomy.

7. Mental Devices: They have none.

SOCIOLOGY

1) CULTURE

The Heavyworlders live on high-gravity planets (four times Earth gravity). They were originally human colonists, but have evolved into a form more suited to their high gravity world. As several of the high gravity planets were used as penal colonies, the original colonists were criminals (many of which died). Currently, the worlds are no longer considered penal colonies.

Heavyworlder planets contain low education, low technology, and low morality societies. Almost all of the Heavyworlders live in small tribal or clan-like groups. There are a few big cities, which sprung up around the spaceports built by extraterrestrials. Heavyworlders have approximate racial and sexual equality. Whoever is bigger makes the rules, and the women are as tough and strong as the men — no one is a weakling. There is marriage on Heavyworld planets, but it is not strictly defined by the law. Some people tend towards monogamy, while others may have two or more spouses. Divorce is possible simply by public declaration.

Because of their strength, Heavyworlders, male and female alike, often hire themselves out as mercenaries, thugs, guards, and spies. They travel to other planets in the Alliance to look for work.

Moral Imperatives: The Heavyworlders have many different beliefs. Many of them choose to ignore religion altogether, while others are polytheistic (many gods/goddesses). They have gods and goddesses of war, food, wealth, death, weather, and love. For example, Lodie, one of the most popular gods, is a god of war and weather, while Seata is goddess of farming and the hunt.

ENTO CHARACTER SHEET

Val	Char	Cost	Max & Cost	75+	Disadvantages
10	STR	0	20 (0)	3	3 fewer Everyperson skills
8	DEX	-6	20 (0)	10	Repulsive distinctive looks, Not concealable
12	CON	4	22 (1)		
10	BODY	0	20 (0)	10	Physical limitation: sensitive to temperature changes, frequent, fully impairing (take 1 body/turn in hot or cold unless protected by clothing, shelter, etc)
9	INT	-1	20 (0)		
8	EGO	-4	18 (-2)		
10	PRE	0	20 (0)		
6	COM	-2	12 (-2)		
2	PD	0	8 (0)		
2	ED	0	8 (0)		
1.8	SPD	0	4 (0)		
4	REC	0	10 (0)		
24	END	0	50 (0)		
21	STUN	0	50 (0)		

Cost Power or Skill

20	Extra limb 2 extra limbs
15	Tracking scent
4	+2 to smell perception roll
3	Climbing 11-
2	+1" running
	Soldier Ento
5	Natural Armor for Soldiers, +3 PD
	Queen Ento
10	Natural Armor for Queen, +6 PD
16	Mind Control 8d6, 14- Act.I (-1/2), x2 END cost (-1)
	Every Ento skills
	Climbing 11-
	Concealment 8-
	Stealth 8-
	Shadowing 8-

Characteristic costs: -12

Skill and Power Costs: 70 for Queen, 51 for Soldiers, 44 for Workers

Disadvantage Bonus: -23

75 - 35 = 40 Points left to individualize Queen
 75 - 16 = 59 to individualize Soldiers
 75 - 9 = 66 left to individualize Workers. If the GM wishes, workers may start with a base of 50 (for a talented normal) or even 0 points (for a normal). However, if a player has chosen an Ento worker as a character, the base points should be 75.

2) GOVERNMENT

There is no organized planetary government. Each "tribe" is ruled by a chieftain or chieftess, who is often an elder of a ruling family. Once a year these rulers get together in Frus, the central city, to discuss treaties and settle disputes. This "ruler's convention" is the only form of planetary government, and the chieftains often fight among themselves.

Military treaties with other races: The Heavyworlders have not yet joined the Alliance. They may in the future, especially if they become more organized and civilized, or if there is an alien threat. They have an unofficial peace treaty with Alliance members.

3) INDIVIDUAL'S LIFE

Heavyworlders enjoy epic poetry, wrestling, drinking, rowing, foot races, and horse races. They are accomplished handicrafters, and make attractive pottery, jewelry, and tools. Some alliance worlds import Heavyworlder handicrafts as "primitive, exotic" goods.

Many of the Heavyworlders are farmers, or raise sturdy livestock. Many, especially the younger ones, leave the high gravity worlds to seek their fortunes on other planets. A few are technicians who build and maintain the high technology devices (FTL spaceships, magnetic railroads, etc) brought by extraterrestrials.

4) ENVIRONMENT ON HEAVYWORLDER PLANETS

Everything on Heavyworld planets is stunted and stocky: the trees are short and thick, the flowers lie low to the ground, and vines move laterally — not vertically. Even the animals tend to be low-slung slinking creatures with thick, stubby legs. To compensate for the increased stress, much of the wildlife has an exoskeleton or numerous legs.

The physical geography of the planet reflects the extremely dense materials at the core, and the crust is decidedly unstable. In addition to numerous active volcanoes, earthquakes (and therefore tidal waves) are common. This environmental adversity has only further hardened the Heavyworlders, making them one of the toughest races in the Alliance.

HEAVYWORLDERS CHARACTER SHEET

Heavyworlders were originally humans who colonized high gravity worlds. They have changed slightly to compensate for the gravity.

- 1) **Alien powers:** Heavyworlders have no alien powers.
- 2) **Source of Food:** Heavyworlders are omnivorous. They farm, raise livestock and hunt.
- 3) **Senses:** Their senses are the same as humans: sight, smell, touch, hearing, and taste.
- 4) **Lifespan:** 45 earth years. They may live longer on lower gravity worlds.
- 5) **Reproduction:** Their reproduction is the same as humans.
- 6) **Physical Description:**
 - Height:** 4 1/2 feet
 - Weight:** 240 pounds
 - Number of appendages:** They have 2 arms, and 2 legs, just like humans.
 - Skin color:** varies from dark brown to cream colored.

Skin texture: Heavyworlders look like humans with thick bushy hair everywhere.

Other: Heavyworlders are similar to humans except they are shorter and stockier. Heavyworlders tend to have pug-like faces, with rough, squashed features. They are very strong.

7) Environment normally live in:

Gravity: Heavyworlder planets have about 4 times earth gravity (this differs somewhat from Heavyworlder planet to planet).

Air, Land, or Water?: They live on the land.

Atmosphere: Earth normal

Temperature: Earth normal

HEAVYWORLDER CHARACTER SHEET					
Val	Char	Cost	Max & Cost	75+	Disadvantages
20	STR	10	30 (3)	5	Distinctive looks: Heavyworlder, Not concealable
10	DEX	0	15 (-8)		
15	CON	10	25 (3)		
15	BODY	10	25 (3)		
5	INT	-5	15 (-3)		
5	EGO	-10	15 (-5)		
10	PRE	0	20		
6	COM	-2	16 (-1)		
4	PD	0	10 (+1)		
3	ED	0	10 (+1)		
2.0	SPD	0	4		
7	REC	0	13 (+2)		
30	END	0	60 (+2)		
32	STUN	0	62 (+4)		
Cost Power or Skill					
Every Heavyworlder skills (free) Climbing 8- Concealment 8- Tracking 8- Paramedic 8- Survival 8- +1 Resistance Stealth 8-					
Characteristic costs: 15 Skill Costs : 0 Disadvantage Bonus: -5 Total 10 75 - 10 = 65 points left to individualize character					

RHERI SOCIETY

Race: Rheri (pronounced "rare-ee")

Planet(s): 30, now in ruins

Rheri are a highly advanced, older race. They resemble large ravens (larger than humans). The Rheri are **not** a player character race. That is, players usually may not play Rheri characters, as they are just too powerful.

TECHNOLOGY

Rheri technology is usually based on gems or crystals. Powerful devices take 3 gems: a red, white (or sometimes green) and blue gem. Weaker devices sometimes consist of only one gem.



Rheri devices are often amulets or gems set in metal — a metal that is unknown to the Alliance. Rheri artifacts frequently have Rheri writing on the back, and this writing is bizarre and difficult to interpret.

Most Rheri devices feed off of a "life force", that is, the device must be worn by a living creature in order to "charge its batteries". For a Rheri, its life force is "big", and this recharging is instantaneous. A human's life force is "small", and usually takes 1 hour to 1 day to recharge a device. Some Rheri crystals feed off of the adoration of their worshippers. Other Rheri crystals feed off of the minds of creatures — intelligent creatures can try to resist this, less intelligent ones cannot.

The most powerful Rheri gems contain the "souls" of the dead Rheri. The gems become intelligent, and have personalities and goals. The 3 gems are in balance: in simplistic terms, one is evil, one is good, and one is neutral. If one of the gems in a set is destroyed, or if the gems are separated from each other (in different solar systems), the other gems fight and a grave imbalance occurs. Such an imbalance may cause an explosion, a warp travel hazard, time travel, or other effects depending on the gem's power (and at the GM's discretion). Sentient gems may have powers of their own, such as telekinesis and mind control.

The gems are virtually indestructible. They can survive a laser blast or a furnace. They may be destroyed by a nuclear bomb, being cast into a star, by another gem, or otherwise at the GM's discretion.

1. **Communications:** They have warp radios and beyond. A Rheri can communicate instantly with someone possessing a Rheri artifact anywhere in the galaxy.
2. **Computers:** Rheri have super brain computers.
3. **Weapons:** A Rheri does not need to carry a weapon, as it has natural weapons. A Rheri can disintegrate almost any inorganic object with one shot.

Planetary Defenses and Space Navy: There is no Rheri space navy, or planetary defense as there are no Rheri occupied planets.

4. **Power supplies:** Rheri can utilize life forces, thought, minds, and adoration as power supplies, as well as conventional power supplies (fusion, bacteriological, and so on).

5. **Transportation:** Rheri can teleport vast distances, from solar system to solar system, and perhaps even from galaxy to galaxy.

6. **Medical Technology:** Rheri are capable of instant mutation of their own bodies and virtually all other races. This includes total instant regeneration — a Rheri takes no lasting damage from any attack that does not kill it instantly. Rheri can create whole new intelligent life forms by genetically engineering them in laboratories.

7. **Mental Devices:** Rheri know how to build illusion, mind control, and telepathy devices.

8. **Other:** Rheri are capable of invisibility, hypnotic teaching and transmutation of matter.

SOCIOLOGY

1) CULTURE

History: The Rheri were originally organic creatures that resembled large birds. They are an old race, and as time passed they became highly technologically advanced. Eventually, the Rheri became "organic machines". They are capable of adding components to their bodies like adding a new arm to a robot.

The Rheri were once very powerful. However, they fought among themselves or with another advanced race. The result was that both sides were wiped out, and the Rheri cities were destroyed. Millennia passed, and most of the cities have become buried or lost. A few Rheri artifacts have been found by humans on radioactive, ruined worlds.

Now only a few Rheri exist. They do not live on their old worlds, but usually travel in space.

Rheri Attitudes Toward Each Other: The Rheri are a cold race. They have no empathy for others of their race — they do not hate each other, but they do not like each other either. A Rheri will probably not help or protect another Rheri, even though their race is nearly extinct. In fact, sometimes the more powerful Rheri will "disassemble" a weaker one, and steal its parts.

Rheri Attitudes Toward Other Races: A Rheri will usually be very interested in old Rheri artifacts, as it may use these for scientific equipment, or to add more power to its body.

A Rheri feels little towards other races. Most Rheri believe that other races are vastly inferior. A Rheri may regard others as annoying interruptions to an experiment, useful for some duties, or simply not worth paying attention to at all. However, a Rheri might assign a job to a PC, and may give a PC an amulet to use to contact it.

Moral Imperatives: In general, Rheri have no morals; they are amoral. The only imperative they may have is a quest for knowledge.

Myths and Collector's Items: Because most of the Rheri died long ago, most humans believe Rheri don't exist anymore. Throughout the Alliance stories of Rheri are considered myths.

Wings of Power: "Wings of Power" is a group that worships Rheri, and their high priest (or priestess) dresses in feathered garments. They believe that Rheri still exist and should be adored. The Rheri are mystical, wonderful beings to them. Some sects possess one or two Rheri artifacts, which they claim can cause miracles (which is possible, considering the Rheri technology).

Rheri artifacts are rare and considered valuable as a

Rheri artifacts are rare and considered valuable as a museum pieces or collector's items. Most consider Rheri artifacts to be jewelry and not devices, as most Rheri artifacts must be worn by a living being to activate them, and this is not common knowledge.

2) GOVERNMENT

Since Rheri are almost extinct and are solitary creatures, there is no organized government ruling them.

3) INDIVIDUAL'S LIFE

Of the few Rheri left, most live alone in huge spaceships or spacestations. A Rheri will travel the universe, conducting experiments and developing new technology. They sometimes start wars or create sentient life forms for amusement, or as part of some arcane experiment.

4) ENVIRONMENT ON RHERI WORLDS

Because the Rheri no longer have a planet to call their own, they have no "typical" environment. Their ships are often sterile monuments to the Rheri's scientific curiosity.

RHERI PHYSICAL DESCRIPTION

1) Alien powers: Most Rheri have the following powers:

Shapechange: Rheri are capable of a wide variety of forms. They usually are in the form of a large bird; a second preferred form is that of a large plant.

They also have Telepathy, Flight, and Regeneration.

Rheri usually have all other alien powers: Rheri are almost omnipotent beings. They are capable of many things. The Rheri are in essence "organic machines". They can "plug" parts into their body which give them powers, like a robot can have an arm plugged into it. These parts are not removable by others. Only a Rheri can remove them.

2) Source of Food: The Rheri eat infrequently. They prefer to consume pure energy, instead of things like meat, fruits, or vegetables. Rheri are able to utilize energy from nuclear reactions, solar energy, anti-matter, from particles falling into black holes, and other sources.

3) Senses: Rheri have all the human senses: sight, hearing, touch, smell, and taste. Rheri also have a wide variety of enhanced senses available to them, depending on what modules they have plugged into their body.

4) Lifespan: Rheri are immortal.

5) Reproduction: There have only one sex, neuter. A Rheri could probably create another Rheri by genetic engineering. Also, another Rheri can be created by an intelligent being holding certain Rheri gems (three of them). The person will undergo metamorphosis into a Rheri that is younger and less powerful than a mature Rheri. The new Rheri will retain the memories from his or her previous form.



6) Physical Description: The following physical description applies when the Rheri is in bird form, which is its usual form.

Height: 9 feet (about 3 m)

Weight: 880 pounds (400 kgs)

Number of appendages: A Rheri usually has 2 arms, 2 legs with 4 clawed toes, and 2 wings.

Skin color: varies

Skin texture: The Rheri is covered with feathers except on the hands and feet.

Other: The Rheri is very fierce looking, and resembles a raven.

7) Environment normally live in: Rheri can live in a wide variety of environments, their usual one is described below.

Gravity: They are used to a gravity near Earth's.

Air, Land, or Water?: Rheri live on land.

Atmosphere: They live in an atmosphere similar to Earth's. If a Rheri wishes, it may have life support and live in hostile environments.

Temperature: Rheri like a temperature around 70 degrees F. They can modify themselves to live in any temperature.

No character sheet is given for the Rheri, as Rheri are capable of almost anything. For the Rheri, technology and alien powers become blurred together.

However, if a person is changed into a Rheri through picking up 3 certain gems, then the following changes happen to the character:

PERSON CHANGED INTO A YOUNG RHERI

Add the following:

Cost	Powers	End
30	6d6 Mind control	6
30	6d6 Telepathy	6
16	Flight (8")	2
30	+30 PRE (ignore characteristic maximum)	
20	Regeneration: 2 BODY per recovery	
75+ Disadvantages		
13	Seeks out other Rheri in order to learn. Very common, Total commitment	
4	Views all other species as unimportant (x1/2), Very common, Moderate	
Total: 109		

The longer a person remains a Rheri, the more powerful it will grow. The new Rheri will gain more powers at the rate of +5 character points per week (or another rate at the GM's option).

ADOLESCENT RHERI

As opposed to a "baby" Rheri, the adolescent Rheri not only has the above powers, but also the following:

Cost	Powers
10	+3 PD and +3 ED Armor
10	Life Support: does not need to breathe
7	Natural Weapon: claws STR/15 + 1/2d6 K (killing)
	Replaceable limitation (-1/2)
20	Shape Change
Total: 47 (+85 from the powers acquired as a young Rheri)	

Rheris cannot advance beyond the Adolescent stage unless they have both Rheri technology and an adult Rheri to guide them.

MATURE RHERI

A mature Rheri has tremendous powers. It would have access to almost every alien power, and its characteristics and skills would be huge. Just consider a mature Rheri a god or goddess.

Of course, a PC cannot become a mature Rheri. A PC will probably only be a young Rheri temporarily as a plot device. If a mature Rheri disassembles a young PC Rheri, the GM may wish to have the PC reappear back as his or her old self (or slightly modified, depending on the Rheri's mood).

YLEM SOCIETY

Race name: Ylems (pronounced "lemz")

Planets: 3

Ylems are telepathic, amoeba like creatures about 1 foot across. They make decisions as a group mind, and find humans confusing for not doing the same thing. Ylems are usually peaceful and friendly.

TECHNOLOGY

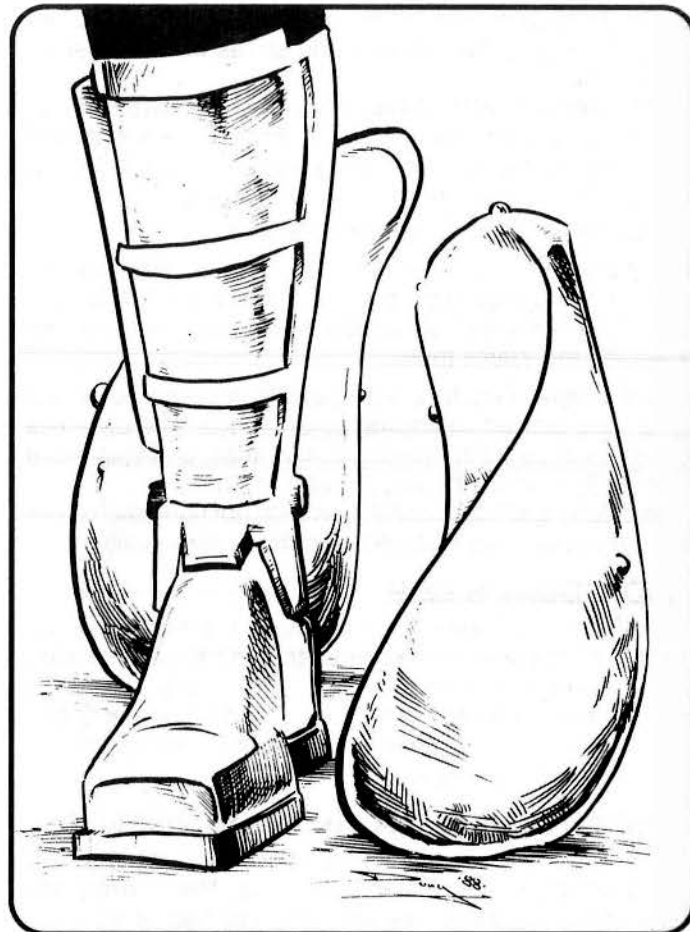
- 1. Communications:** They have warp radios.
- 2. Computers:** They have a few Transistor computers, for use with spaceships, monitoring their solar system and sun, and so forth. Individuals do not own personal computers.
- 3. Weapons:** They have laser pistols and stunner weapons.
 - Handguns:** how common: Handguns are rare on Ylem worlds (used only against hostile animals), typical #d6 damage: 1 1/2 d6K or 3d6 NND.
 - Planetary Defense:** range: within the solar system.
 - Space Navy:** They have a small, virtually unused space navy.
- 4. Power supplies:** They have bacteriological and solar power supplies.
- 5. Transportation:** They have planes, and a few FTL space ships.
- 6. Medical Technology:** Ylems have developed devices to regenerate lost body parts.
- 7. Mental Devices:** none (they are natural telepaths).

SOCIOLOGY

1) CULTURE

History: The Ylems do not realize it, but they are an artificial race. They were genetically engineered 2000 years ago by a race that has since disappeared. The Ylems worship temples that, unknown to them, contain laboratories used to originally construct the Ylems. They forbid anyone (themselves or other races) to enter these "temples".

The Ylems are telepathic, and between all of them, they form a group mind. This group mind decides what each individual Ylem's job will be and defines the laws of their society. The Ylems destroy any of their race that are born which do not share the group mind.



Ylems are greatly influenced by others around them (probably a result of being telepathic). If a Ylem is taken off its home world, it starts losing contact with the group mind and becomes more individualistic. A Ylem who associates mostly with humans or other aliens is less likely to take orders from the group mind.

Ylems find humans to be confusing. They can sense that humans do not have a group mind, and wonder how humans can make decisions. Concepts like love, affection, friendship, greed, and governments are foreign to these aliens. Gradually, however, a Ylem who lives with humans will begin to understand them.

Ylems are peaceful, and their government fights only in self defense. They are open to meeting other races, and try to establish diplomatic relations.

Science: The Ylems excel at medical technology. They are capable of regenerating lost body parts, and may be able to extend this technique to other races (with research).

Literature and Arts: Ylems grow trees into intricate patterns and symbols by telepathically speaking to them over a long period of time.

2) GOVERNMENT

Ylems have no government, no written laws, and no "ruling Ylem". Decisions are made through the group mind. The regulations consist of two fundamental tenets: serve the group mind, and do not enter the temples. Other than this, the Ylems have no rules.

The Ylems have virtually no crime, because of their psychology: greed is unknown to them, they are rarely angry, and mentally ill Ylems are destroyed.

Economic system: Ylems live communally, and all receive what they need to live. Money and stores do not exist on Ylem worlds.

Military treaties with other races: The Ylems do not currently have any military treaties with other races, although they are trying to enter into a treaty with the Alliance. So far, most of their contact has been with the Imen.

POWER GROUPS ON YLEM WORLDS:

Homeworld Ylems: The Ylems on the homeworld are closer to the group mind than the Ylems on the colony worlds. The "temples" are on the homeworld, and may be influencing the Ylems there.

Colony Ylems: Due to a sun that will soon go nova, the Ylems have started colonizing other worlds. The colonists are more interested in meeting other races, and they have just recently started sending out ambassadors.

The colony and homeworld Ylems do not fight each other or vie for power, they just differ slightly in personality.

3) INDIVIDUAL'S LIFE

Ylems live in a tropical area and like to spend about half their time in swamps. They are neuter, and have no marriage (they breed through mitosis). Some build machinery, some farm, and some build shelters (there are no consumer goods on their planet). Ylems have a lot of leisure time, and spend it sleeping, reproducing, or creating art.

4) THE ENVIRONMENT ON YLEM WORLDS

Given their physiology, Ylems live on worlds that are covered almost entirely with shallow water. The land masses are swampy, and there are only tiny patches of dry land (even the spaceport is occasionally inundated). The populated regions range from wave-swept salt marshes to fetid bogs and lagoons. The flora and fauna are composed almost entirely of estuarine and swamp species. Needless to say, the entire planet reeks of swamp gas and standing water. There are few tourists on Ylem worlds.

YLEM CHARACTER SHEET

Ylems look like giant amoebas.

- 1) **Alien powers:** Ylems have Telepathy, Small body (they are cat sized), and EGO Attack (they can "telepathically" stun a target's brain).
- 2) **Source of Food:** Ylems are primarily vegetarians. They can eat meat but dislike it.
- 3) **Senses:** Ylems have all the human senses of sight, touch, hearing, and taste, but not the ability to smell.
- 4) **Lifespan:** Ylems live about 100 earth years.
- 5) **Reproduction:** They reproduce by merging with another Ylem, exchanging genetic material, and then fissioning. There are no sexes, and reproduction is an emotionless affair.



6) Physical Description:

Height: Ylems can stretch their bodies from 1 inch to 2 feet.

Weight: They weigh about 5 pounds.

Number of appendages: Ylems can have up to 4 pseudopods, all of which can function as arms or legs.

Skin color: They are greenish brown.

Skin texture: Ylems are slimy.

Smell: Since Ylems enjoying lounging around in swamps, they smell like it.

Other: Ylems look like giant amoebas: they have no fixed arms, legs or eyes but can form them from their bodies. This is considered a zero phase action.

7) Environment they normally live in:

Gravity: They live in a gravity near Earth's.

Air, Land, or Water?: They spend part of their time in swamps and part of their time on dry land.

Atmosphere: They breathe an atmosphere similar to Earth's.

Temperature: They prefer tropical temperatures, but can tolerate normal room temperature.

YLEM CHARACTER SHEET

Val	Char	Cost	Max & Cost	75+ Disadvantages
5	STR	-5	15 (-3)	3 3 fewer Everyperson skills
10	DEX	0	20	5 Watched by group mind,
8	CON	-4	18 (-2)	Large group. 8-
8	BODY	-4	18 (-2)	10 Repulsive distinctive looks,
15	INT	5	25 (+2)	Not concealable
15	EGO	10	25 (+3)	8 Confused by human
5	PRE	-5	15 (-3)	emotion, Common Irrational
2	COM	-4	12 (-2)	
1	PD	0	8	
2	ED	0	8	
2	SPD	0	4	
3	REC	0	10	
16	END	0	50	
15	STUN	0	50	

Cost Power and Skills

- 20 Telepathy 6d6, 14- Activation roll, END cost: 6
- 20 Ego Attack 3d6 14- Activation Roll END cost: 6
- 20 Small body (cat sized): +4 Concealment and Stealth, 1/4 Range mod
- 3 Ambidextrous
- 3 Breakfall 11-
- 2 KS: Ylem religion 11-
- Every Ylem skills (free)**
- Climbing 8-
- Concealment 12- (including Small Body bonus)
- Deduction 8-
- Stealth 12- (including Small Body bonus)

Characteristic costs: -14

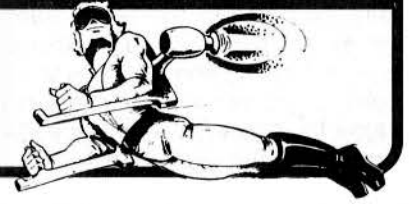
Skill Costs: 68

Disadvantage Bonus: -26

Total: 28

75 - 28 = 47 points left to individualize character

CAMPAIGN: THE SWEET SCENT



What follows is a campaign that takes place in the universe of the Alliance. The plot line centers around the colony of a young Ento queen, the Scarlet Queen. She commands a small failing colony of only a few Ento. She sent out scouts to search for pleasant worlds with many natural resources, and discovered the Pendrite flowers on the small rocky planet Menkar. The Pendrite flowers have a hypnotic effect on many life forms, including humans. Using the flower, the Queen intends to strengthen her colony by conquering the human colonists on the planet Cetus; after Cetus, she hopes to take over Theris. Zakul, a Theris government official, is helping the Scarlet Queen take over Theris for reasons of his own.

ABOUT THE PENDRITE FLOWERS

The drug from the flowers does not take immediate effect. The Ento place it in water or food, and after several days the victim becomes docile and easily influenced. After an extended period (a week or more), the victim becomes totally obedient. If the victims are no longer given the drug, they recover some independence after a day or two, and are back to normal after a week.

ADVENTURE 1: THE THEFT

The *Volans Glacia*, a Theris Mining and Manufacturing cargo ship carrying medical, biochemical, and electronic equipment and a crew of 5 Theris natives sent an S.O.S. to the Phychi government. The message was cut off before any details about the trouble were received. Fortunately, the ship had an automatic distress beacon, and the government could trace the ship as it went off course.

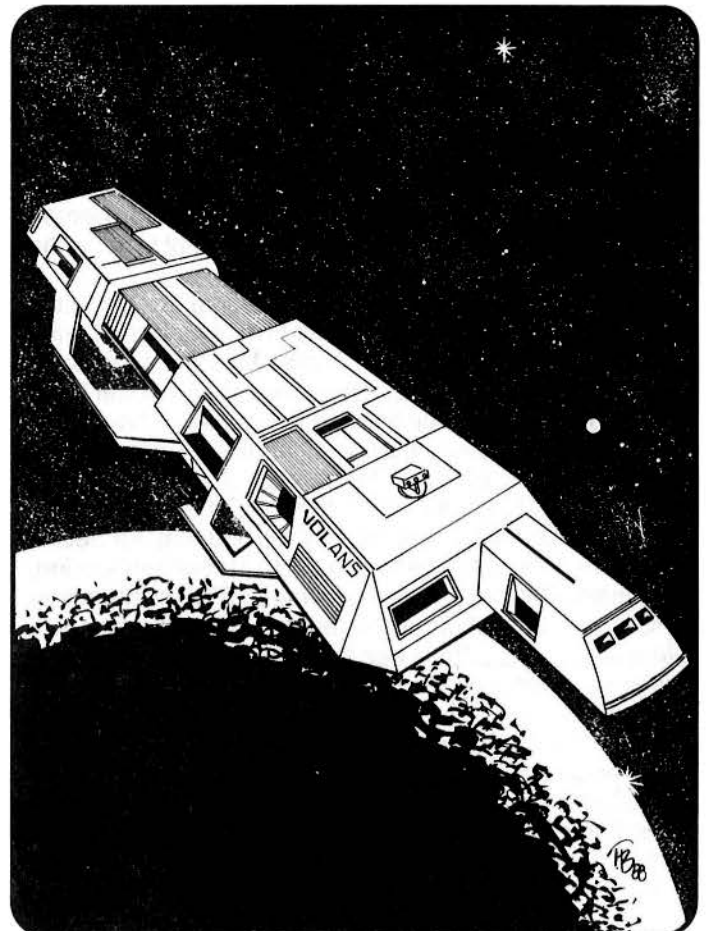
If the PCs are freelance adventurers, TM&M will hire them to follow the *Volans*, and find out what happened. If the PCs are working for the Theris Government, Lyman will send them on the mission as a favor to TM&M, which has no available ships to investigate. In either case, this mission will be described as a simple mechanical malfunction, and the PCs will be given a small ship with mediocre weapons and armor. If the PCs have their own ship, they can use it instead.

When the PCs arrive in the same solar system as the *Volans*, they will find the ship with its distress beacon is still going. What has happened is that the Ento used the Pendrite flowers to drug humans from Cetus, an outlying colony, and ordered them to take over the ship. 5 Cetus natives took one of their colony's shuttlecraft and posed as survivors of a wrecked spaceship. The *Volans* picked them up, and the Cetus natives took over the ship by surprise. No one was killed in the melee, but two of the Cetus colonists were wounded. The Cetus colonists are bad pilots, and collided with their own shuttle, producing a large dent.

The colonists are having difficulty piloting the ship, and have only gotten as far as an uninhabited system 7 LY from Cetus. They have stopped there, and are trying to persuade the ship's real crew to help them pilot the ship.

Hence, when the PCs arrive, they will see the Volans with a large dent in its hull which has been crudely patched. The "captain" (one of the colonists) will answer the PCs' messages calmly, and will give a bogus reasons for why the ship went off course (like "We needed to refuel"). PCs who compare the captain's appearance with records will find that the person talking to them is not the captain, but is using the captain's name and clothes.

The Cetus colonists are stealing the ship for the biochemical equipment, which they will use to synthesize more Pendrite drug. They are heading for their colony on the planet Cetus. When the PCs arrive, the colonists will pose as crewmembers and argue at great length, refusing to let the PCs come aboard. They will claim the ship is damaged, carries the plague, etc. Eventually they will reveal the original crewmembers and hold them as hostages, demanding that the PCs leave and let them fly away from the *Volans*.



The PCs must free the crew and recover the equipment, which will require sneaking aboard the *Volans* and fighting the colonists. The colonists fight stupidly, as if they don't really want to win (some of them are resisting the mind control), but they have laser rifles and are very dangerous. They are bluffing about hurting the hostages; the ship's crew is simply locked up in a storage room.

After the PCs take over the *Volans*, they will find that the destination plotted into the ship's navigation system is Cetus. The PCs should call their boss (Lyman or TM&M) on the FTL radio to report this development. If they don't, their boss will call them. The *Volans* is 30 LY from Theris; FTL radio messages have a 16 hour turnaround time. Their boss will ask the PCs to go to Cetus and find whoever is buying stolen goods.

ADVENTURE 2: CETUS

Cetus has been totally taken over by the Ento. They have drugged the whole populace by putting the Pendrite drug in the water supply. Cetus' small population of 3,000 now obey the Ento, and many have been put to work to synthesize more of the drug from the Pendrite flowers, which are being imported from Menkar by Ento ships. However, this will not be immediately obvious to the PCs, as the Ento are in hiding underground.

After the PCs land on the planet, they will find several strange things: the people of Cetus have dulled emotions, there is no sign of any crimes or socially deviant behavior, and the people engage in no recreation of any form — games, cards and books are covered with dust. Also, the PCs will probably notice that large segments of the population disappear every day. This is because, except for support people in food and power industries, the populace goes to several large hidden warehouses to synthesize more of the Pendrite drug.

The colonists will have a big feast for the PCs, and give them the real red-carpet treatment. If they are permitted to, they will replace the PC's starship's food and water with drugged food and water. They will be helpful and cooperative, and will make a great show of tracking down the person receiving stolen equipment. This is all an attempt to delay the PCs until the drug takes effect on them.

After the PCs have been making investigations on Cetus for a few days, a message will come from their boss saying "This mission is very important — please make a thorough investigation of this incident." Their boss will also offer them a large bonus for this extension of their mission. 1 hour later, an FTL message comes from the Theris government: "By order of Secretary of State Zakul, your ship is ordered to return to Theris immediately." If the PCs check their computer records of Theris politics, they will find that the Secretary of State does not have the power to order them around, unless martial law is declared on Theris. FTL messages to the PC's boss will get unhelpful responses like "Lyman is in conference". In fact, Zakul has arrested the PC's boss on a trumped-up charge, although the PCs won't find this out until they return to Theris. The PCs will have to investigate Cetus without further guidance.

After repeatedly drinking the water on Cetus, the PCs will begin to feel sleepy and docile. The GM should give them a chance to break free of the drug, through EGO rolls. Alternately, a weak-willed PC could show signs of being drugged first, thereby warning the others.

The PCs should eventually trail the humans to the warehouses. Inside they will find huge processing plants that churn out a sweet-smelling liquid. It is being put into shipping containers (and being shipped to Theris). There will be several Ento on guard supervising the humans. The humans show no fear of the Ento, but show perfect obedience.

The PCs should by now have determined the function and importance of the drug. The Ento, of course, will do their best to prevent the PCs from escaping with this knowledge; the PCs will probably have to fight their way out. If the Ento capture some PCs, they will drug them and make them slaves. The Ento will not kill captured PCs, since they could be useful back on Theris. However, captured PCs will be more resistant to the drug than expected, and should get a chance to escape or lead a rebellion.

Once the citizens are no longer drinking the drugged water, the effects of the drug will gradually wear off, and the populace will return to normal. They will have only vague, confusing memories of what happened.

ZAKUL

After the Cetus incident, the GM should encourage the PCs to go to Menkar, and discourage them from going to Theris. If the PCs do go to Theris, Zakul will make it very unpleasant for them, exiling or even attempting to arrest them, and thereby encouraging the PCs to go to Menkar.

Zakul is a high ranking Phychi government official (but not high enough ranking for Zakul). By accident, he was on Cetus when the Ento took over. He avoided being drugged, and worked out a deal with the Ento whereby he helps them drug the entire population of Theris (the Phychi capital world); in return the Ento will allow him to rule Theris.

Zakul has found out about the PCs visit to Cetus. He will try to recall them before they find out anything, and will be too late. Zakul will do everything in his power to discredit the PCs, and will deny them Phychi government help. He will try to fire, exile, or even arrest them on the pretext of their incompetence. Alternately he will claim that they contracted an alien plague on Cetus. To restore their position, the PCs will have to bring back proof of the Ento's plan, like a live Ento and the Pendrite drug.

ADVENTURE 3: MENKAR

Menkar is a frigid, rocky world with no sentient life forms — though it does have animals and plants. The thin atmosphere is inadequate for humans and Ento, and breathing it will drain INT at the rate of 1 per hour. This makes it difficult to build a factory here, and the Ento — having few resources — found Cetus to be the best place for producing the drug. Cetus is only a few days' journey from Menkar.

Menkar is where the Pendrite flowers bloom naturally, and it is their pollen that has a hypnotic effect. Most of Menkar's animals have developed immunities to the flowers. Scientist PCs could capture some of the immune animals and find protection from the Pendrite drug.

There are 12 Ento on Menkar. They are harvesting Pendrite flowers to be shipped to Cetus. Even if Cetus has been freed, the Ento are simply planning to do the same thing to another colony. The PCs will have to stop the Ento, probably without any government help.

The Ento are living out of their one spaceship. The PCs may wish to try a frontal assault or a stealthy approach. Another option would be for the PCs to find an antidote for the drug by catching an immune animal, and then distributing this antidote.

ADVENTURE 4 THERIS' DEMISE

Meanwhile, the Ento (with Zakul's help) have been secretly shipping the Pendrite drug to Theris. They plan on dumping it into the water supplies of the whole planet, starting with military bases and the capital city.

The PCs will arrive at Theris with "proof" of the Ento's crimes. They will find that the President of the Phychi has become ill, and appointed Zakul as acting president. In reality, Zakul has drugged the president, and ordered her to appoint him as acting president.

Zakul will express great interest in the PCs' information. He will arrange to meet them outside the capital city in a abandoned military complex because of the "great secrecy of their information" and "security risks". The Ento are hiding here, along with supplies of the Pendrite drug. Zakul's Phychi troops (they are drugged) will surround the PCs and try to arrest them. If need be, the Ento will join in the fight. If Zakul wins, he will take the PCs' proof, and place the PCs in cells, where he will drug them. It will take several days to control the PCs, during which time they may try to escape and stop the Ento. If the PCs win, the Ento will be stopped, and they may expose Zakul to the Phychi government. The GM may wish to have Zakul escape, or be exiled, so he may return in later adventures with further insidious plans.

THE MISSING MINERS



This is a ready-to-run scenario, containing a plot, characters, and descriptions for running the adventure. **If you wish to play this adventure, read no further.**

SUMMARY

A mineral-rich planet has been recently discovered, and Theris Mining and Manufacturing sent 100 Phychi citizens there to mine it. Two weeks later, a Kindred warship moved in and claimed that no Phychi miners were on the planet. The Player Characters (PCs) will be hired by the Phychi Secret Service to discover what happened to the miners, and rescue them if possible.

The miners are still alive, and are being used as slave labor by the Kindred. A Kindred spy among the miners found out that this planet contained valuable artifacts from an ancient, highly advanced race — the Rheri. Such artifacts are rare and often have bizarre effects. The miners have discovered a large blue gem with Rheri writing inscribed on it. It is known that Rheri gems come in sets of three, and together these three gems can form a device with strange abilities.

After the discovery of the gem, the Kindred moved in and took control of the planet. Two more gems lie beneath the surface: a green gem and a red gem. When all three gems are combined, they will form an advanced illusion generator.

CAST OF CHARACTERS

Adia Lyman: Phychi Secret Service officer (female).

Bevis Zorg: Kindred General in charge of operation (male).

Jarman Travis: Kindred spy among the miners (male).

WORKING THE PLAYER CHARACTERS (PCS) INTO THE SCENARIO:

The Phychi Secret Service will hire a wide range of characters: thugs, spies, pilots, scientists. PCs who are Phychi citizens may be training to become Phychi Secret Service Agents. PCs may also recommend their friends as possible agents for the mission. Perhaps the PCs have friends or relatives among the miners. Once Lyman finds out that the characters are available for the mission, she will send each of them a private message promising them high pay for a very important mission. She will tell them to go to her office at noon the next day.

Why aren't the Phychi using experienced agents? Because this is a suicide mission, and they want someone expendable. Of course, they won't admit this to the PCs. If the PCs cannot save the miners, Lyman may send Phychi troops, but this would cause great diplomatic difficulties, and will only be a last ditch effort.

ABOUT THE KINDRED

Remember that the Kindred are poorly educated, militaristic, sexist, and bullheaded. The lower-ranking soldiers are taught to mindlessly obey orders. Hence, a PC successfully passing as a Kindred officer may get far. The Kindred are extreme sexists. Kindred military men are reluctant to shoot females because it is considered unmanly. Also, the Kindred have a strict code of honor. If a character saves a Kindred's life, the Kindred will feel compelled to return a similar favor (see the description of the Kindred Culture in the gamemaster's section).

WHAT HAPPENED

The Kindred had placed a spy in Theris Mining and Manufacturing (TM&M, a Phychi corporation). This spy, named Travis, heard about Aldebaran VII, a platinum-rich planet. He volunteered to head the mining operation as an officer of TM&M. When the miners discovered the Rheri gem, Travis immediately informed the Kindred. Kindred General Zorg decided that Rheri artifacts were important. He drove his warship to the planet and easily overwhelmed the Phychi miners. Zorg does not have official permission for this hostile act, and will be executed if it fails. Zorg has the blue Rheri gem on his person.

STARSHIPS FOR THIS ADVENTURE

For the starships for this adventure, see the sample starships in the technology section. For the Kindred shuttlecraft, use the lifeboat, but assume it does not have faster-than-light capabilities. For the PCs ship, use the Enigma Exploration Vessel or the Phychi Scout Craft. For the Kindred Warship, see the Small Kindred Warship (also see the map of the warship in this section).

SCENE 1: LYMAN'S OFFICE

Lyman's office is on the 25th floor of a high-security government building in Therin, the capital city of Theris. The PCs will pass through a concealed metal detector, and if they are carrying any weapons they will be politely asked to remove them.

Once they enter, Lyman greets them formally. She is middle-aged, with streaks of gray hair, and acts tense and nervous. Her bad mood is caused partly by concern for the miners, and partly because she does not like sending the PCs on such a dangerous mission.

LYMAN'S BRIEFING WILL INCLUDE THESE FACTS:

- 1) Theris Mining and Manufacturing (a Phychi corporation) discovered a planet in the Aldebaran system rich in platinum and other minerals. One month ago, TM&M sent 100 miners to Aldebaran VII to set up a mining operation. They received progress reports by FTL radio from the miners until 2 weeks ago.
- 2) Two weeks ago, a Kindred warship went to the planet on a "routine exploration" and claimed it for the Kindred Empire. The Kindred claim there were no Phychi miners on it. The Kindred suggest that Theris Mining and Manufacturing was mistaken about which planet they sent their miners to, or that the miner's spaceship went off course and never arrived.
- 3) The PC's mission is to discover what happened to the miners and save any survivors. They are to gather any evidence of Kindred misbehavior, including photos, tape recordings, Kindred guns, witnesses, and so forth. This evidence will be presented to the Alliance High Council.
- 4) The PCs may also wish to discover why the Kindred took over the planet.
- 5) The mining planet is cold (0 degrees Fahrenheit), and has a thin but breathable atmosphere. Humans prefer to use small rebreather masks on the planet. Aldebaran VII has little vegetation or animal life. It has no native intelligent life forms and is often covered with snow.
- 6) The PCs will be paid 4000 credits each for completing their mission.
- 7) Lyman will provide help for the PCs, including extra personnel — like starship pilots and doctors. She can also get equipment: a starship, fake Kindred identification, laser pistols, spacesuits, etc. See the description of the equipment Lyman gives the PCs. She is willing to give more equipment to the PCs if they ask for it, subject to the GM's approval.
- 8) Lyman has a rescue ship on call that can hold over 100 people. It can arrive at the mining planet in one day. It will wait nearby in space, just outside the Aldebaran system.
- 9) Lyman will provide a starship for this mission. There are two ships available. One of the ships is disguised as a Kindred ship; the other has a cloaking device. The PCs must choose one of these ships.
The players should discuss possible plans with Lyman. Lyman may offer suggestions, especially if the players seem stumped. Lyman may suggest:
 - 1) Some of the PCs may wish to pose as Kindred nobility, or Kindred officers. Lyman can supply fake ID and Kindred clothing and equipment. This way they may get on the Kindred warship, and the planet below.
 - 2) The PCs may wish to sneak onto the planet by approaching it from the opposite side from the Kindred. Once they get to the planet, they may wish to pose as miners or Kindred soldiers.

Note that Lyman knows nothing of the Rheri artifacts.

SCENE 2: TRAVELLING TO ALDEBARAN VII

After the PCs have gotten their equipment and made their plans, they must travel from Theris to Aldebaran. If any PCs own a starship, they may bring it along. Aldebaran is 24 light years (LY) away from Theris, and the ships Lyman provides travel 4 LY/day, so the trip will take 6 days of FTL travel in warp space.

The PCs re-enter normal space on the outskirts of the Aldebaran system, about 4 hours' travel from the miner's planet. This is out of range of the Kindred sensors. If the PCs scan the radio frequencies, they detect short transmissions in Kindred military code. If a PC can make a successful Cryptography, Translation, or Kindred Knowledge roll, these transmissions may be decoded. If the PCs decode 1 hour of transmissions, they will learn several useful facts:

- The Kindred leader is General Zorg, and he is eagerly awaiting news of some jewels which his men are mining on the surface.
- The Kindred warship is not very large: it has only 2 guns and a crew of 30.
- Ten of the Kindred soldiers are on the surface overseeing mining operations there.

When the PCs decide to approach the planet, they must either do so openly, announcing their presence to the Kindred, or stealthily by using the Cloaking Device. The Kindred ship is constantly scanning the area for incoming ships with a Sensor roll of 12-. If the PCs just drive right up to the planet, the Cloaking device gives the Kindred a -3 modifier for a final 9- chance of detecting the PC's ship. If the PCs try to improve their chances by coming in slowly with minimum engine power, they must make a successful Pilot Skill roll. If they try approaching from the side of the planet opposite the Kindred ship, they must make a Navigation roll. If the PCs succeed in one of these sneaky maneuvers, or think up one of their own, the Kindred have an additional -3 modifier to their Sensor roll, or a 6- chance of detecting the PCs. The GM may choose to let Luck or Unluck change the result of these rolls.

If the PCs are detected and discovered to be hostile, General Zorg will do the following:

- Order the PCs to leave the system, which has been claimed for the Kindred Empire. If they fail to comply, he will fire on them. First he will fire warning shots, and if they are not scared away, he will try to disable their ship and take the PCs prisoner for interrogation.
- Order his men on the planet to put all the prisoners deep in the mine, and take up defensive positions to repel invaders.

If the PCs are caught or enter the warship disguised as Kindred, proceed to Scene 4: The Kindred Warship.

If the PCs successfully sneak onto the planet or crash-land there, proceed to Scene 3: Aldebaran VII.

SCENE 3: ALDEBARAN VII

THE CURRENT SITUATION

When the PCs arrive on Aldebaran VII, they will find the 100 miners being guarded by 10 Kindred guards. There are 3 temporary buildings, a mine, a shuttlecraft, and the ruins of a large TM&M starship.

THE MINERS

The Kindred have captured the miners and have forced them to work as slave labor in the mines. The miners are cold and hungry. If the players arrive during the daytime, they will find the miners working in the mine. If the PCs arrive during the night, they will find the miners sleeping in the temporary plastic buildings that function as barracks. Half of the miners are female.

What The Miners Can Tell the PCs

- 1) The Miners know that a Kindred warship is orbiting the planet. They saw at least 20 Kindred soldiers when the Kindred took over the planet.
- 2) If the PCs secretly question the miners, they will find out that a large blue gem inset in some unknown metal with strange writing on the back was found. A picture of the gem is in the main building. The miners will also tell the PCs that Travis handed the gem to a Kindred officer. The miners will also mention that the Kindred have ordered them to look for more gems and to ignore the platinum.
- 3) Most of the miners know that Travis is cooperating with the Kindred. They do not know Travis is really a Kindred spy.
- 4) The miners may direct the PCs to the other 2 Rheri gems (see below, "The Rheri Gems").

TRAVIS

To determine Travis' location, roll a D6, on 1-4 he is on the planet, on a 5 or 6, he is on the Kindred Warship.

If Travis is on the planet, he will be in the main building with the Kindred guards. If the players catch Travis, he will pretend to be a loyal Phychi. If Travis realizes that his true identity is known to the PCs, he will laugh at them, and will tell them that the Kindred race is invincible. He will admit he is a Kindred spy. He will **not** tell the PCs about the Rheri jewel, unless he is drugged or tricked.

THE KINDRED GUARDS

Zorg has left 10 guards to keep the miners obedient. During the day, 5 of the guards will be at the mine, 2 will be patrolling the area on foot, and 3 will be in the main building, sleeping, eating, or gambling. At night, 3 guards will be patrolling the grounds, and the rest will be sleeping, eating, or gambling.

FIGHTING THE GUARDS

The Kindred guards want to capture the PCs alive. They will not shoot a PC that is down.

Although the Kindred have poor medical facilities, the Phychi miners have excellent ones. (Mining is dangerous work, and they came prepared.) The guards will take seriously wounded characters to Isleen, a Phychi doctor, who has a 14- paramedic roll, good supplies and a good lab (+3 to her roll).

Kind-hearted GMs may wish to simply let characters survive even if they lost enough BODY to be technically dead. The excellent Phychi medical facilities may be able to bring someone back from the dead.

The guards have access to a radio in the main building. Given the chance, they will call the Kindred warship if they are attacked. The PCs can prevent this by destroying the radio, the radio's antenna, or by capturing the guards before they can send a message. The guards have set up an obvious antenna on the roof of the main building for their radio. The PCs can shoot the antenna or try crawling on the roof to destroy it. Characters crawling on the roof must successfully make a Stealth roll, or the guards will hear them, and come to investigate.

If the guards call the warship, the warship will send down a shuttlecraft with 13 Kindred soldiers and General Zorg. It will take 1/2 hour for the shuttlecraft to travel from the warship to the planet. This will leave 7 Kindred crew members on the warship.

THE MAGNETIC KEYS

Two of the guards carry the magnetic cards necessary to open the shuttlecraft described below. If the PCs capture these guards and search them, they will easily find the cards.

THE MAIN BUILDING

The Main Building contains 3 rooms: a large recreation room, the Head Miner's Office, and the Doctor's Office.

The large recreation room contains Phychi cards, board games, 3-D chess, holographic video games, robot ping pong, and electronic pool. There are also couches, a TV with video tapes, and Phychi books.

The Head Miner's Office is used by Maia and Travis. They are the leaders of the mining operation. There are two desks, a computer, a couple of chairs, and some file cabinets containing samples of platinum and magnetic computer disks.

The disks contain information on the miners (name, salary, job title, and so on), a tally of how much platinum has been found (150 kgs, about 100,000 Credits worth) and a description of the discovery of strange alien artifacts. Most of the artifacts consisted of pieces of metal from walls, furniture, and equipment. The log also mentions finding a strange blue gem. A picture of the gem is in one of the desk drawers.

In Travis' desk are the usual office supplies. Hidden behind one of the drawers is a Kindred code book. A successful concealment roll will locate it.

The doctor's office contains syringes, anti-biotics, a robot doctor, oxygen, drugs in a case, and operating equipment.

THE KINDRED SHUTTLECRAFT

There is an empty Kindred shuttlecraft within 100 feet of the main building (this is in addition to the shuttlecraft containing Zorg and the 13 soldiers). There is Kindred lettering and insignia on the side of the craft. It is the shuttlecraft used by the 10 guards to land on the planet, and is currently unguarded but locked. It can be opened with a Lockpicking roll. If the PCs have tools, they can spend 10 minutes and disassemble the lock with no skill roll.

SCENE 4: THE KINDRED WARSHIP

There are Kindred uniforms, spacesuits, and one Kindred laser pistol inside. The PCs, if they are pretending to be Kindred guards, may wish to use the shuttlecraft to dock with the warship. Anyone with Pilot Skill can pilot the shuttlecraft. It does not have any spaceship weapons or FTL capacity.

THE RHERI GEMS

Travis gave the blue gem to General Zorg, who has it in a pouch on his body. Without the other two gems, the blue gem has no special power. It is valuable to collectors and museums, and worth 300,000 credits.

There is a picture of the Rheri gem in the main building. It is blue, about 3 inches long, set in an unknown metal with writing on the back. Any character with Translation may attempt to read the inscription. A successful skill roll means the player has identified it as Rheri lettering and reads the following:

Fed By Body Image Producer

The other two gems are still in the mine. They will be discovered within 1/2 hour of the PCs' arrival. If the PCs sneak into the mine or contact the miners, they can obtain the gems. All the gems have the same inscription.

When all 3 gems are simultaneously held by one person or on the body of one person, that person can project an illusion (see the device description of the gems). PCs may discover this by accident. For example, the person holding the 3 gems may be thinking of Kindred guards, and suddenly one appears. For more details, see the device statistics.

IF THE PLAYER CHARACTERS ARE CAPTURED

If the PCs are captured, the Kindred will hold them on the planet until a shuttle from the warship arrives, and then transfer them to the warship.

The PCs may attempt to escape. On the planet, the guards will lock the PCs into barracks. The guards will search the PCs (let them make concealment rolls vs. the guards' 11-perception rolls), and take all obvious weapons, radios, or lockpicks.

Each PC will be locked in a separate room. Each room is windowless, contains a bed made of plastic, a closet with clothes, books, and a bathroom. The door is locked from the outside. It may be successfully picked with a Lockpicking roll at -2, if a PC has lockpicks, or -4 if the PC is forced to use improvised lockpicks like hairpins or wire. Remember the bonuses on skill rolls for taking more time. The door has 5 Defense and 3 BODY.

If the players are taken to the warship and wish to escape, read the section "The Kindred Warship".

If the players do not escape either on the planet or on the warship, there are several options available. The GM might wish to have backup troops rescue them and the miners. The PCs may be traded for Kindred prisoners who are imprisoned on Phychi planets. Or the PCs may be made into slaves and put in the Kindred army. If the PCs are persuasive enough, they may convince General Zorg that they are not loyal Phychi and would be willing to work as spies for the Kindred.

Give the PCs several chances to escape and save the miners.

Captured PCs will be placed in cells until Zorg talks to them.

If the players have successfully passed as Kindred guards or nobility, they will be shown to their rooms. They will have access to the recreation areas and the mess room. If Zorg is suspicious of the PCs' disguises, he will assign at least one guard to quietly accompany them as a "host". If there are several PCs, Zorg will place 2 or more guards with them.

GENERAL ZORG

If General Zorg is on the warship, he will usually be found in his room, the control room, or occasionally in the recreation room (see Zorg's character sheet).

THE ROOM DESCRIPTIONS

Warship Prison Cells: There are 3 prison cells, each 2 hexes by 2 hexes. Each cell contains a metal bed which is part of the wall, a thin mattress, a sink, and a waste disposal unit. The lock is magnetic, and can be opened with a Lockpicking roll at -3. The walls and doors are 7 DEF and 5 BODY. Unless a player successfully rolls Luck or tricks the guard, there will always be at least one guard on duty outside the cells.

The Ventilation Shafts: The Kindred warship has ventilation shafts 2 1/2 feet by 2 1/2 feet — wide enough to crawl through. These shafts connect with almost every room. The covers to the shafts are screwed on, and may be unscrewed or forced.

If the PCs get to the engine room, they can find the ventilation unit that provides air for the ship. Here they may place chemicals such as sleep gas that will knock out the whole crew. If they place chemicals in one of the shafts, but not the ventilation unit, then the chemicals will only affect part of the ship (GM's choice). The characters may obtain chemicals from the warship's laboratory.

The Armory: The Armory contains 2 laser pistols (2d6 K, 14-activation roll, 5 shots/clip, 1 phase to load a new clip, +0 OCV), laser weapons' replacement parts, a laser weapon repair kit, and 3 daggers. The other weapons are being carried by Kindred guards.

Captain's Suite and Office: The Captain has a 2 room suite. The first room contains his desk, a personal computer and printer, a chess board, a couch, a refrigerator with Kindred drinks and food, and the heads of wild alien animals that Zorg has killed. Zorg's computer contains references to the Rheri gem. It also contains data on the Rheris themselves, and the powerful artifacts that they left. The PCs may discover Travis' true identity on the computer, as it lists him as a member of the Kindred military.

If Zorg is here, he will draw his laser pistol (he always carries a laser pistol on him.) There is also a laser pistol in the desk drawer. Zorg will go for this gun if his normal one is destroyed or taken away.

The second room is Zorg's bedroom. It has a luxurious bed, plush carpeting, a bedside table with a small monitor and reading material (*Alien Martial Arts*, *The Secrets of Stealth*, and *Slaughter at Moran*). Zorg has a picture on the wall of the different type of Kindred weapons. In the floor is a hidden box which contains precious jewels, platinum and some Alliance Credits. This is Zorg's capital from past missions, and is worth 150,000 Credits.

There is a restroom off the bedroom.

Control Room: The control room contains the equipment to run the ship, including the sensors controls, the pilot's controls, the ECM controls, and the ship's large computer. The controls and computer data are all written in Kindred.

The pilot and ship's sensors operator are here. They also carry standard Kindred laser pistols. They will fight the PCs, but will give up if overwhelmed or seriously injured.

Crew Barracks: There are 2 large barracks (16 meters by 16 meters) that each house about 15 crew members. Each barrack has 15 bunks and 15 footlockers. Kindred crew have few possessions, and most of the footlockers contain only trashy Kindred comic books and novels, cards, and a couple pieces of military clothing.

The PCs will probably find a couple of off-duty crew members here (depending on how many Kindred are on the planet). Unless the PCs are in disguise, the crew members will pull laser pistols or rifles and try to capture the PCs.

Engine Room: The engine room contains the FTL engine, the sublight engine, the ship's life support unit (including the ventilation unit), and the power generator for the ship (nuclear power supply). The engine room contains the ship's engineer and his assistant. They are armed with laser pistols, and will fight the PCs.

Interrogation Room: Zorg interrogates prisoners here. If the PC is male, he will strap him to a chair, shine bright lights in his face, and attempt to intimidate him. He will play Kindred propaganda films which describe the superiority of the Kindred. If Zorg cannot intimidate the PC, he will try truth serum.

If the PC is female, Zorg will question her last. He believes a female would know little, and will talk to her in his office. Unless he was injured by the female PC, he will act as a friend, and may even try to charm her.

Lower Ranking Officer's Rooms: There are two private bedrooms for lower ranking officers. Each will contain a bed, a desk next to the bed with a computer (for military reports), and a private restroom.

Lunt, the second in command, has one of the bedrooms. While off duty he will be here, in the mess hall or in the recreation hall. On duty he will be in the control room or carrying out Zorg's orders on the planet.

Travis has the other bedroom. Travis will usually be found here, in the recreation room, or reporting to Zorg in his office.

Mess Hall: This room contains 2 tables which can hold 7 people each. There is a food processor here which will prepare tasteless Kindred food.

The Recreation Room: The recreation room consists of a gym for practicing hand to hand combat and an unofficial firing range (the Kindred use the lid to the heating unit as backing for a picture of the Phychi president). They also have a holoviewer and some video tapes of combat.

Ship Repair Room: The ship repair room contains mechanical tools, electronics, extra parts for ship's systems (engines, life support, sensors, and so on), a vacuum welder (does 2d6 K armor piercing, no range), extra space suit parts, and patches for sealing holes in ship's walls or spacesuits.

Science Laboratory: This is a chemistry laboratory. Here the ship's scientist prepares the truth serum and analyzes the Rheri gem. PCs may, with the appropriate sciences, make sleep gas from the chemicals stored here. There are also 2 syringes filled with truth serum here.

If they search, the PCs can also find the chemical report on the Rheri gem. It states that the metal around the gem is unidentifiable and was undamaged by powerful acids. The gem itself resembles diamond, but has a radically different crystalline structure. The scientist also has the translation of the inscription (see the Rheri Gems).

Storage Room: This storage room contains random things (no weapons) like mops, broken tools, computer paper, replacement parts for the food processor, extra blankets, and uniforms.

Weapons' Rooms: Each weapon room contains a Rocket Launcher for attacking other ships. Here the gunner operates the weapon.

POSSIBLE SOLUTIONS

The players may capture the Kindred soldiers on the planet, possibly by releasing the miners to help them fight. They may get rid of the Kindred by sneaking onto their warship, and causing it to warp out (and hopefully get lost) in space. Another possibility is taking over the warship by pouring sleep gas in the ventilation unit. The players could try to attack the Kindred in ship to ship combat, but they are likely to lose, and they'd better have evidence of Kindred misbehavior because attacking a Kindred ship is an act of war.

EPILOGUE

If the players save the miners, they will become heroes. They will receive good press in Phychi and other Alliance media.

If the PCs have miners as witnesses, the Alliance High Council will rule that the Kindred are guilty of misbehavior and must pay a fine. The High Council will state that Zorg acted on his own, without orders from the Kindred government.

In reality, the Kindred government knew the exact situation on Aldebaran VII, but did not order Zorg to stop. They knew that Phychi citizens had been kidnapped, and that the planet had already been claimed by the Phychi.

GENERAL ZORG'S FATE

If the PCs are successful, the Kindred will deny all knowledge of General Zorg's actions, and will put the blame on him. Zorg will face execution if he returns to Garro, the Kindred homeworld.

Zorg will feel betrayed by the Kindred, and will go renegade, stealing the warship. Most of his crew will join him, as they also face discipline by the Kindred government. Zorg and his crew will become space pirates. Zorg may be an enemy of the PCs or a friend, depending on how they treated him.

TRAVIS' FATE

If the PCs do not discover that Travis is a Kindred spy, he will return to spying on Theris Mining and Manufacturing. If the PCs discover Travis' identity and capture him, then he will be held by the Phychi. Travis may be imprisoned, escape, or be traded back to the Kindred for Phychi spies at the GM's discretion.

If Travis escapes, he will go back to the Kindred.

LEADING INTO OTHER ADVENTURES

This scenario can lead into other adventures. Lyman could become the PCs' permanent boss. The PCs may wish to search other planets for Rheri artifacts. Or they may wish to hunt down Zorg.

Travis and Zorg may steal the Rheri gems, and the PCs will be given the mission of hunting them down.

The starship provided to the PCs could become their regular ship for Phychi-backed missions.

THE RHERI GEMS

There are 3 Rheri Gems. When the gems are placed together on one person, they function as a device. It only works 4 times, then it must recharge for 1 day. The device must be in contact with a living being in order to recharge. In essence, it harmlessly feeds off the sentient life force. The device is in crude telepathic contact with the user. When the user is under stress or otherwise mentally activates the device, the gems project an illusion of whatever the character concentrates on.

Maintaining a consistent illusion requires concentration: if the character is attacked, engages in combat, or is otherwise distracted, he or she must make an EGO roll or the illusion shifts suddenly.

Cost Power

- 11 Mental Illusions 8d6 Limited Uses: 4; recharges after 1 day (+1). It takes all 3 gems to work: +1/2 Limitation The character fall to zero DCV and must concentrate one phase before using the device: +1 Limitation. END cost from user: 8

EQUIPMENT LYMAN PROVIDES FOR THE PCS

Lyman will provide any equipment player characters request, within reason. She will specifically give the PCs the following:

1. Armor: 6 H PD and 6 H ED (Hardened), it resembles a jumpsuit, and covers all locations except the head.
2. Tiny Radio: It has a battery life of 1 day. It fits in the ear like a hearing aid, and functions primarily as a communicator between the PCs.
3. Laser Pistols: 2d6 K, 6 shots/clip, +0 OCV, -1/3".
4. 3 Spare Laser pistol clips.

KINDRED SOLDIER

These soldiers are worse than the average player character, and total fewer points.

KINDRED SOLDIER				
Val	Char	Cost	75+	Disadvantages
13	STR	3	2	Kindred Military Package Bonus
14	DEX	12	2	Character minimums
11	CON	2	8	Watched by Kindred Military, 11-
10	BODY	0	8	Racist and narrow minded:
11	INT	1		common, irrational
8	EGO	-4		
11	PRE	1		
10	COM	0		
5	PD	2		
4	ED	2		
3	SPD	6		
5	REC	0		
22	END	0		
23	STUN	0		
Cost Skill				
2	Familiarity: Small arms			
1	Fam: Thrown knives			
1	Fam: Grenades			
1	Fam: Ship to ship weapons			
1	Fam: Zero-G combat			
2	Military Procedures 11-			
0	Kindred language			
2	Language: Tradespeak			
5	+1 level with small arms			
	"The Kindred Way"			
	Martial Arts	OCV	DCV	Effect
4	Choke hold	-2	-2	STR/5 NND
3	Chop	-1	0	STR/15 K
3	Punch	+1	0	+2d6
3	Choice 1 of these skills:			
	+1 with hand-to-hand combat for guards			
	For technicians:			
	Navigation 11-			
	Mechanics 11-			
	Pilot 12-			
	Sensors Operation 11-			
Costs:	Char.	Skills	Total	
	25	+ 28	= 53	
OCV: 5; DCV: 5; ECV: 3; Phases: 4, 8, 12				

Equipment Carried by Kindred Soldiers

Laser pistol: 2d6 K, 6 shots/clip, 14- activation roll

1 spare laser pistol clip

1 throwing knife

Kindred soldiers wear 6 H PD and 6 H ED (Hardened) armor with a 14- activation roll.

TRAVIS

TRAVIS					
Val	Char	Cost	75+	Disadvantages	
13	STR	3	2	Package Bonus	
20	DEX	30	2	Characteristic minimums	
11	CON	2	8	Watched by the Kindred	
10	BODY	0		Military, 11-	
13	INT	3	8	Cowardly and treacherous:	
8	EGO	-4		common, irrational	
15	PRE	5	1	Distinctive looks: black hair slicked	
18	COM	4		back	
6	PD	3	15	3d6 unluck	
5	ED	3			
3	SPD	0			
7	REC	4			
22	END	0			
23	STUN	0			
Cost Skill					
3	Persuasion 12-				
3	Sleight of Hand 13-				
3	Pilot 13-				
5	Stealth 13-				
3	Streetwise 12-				
3	Breakfall 13-				
3	Bribery 12-				
3	Bugging 12-				
3	Concealment 12-				
3	Demolitions 11-				
3	Forgery 11-				
2	KS: poisons				
2	KS: Kindred military procedures 11-				
Languages					
4	Phychi				
2	Tradespeak				
0	Kindred (native)				
Combat					
2	Fam: small arms				
1	Fam: Thrown knives				
1	Fam: grenades				
1	Fam: Ship to ship weapons				
1	Fam: Zero g combat				
15	+3 with small arms				
"The Kindred Way"					
10	Martial Arts	OCV	DCV	Effect:	
	Choke hold	-2	-2	STR/5 NND	
	Chop	-1	0	STR/15 K	
	Punch	+1	0	+2d6 K	
Costs:	Char.	Skill	Total	Disadv.	Base
	53	+	75	=	128
				=	53
				+	75
OCV: 7;DCV: 7; ECV: 3 Phases: 4, 8, 12					

Equipment carried by Travis

Laser pistol: 2d6 K, 6 shots/clip, 2 spare clips
 5 poison capsules: must be eaten or drunk, causes 3d6 STR drain.
Physical Description: Travis is average height, with black hair slicked back off the face. He has rough skin and features, and is in good health. Travis tends to smile bitterly.

Personality: Travis is treacherous, and enjoys betraying people. However, Travis is somewhat of a coward. He will consider his own safety first — he will not fight for the Kindred if it looks dangerous, but instead will try to escape.

Travis fancies himself to be quite persuasive and charming.

ZORG

ZORG					
Val	Char	Cost	75+ Disadvantages		
18	STR	8	2	Kindred Military Package bonus	
18	DEX	24	2	Characteristic minimums	
13	CON	6	8	Watched by Kindred Military, 11-	
13	BODY	6	8	Overconfident: Common, irrational	
18	INT	8	4	Greedy: Common, irrational	
13	EGO	6	5	Lame: Wounded right leg	
20	PRE	10	4	-2" to running (4" combat move)	
10	COM	0	5	Distinctive looks: Dueling scar on face, Not concealable	
8	PD	4	39	Villain Bonus	
7	ED	4			
3	SPD	2			
8	REC	2			
26	END	0			
29	STUN	0			
Cost Skill					
3	Bureaucratics 13-				
3	Concealment13-				
3	Interrogation 13-				
3	Persuasion 13-				
3	Resistance				
3	Navigation 11-				
5	Pilot 14-				
3	Sensors Operation 11-				
3	Tracking 11-				
2	KS: chess 11-				
	Languages				
0	Kindred (native)				
2	Phychi (fluent)				
2	Tradespeak				
	Combat				
2	Small Arms				
1	Thrown Knives				
1	Grenades				
1	Ship to ship weapons				
1	Zero G combat				
5	Military Procedures 14-				
16	+2 levels with all combat				
	"The Kindred Way"				
	Martial Arts	OCV	DCV	Effect	
4	Chock Hold	-2	-2	STR/5 NND	
3	Chop	-1	0	STR/15 Killing	
3	Punch	+1	0	+2d6 strike	
Costs:	Char.	Skills	Total	Disadv.	Base
	80	+	72	=	152
				=	77
				+	75
OCV: 6 DCV: 6; ECV: 4 Phases: 4, 8, 12					

Equipment Carried by Zorg

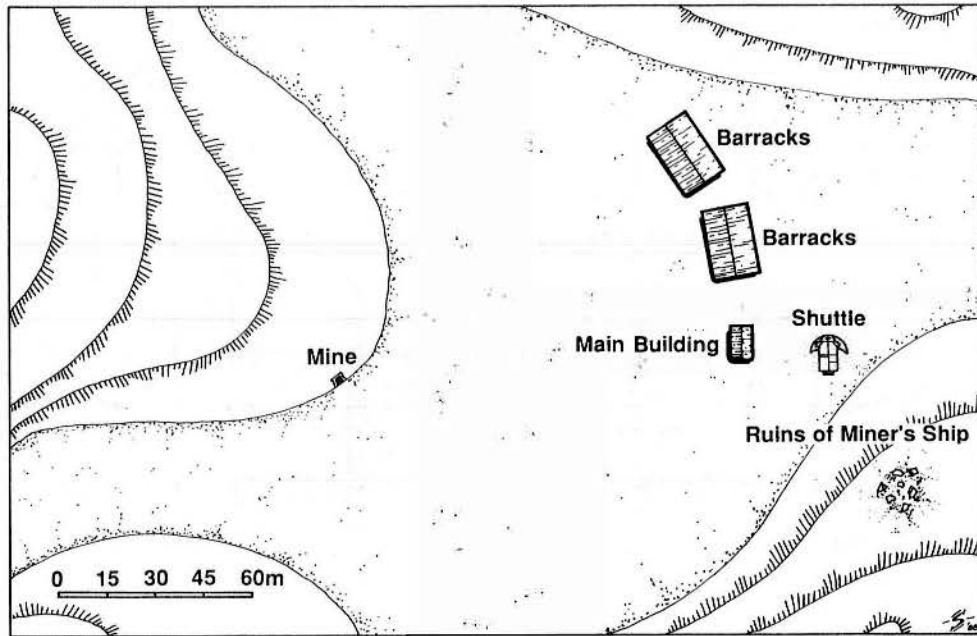
Laser Pistol 2d6 K, 6 shots/clip, 14- activation roll
 3 extra laser pistol clips, Throwing Knife: 1d6 + 1 K
 He wears 8 H ED, 6 H PD (Hardened) armor, 14- activation roll
 Blue Rheri Gem

Physical Description: Zorg is large, muscular, slightly taller than average, but stockier. Zorg walks with a slight limp from a wound in his right leg. He also has a dueling scar on his right cheek, which he wears with pride.

Zorg has dark brown hair. His features are rough, and his eyes are large and dark. He wears a Kindred general's uniform, with black boots and a short dark red cape.

Personality: Zorg is greedy, overconfident, and very prideful. He talks loudly, and expects obedience from all. While talking, Zorg likes to emphasize his point by slamming his fist on his desk.

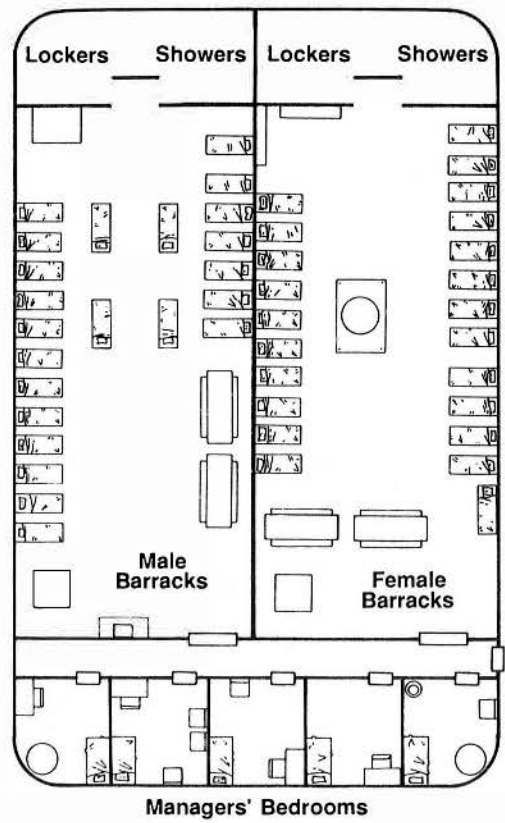
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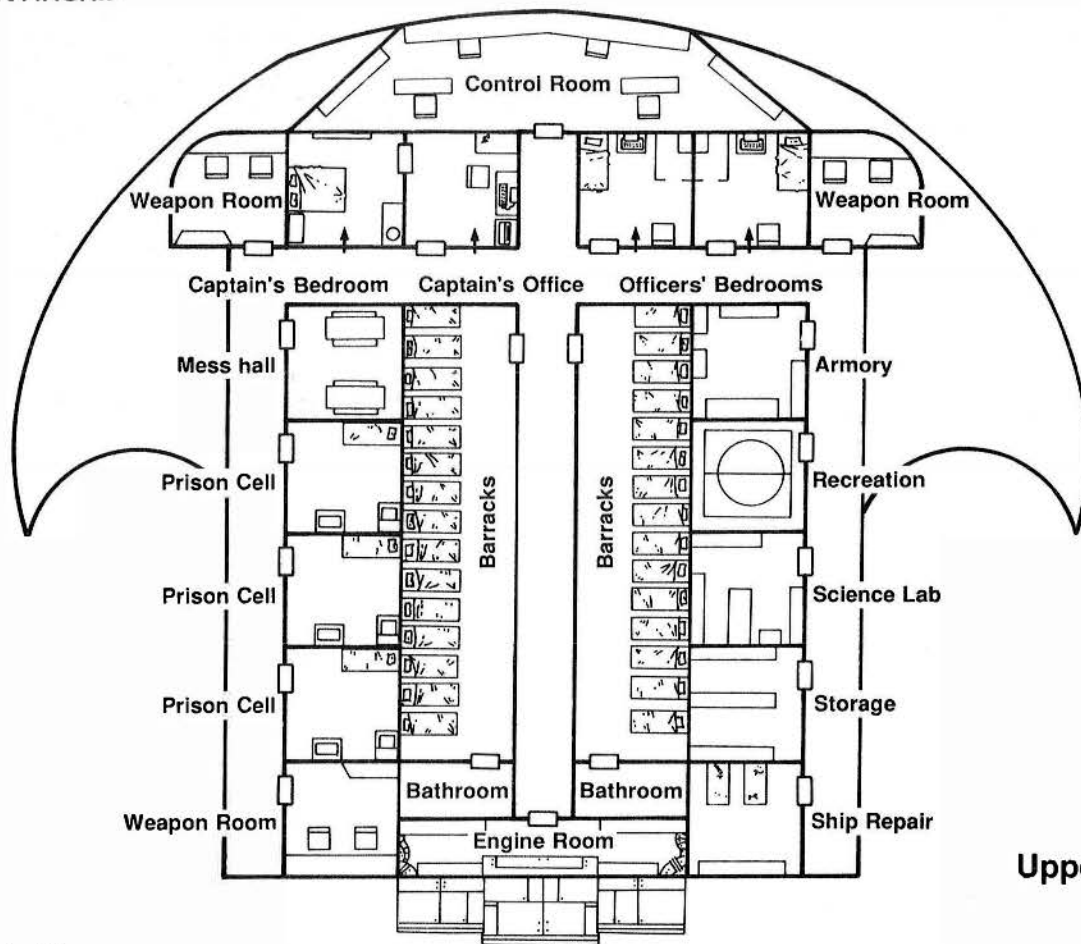
MAIN BUILDING



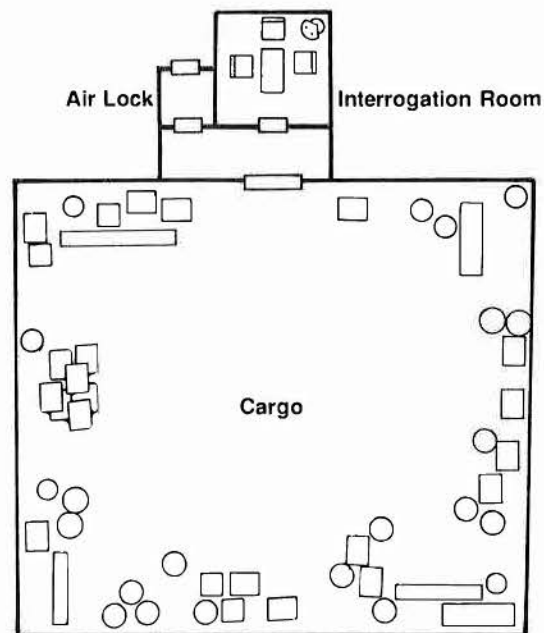
BARRACKS



KINDRED WARSHIP



Upper Level



Lower Level

BIBLIOGRAPHY

The following movies, television shows, and books can serve as resources to any GM who intends to run *Star Hero*. They can be especially important to GMs who wish to run a particular theme. Moreover, the majority are, in their own right, good examples of science fiction.

WAR

Books: *Moon is a Harsh Mistress* and *Starship Troopers*, by Robert Heinlein; *The Forever War*, by Joseph. Haldeman; *Mercenary*, by Jerry Pournelle; *Bolo*, by Keith Laumer; *The Hammers Slammers* series, by David Drake; *War of the Worlds*, by H.G. Wells; *Dragon Riders of Pern*, by Anne McCaffery; *Dune*, by Frank Herbert; *Ender's Game*, by Orson Scott Card.

Movies and Television: Aliens; the Star Wars trilogy; War of the Worlds; Enemy Mine; The Last Starfighter; Dr. Strangelove; Battle Star Galactica (TV); V (TV); The Invaders (TV).

GENERAL ASTRONOMY

Books: *Astronomy: Fundamentals and Frontiers*, by Jastrow & Thompson; *Astronomy: The Cosmic Journey*, by Hartman; *Universe Guide to Stars and Planets*, by Ridpath and Tirion.

BUSINESS

Books: *Space Merchants*, by Frederick Pohl; *The Trouble Twisters* series, by Poul Anderson.

Movies: Alien; Aliens; Metropolis; Robocop; Rollerball; Max Headroom (TV).

ESPIONAGE

Books: *Stainless Steel Rat*, by Harry Harrison; *The Cool War*, by Frederick Pohl; *Friday*, by Robert Heinlein. the *Flandry* series, by Poul Anderson.

Movies and Television: Star Trek, old and new series; Star Trek — the Motion Picture; 2001; 2010; The Day the Earth Stood Still.

POLICE WORK AND MYSTERIES

Books: The *Daneel Olivaw* series, by Isaac Asimov.

Movies: Alien Nation; Blade Runner; Robocop; Escape From New York; Outland.

THIEVERY

Books: *Stainless Steel Rat*, by Harry Harrison; *Neuromancer*, by William Gibson; *Napoleon Disentimed*, by Hayford Pierce.

Movies: Time Bandits.

DIPLOMACY AND POLITICS

Books: *Dune*, by Frank Herbert; *Mote in the God's Eye*, by Larry Niven and Jerry Pournelle; *The Foundation* series, by Isaac Asimov; *Bio of a Space Tyrant*, by Piers Anthony; *The Dispossessed*, by Ursula Le Guin.

Television: Star Trek, old and new series.

EXPLORATION

Books: *Neutron Star*, *Ringworld*, and *Ringworld Engineers*, by Larry Niven; *Rendezvous with Rama*, by Arthur C. Clarke; *Martian Chronicles*, by Ray Bradbury; *Journey to*

the Center of the Earth, by Jules Verne; *Gateway*, by Frederick Pohl; *Left Hand of Darkness*, by Ursula Le Guin; *Titan*, by John Varley.

ARTIFICIAL INTELLIGENCE AND ANDROIDS

Books: The *Robot* series, by Isaac Asimov; *City*, by Clifford Simak; *The Humanoids*, by J. Williamson; *Do Androids Dream of Electric Sheep*, by Phillip Dick.

Movies and Television: Silent Running; 2001; Metropolis; Blade Runner; Alien; Westworld; Futureworld.

POST HOLOCAUST

Books: *Day of the Triffids*, by J. Wyndham; *Alas Babylon*, by Pat Frank; *Lucifers Hammer*, by Larry Niven and Jerry Pournelle; *Make Room Make Room*, by Harry Harrison; *The White Plague*, by Frank Herbert; *The Postman*, by David Brin.

Movies: Soylent Green; Wizards; A Boy and his Dog; the Mad Max trilogy; On the Beach; Dawn of the Dead; Damnation Alley; Night of the Comet.

HUMAN EVOLUTION AND MUTANTS

Books: *Lensman*, by E. E. "Doc" Smith; *Childhood's End*, by Arthur C. Clarke; *Time Machine*, by H.G. Wells; *Stranger in a Strange Land*, by Robert Heinlein; *Deathworld*, by Harry Harrison; *Hellstrom's Hive*, by Frank Herbert; *Serpent's Reach*, by C.J. Cherryh; the *Wildcards* series.

Movies and Television: Star Trek II; Scanners; Videodrome; Dreamscape; Planet of the Apes.

ANTI-UTOPIAS AND UTOPIAS

Books: *We*, by Eugene Zamaitin; *1984*, by George Orwell; *Brave New World*, by Aldous Huxley; *Fahrenheit 451*, by Ray Bradbury; *New Atlantis*, by Sir. Francis Bacon; *Utopia*, by Sir. Thomas Moore.

Movies and Television: Barbarella; Brazil; 1984; Logan's Run; Max Headroom; Zardoz.

ALTERNATE DIMENSIONS

Movies and Television: Buckaroo Banzai; Fantastic Voyage; The Wizard of Oz; King Kong; Land of the Lost (TV).

TIME TRAVEL

Books: *A Wrinkle in Time*, by Madeline L'Engle; *Paratime*, by H. Piper; *Millenium*, by John Varley; *Lest Darkness Falls*, by L. Sprague De Camp; *Pebble in the Sky*, by Isaac Asimov; *Time Machine*, by H.G. Wells; *A Connecticut Yankee in King Arthur's Court*, by Mark Twain.

Movies and Television: Star Trek IV; Terminator; Dr. Who.

HORROR

Movies/Television: Alien; Invasion of the Body Snatchers; Night of the Living Dead; The Thing; The Blob; Saturn 5.

CYBERPUNK

Books: *Neuromancer*, by William Gibson; *Street Lethal*, by Steven Barnes; *The Ophiuchi Hotline*, by John Varley; *Hardwired*, by Walter Jon Williams.

Movies and Television: Blade Runner; Robocop; Tron; Max Headroom (TV).

HONORABLE MENTION

Books: *Hitchhikers Guide to the Galaxy*, by Douglas Adams.

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