TRAVELLER

Core Rulebook

Science-Fiction Adventure in the Far Future

TRAVELLER

Core Rulebook

CREDITS

Classic Traveller
Marc Miller

Loren Wiseman, John Harshman, Frank Chadwick, Darryl Hany, Winston Hamilton, Tony Svajlenka, Scott Renner, Doug Poe, David MacDonald, Wayne Roth, Paul R. Banner.

Mongoose Traveller

AUTHOR
Gareth Hanrahan

EDITOR
Chris Longhurst

INTERIOR ILLUSTRATIONS
Leonardo Borazio, McLean Kendree, Rich Longmore, Carlos Nunez de Castro Torres, Robin Everett-McGuirl, Travis Leichssenring

SPECIAL THANKS
Marc Miller, Tom O'Neill, Brian Caball, Aidan Rafferty, Robert Eaglestone, Loren Wiseman, James Maliszewski, Donald McKinley, Constantine Thomas, William Hostman, Martin Costa

PLAYTESTERS
Exploration

Kris Crofts, Claire Mooney, Denis Ryan, Stephen Harte, Tom O'Neill, Padraig O'Sullivan, James Maher, Geoff Russell, Brian Mulcahy, Rob Feeney, Mike O'Brien, Jp Corkery

Survey

Jim Adams, Steve Alban, William Allen, Tim Bancroft, Michael Barger, Roger Barr, Ty Beard, Al Beddow, Michael R. Blair, Mark Bloss, Chris Bluflodt, Chris Boote, Colm Brophy, Wyatt Bruce, Brad Burklow, Jeff Burklow, Mark Burr, Timothy Calesa, Greg Chalik, Adam Coker, Ross Compton, Martin Costa, Nathan Cowan, Bradley Crooks, Tim Davis, Alexis Dempsey, Paul Dempsey, Jason deYoung, Steve Dycus, Rob Eaglestone, Phil Eaton, Dave Elrick, Alexander Fennell, Ronaldo Fernandes, Neil Ford, Chris Garland, Chris Gauvin, Jim Geldmacher, Omer Golan-Joel, Amaryllis Graybill, Caroline Graybill, Mark Graybill, Toni Graybill, Stefab Green, Sean Guttman, Sharis Guttman, Aragorn Hansard, David Hazlewood, Kevin Hazlewood, Richard Hazlewood, Andrew Head, Phillip Hightower, Sean Hitchings, Andreas Hoetzel, William F. Hostman, Stephanie A. Hostman, Tammalyn Hostman, Rory Hughes, Anthony C. Hunter, Dave Insel, Julia Iskett, Stephen Jarvis, Steven W. Jennings, Hilary Jones, Mark Jones, Jeremy Kelley, Jason Kemp, David Kilfoyle, Chris Kollias, Dan LaBarge, Lev Lafayette, Andy Lilly, Kevin Livingstone, Tony Love, Stuart Machin, Christine Manz, Cornelia Manz, Andy Martone, Dale C. McCoy, Jr., Neil McGurk, Donald McKinney, Christopher Morrell, Pete Mujica, Tina Mujica, Joseph Osborne, Warren Okuma, Erik E. Pikey, David Pulver, Tim Pulver, Eric Rathbun, James Record, Warren Ricker, Tom Roberts, John Robertson, Robert Rosenthal, Christopher Rule, Fotis Sagonas, Ben Sennitt, Allen Shock, Lane Shutt, Luke Silburn, David Silverman, Alex Smith, Benjamin W. Smith, Jerry J. Stephens, Logan Stowers, Edward Sturges, Dimitris Stylos-Sagonas, Larry Taylor, Constantine Thomas, Lloyd Thomas, Christopher B. Thrash, Larissa Tonkin, Lee Torres, Nick Townsend, Thomas Tucholski, Joseph Ulrich, Joni Virolainen, Daniel Wall, Troy Wells, Alex Whittaker, Ian Young

CONTENTS

TRAVELLER

Traveller is a science fiction roleplaying game of the far future. Humanity has gone to the stars and found them crowded with other forms of life and other sentient races, and science and technology have advanced vastly over the present day – but the essential nature of humanity is unchanged. Life continues as it does today, only spread out over the sea of stars. A mighty Imperium unites thousands of star systems under a single rule, but it is beset by enemies both internal and external.

The Imperium commands the space between the stars, ensuring that civilisation endures and trade continues. Megacorporations and feudal lords conduct the bulk of this trade, but there will always be a place for the free trader – hardy travellers and adventurers on the fringes of known space, dealing in strange goods and smuggled cargoes, doing whatever they can to make a credit.

While the *Traveller* rules can be used to model almost any science fiction novel, movie or setting, the traditional setting for games is the Third Imperium of Mankind, the third great empire to stretch across the stars. In the Third Imperium setting, the players take on the roles of tramp merchants and mercenaries, wandering the galaxy in search of profit and adventure.

Players
Most of the participants in a *Traveller* game will be **players**. Usually, each player generates a character using the Character Creation rules; that character becomes the player's avatar in the game world. These player characters are the central protagonists of the game and scenarios revolve around their adventures and actions.

The Referee
One of the participants is the **Referee**, who describes the world around the characters, presents them with challenges and dangers, and takes on the role of the supporting cast and the antagonists. The Referee creates the basic outline of the scenarios that the player characters encounter and resolves the results of their actions using the rules in this book as a guideline.

Games
Traveller may be played in any of three basic configurations – scenario, refereed campaign, or shared campaign.

In a scenario, the players embark on a journey or adventure overseen by a Referee. The Referee determines what dangers the characters will face, from hostile aliens or criminals to solar flares or automated defence systems, or even political intrigue and deception. The players choose how their characters will react and overcome these obstacles. For example, the characters may be hired to bring a cargo from one world to another, but a rival merchant is trying to stop them and has hired a band of mercenaries to attack the characters' ship en route. The characters have to get the cargo through safely.

A scenario can be a one-off game, using characters written by the Referee specifically for that game and discarded afterwards, or it can be part of a campaign. A scenario takes one or more game sessions to complete.

A campaign is a series of scenarios, charting the continuing adventures of a group of player characters. A campaign can be continuous or episodic. In a continuous campaign, each scenario follows on almost immediately from the end of the last one and the fuel, resources and money available to the characters is carefully tracked. In an episodic game, there are longer gaps between scenarios, and the game focuses only on the exciting and conflict-filled parts of the characters' lives.

A campaign can also be refereed or shared. In a refereed campaign, there is a single Referee for the whole game, who sets up the whole universe that the player characters adventure in. Refereed campaigns can have long story arcs and ongoing plotlines, taking multiple scenarios to resolve. In a shared campaign, the position of Referee rotates from player to player – for example, when the characters' ship Jumps to a new star system, a different player takes over as Referee and presents the dangers and opportunities in this new system.

Campaign Ideas
A few suggestions to get the ball rolling:

The Trader Campaign: The player characters form the crew of a free trader merchant vessel, taking whatever cargos they can get to keep their spacecraft aloft and in one piece. Inspiration for games like this could be the TV series *Firefly* or the computer games *Elite*, *Privateer*, or *X*.

The Military Campaign: The player characters are all members of a military unit, usually veterans of the same career (see page 8 for more on careers). They participate in campaigns, skirmishes and other military activity. Inspiration could come from the *Honor Harrington* novels, the film *Aliens*, or *Starship Troopers* – the book, the animated series or the film.

The Explorer Campaign: In a game of this type the player characters go beyond the borders of known space, looking for objects, planets and civilisations of value or curiosity. The characters will have to be highly self-sufficient to survive away from known space for long stretches. For inspiration look no further than the original series of *Star Trek*.

The Traveller Campaign: The traditional *Traveller* campaign features a little of everything. The characters will go from exploring abandoned alien ziggurats to rescuing missing pets to taking on the local crime lord in a protracted gang war. Inspiration could come from anywhere.

Die Roll Conventions

The *Traveller* system uses two six-sided dice to resolve most actions. Some situations involve fewer or more dice. Accordingly, a quick discussion of various terminology and conventions is needed before proceeding.

1d6/2d6: To avoid writing 'roll two six-sided dice and add them together' over and over again, *Traveller* uses the abbreviation 'roll 2d6'. Where you see 'roll 2d6' read 'roll two six-sided dice and add them together'. Sometimes you may also see '1d6', '3d6' or other numbers of 'd6'. This simply means roll one six-sided die, three six-sided dice, or however many six-sided dice are indicated, and add them together to gain the final result.

d66: This is shorthand for a special way of rolling two six-sided dice. Before rolling nominate one die as the 'tens' die and one as the 'units' die, to give you a two-digit number between 11 and 66. Some numbers cannot be rolled on a d66, giving you a total of 36 possible outcomes.

Check (or Throw): To determine if a character succeeds or fails at a particular task, the player must make a check. To make a check, the player rolls 2d6 and adds any appropriate Dice Modifiers (such as a skill his character possesses, or a bonus from a piece of equipment). If the total is equal to or greater than the target number for that check, he succeeds. A check will usually have a skill or characteristic associated with it. For example, a check of 'Dex 8+' means 'roll 2d6, add your Dexterity Characteristic Modifier, and you succeed if you have a total result of 8 or more'.

Target Numbers: In many checks, the player needs to roll equal to or above a specific number (usually, eight or more). This is denoted by a number followed by a plus, such as 8+ or 10+.

Natural 2/Natural 12: Some rolls refer to a 'natural' number – this is the actual number rolled on the dice before any modifiers are applied.

Dice Modifier (abbreviated to DM): A number to be applied to a die roll before it is used. Dice Modifiers are preceded by a sign, which indicates if the number is to be added to or subtracted from the roll. For example, a Dice Modifier of –2 indicates that two is to be subtracted from the roll; a Die Modifier of +4 indicates that four is to be added to the roll.

EXAMPLE OF PLAY

Three players (Chris, Tom, and Claire) are playing Traveller. *Their characters are, respectively: Morn, a thuggish ex-barbarian; Erik, a spy and agent, and Kathya, a pilot and technician. They're currently aboard their ship, a Free Trader. In-character speech is denoted by (parentheses).*

Referee: Anyway, you've just jumped to the Cogri system. You're about two million kilometres out –
Chris (Morn): 'Accurate' as usual, Kathya! Only twice as far away as

we should be.
Claire (Kathya): The longer it takes us to get to the starport, the longer it is before you get us into trouble.
Referee: Ahem. As I was saying, you're about two million k out, and you're picking up a distress call.
Tom: My character will put the distress call on the screen.
Referee: It's audio only. 'This is Free Trader *Beowulf*, calling anyone... mayday, mayday, we are under attack... main drive is gone...turret number one not responding ... mayday...'
Claire: How close is the *Beowulf*?
Referee: No navigational transponder showing... give me a Sensors check, please.
Claire: I rolled a 9, plus Dice Modifiers gives me a 12.
Referee: You're picking up one ship about 80,000k away. Minimal heat, no power, looks dead in space.
Tom: No power? Then where's the transmission coming from?
Referee: Er, minimal power then. Power plant's down. The distress call continues 'Mayday... losing cabin pressure fast...calling anyone... please help...', then starts repeating itself.
Claire: Life signs?
Referee: Not at this range.
Claire: But I rolled a 12...
Tom: Any sign of the attackers?
Referee: Nope.
Tom (Erik): Something isn't right here. Either the *Beowulf* was hit a long time ago, in which case someone else should have checked out the call before us, 'cos we're not that far from the planet... or she was only hit a short time ago, and the attacker's still nearby. Nothing on the scope at all?
Referee: You're in open space. Unless they're hiding behind a speck of space dust...
Claire (Kathya): Nothing. They could have really good stealth technology.
Chris: Or be hiding on the wreck of the *Beowulf*...
Tom: If it was an internal problem like hijackers, he wouldn't have mentioned the turret being hit.
Tom (Erik): We've still got to investigate. There could be survivors. Morn, get to the turret and power up the guns. Kathya, bring us in. I'll get my vacc suit on and get ready to board.
Referee: As you approach the ship, you see the unmistakable scars of laser hits, er, scarring the hull. One of the airlocks has been blown open.
Tom (Erik): Looks like she's been boarded. I'll jump across. Don't dock – if there are bad guys still over there, then the last thing we want is them walking on board our ship.
Claire: Life signs?
Referee: Faint traces of three. Could be three people in low berth freezer-tubes, or three people in hibernation...or three recently-deceased corpses that're still cooling. Tom, you go through the front airlock and push off, drifting for several seconds before bouncing off the hull of the other ship. Your magnetic boots catch on, and you can walk over the skin of the ship towards the airlock, gingerly stepping over the areas melted by the lasers.
Tom: Do I need a Vacc Suit check or a Zero-G check or anything?
Referee: Er...do you have both skills?

Tom: Well, Zero-G level zero, so *technically* yes.

Referee: Nah, you don't need a check. You make it across fine.

Tom: We'll keep communications channels open, and I'll feed my suit's cameras back to the others so they can see what I see.

Referee: Sure. Are you going into the airlock?

Chris (Morn): *bzzt* I'll cover you with the laser turret.

Tom: Where 'cover' is a synonym for 'burn me to a crisp if you fire that thing anywhere near me when I'm only wearing a vacc suit. It's like covering me with a nuclear missile.

Chris: I'd call that pretty damn covered.

Referee: You step through the airlock, into the darkened corridors of the *Beowulf*. Air's gone...no artificial gravity... The beam from your suit's torch cuts through the air, illuminating droplets of blood floating like little worlds. Give me a Recon roll, please.

Tom: Rolled a...6. Failed, unless it's an unusually easy one.

Referee: It's not. The cargo bay's splattered with blood, but all the cargo appears to still be intact, although it's hard to tell with all the crates drifting around. It looks like the upper deck might still have pressure – the stairwells automatically iris shut if this lower deck is breached.

Tom: I'll go up and knock, I guess.

Referee: You tap your gauntlet against the metal... and there's an answering knock from above. You catch a glimpse of some movement behind you... and suddenly, the sensor feed from Erik's suit goes out!

Claire (Kathya): Erik! Can you read me? Erik! Erik? Erik?

TECHNOLOGY LEVELS

The concept of Technology Levels (TLs) runs through *Traveller*. Technology Levels measure the scientific capacity of a world and the complexity and effectiveness of a piece of equipment. The Technology Level scale starts at 0; the Imperium's most advanced scientists are probing the upper boundaries of TL 15, but most core worlds range between 10 and 13. Out on the fringes of the Imperium in sectors like the Spinward Marches, Technology Levels vary wildly. Isolated systems that are visited only once or twice a generation might have slipped back into the darkness, losing technology to war or disaster. On other worlds, secret research bases, isolationist colonies or Ancient relics hold scientific secrets of vast worth.

Even on a low-technology world, there might be examples of higher technology. A warlord on a primitive planet might enforce his rule with advanced weapons imported from offworld; colony worlds are often dependant on their sponsor civilisation for supplies and support. Some low-technology worlds are aware of the larger universe, and have consciously decided to reject higher technology.

TL 0: (Primitive) No technology. TL 0 species have only discovered the simplest tools and principles, and are on a par with Earth's Stone Age.

TL 1: (Primitive) Roughly on a par with Bronze or Iron age technology. TL 1 science is mostly superstition, but they can manufacture weapons and work metals.

TL 2: (Primitive) Renaissance technology. TL 2 brings with it a greater understanding of chemistry, physics, biology and astronomy as well as the scientific method.

TL 3: (Primitive) The advances of TL 2 are now applied, bringing the germ of industrial revolution and steam power. Primitive firearms now dominate the battlefield. This is roughly comparable to the early 19th century.

TL 4: (Industrial) The transition to industrial revolution is complete, bringing plastics, radio and other such inventions. Roughly comparable to the late 19th/early 20th century.

TL 5: (Industrial) TL 5 brings widespread electrification, telecommunications and internal combustion. At the high end of the TL, atomics and primitive computing appear. Roughly on a par with the mid–20th century.

TL 6: (Industrial) TL 6 brings the development of fission power and more advanced computing. Advances in materials technology and rocketry bring about the dawn of the space age.

TL 7: (Pre-Stellar) A pre-stellar society can reach orbit reliably and has telecommunications satellites. Computers become common. At the time of writing, humanity is currently somewhere between TL 7 and TL 8.

TL 8: (Pre-Stellar) At TL 8, it is possible to reach other worlds in the same system, although terraforming or full colonisation are not within the culture's capacity. Permanent space habitats become possible. Fusion power becomes commercially viable.

TL 9: (Pre-Stellar) The defining element of TL 9 is the development of gravity manipulation, which makes space travel vastly safer and faster. This research leads to development of the Jump drive, which occurs near the end of this Tech Level. TL 9 cultures can colonise other worlds, although going to a colony is generally a one-way trip.

TL 10: (Early Stellar) With the advent of Jump, nearby systems are opened up. Orbital habitats and factories become common. Interstellar travel and trade lead to an economic boom. Colonies become much more viable.

TL 11: (Early Stellar) The first true artificial intelligences become possible, as computers are able to model synaptic networks. Grav-supported structures reach to the heavens. Jump–2 travel becomes possible, allowing easier travel beyond the one-Jump stellar mains.

TL 12: (Average Stellar) Weather control revolutionises terraforming and agriculture. Man-portable plasma weapons and carrier-mounted fusion guns make the battlefield untenable for unarmoured combatants. Jump–3 travel is developed.

TL 13: (Average Stellar) The battle dress appears on the battlefield in response to the new weapons. Cloning of body parts becomes easy. Advances in hull design and thruster plates means that spacecraft can easily enter atmosphere and even go underwater. Jump–4 travel.

TL 14: (Average Stellar) Fusion weapons become man-portable. Flying cities appear. Jump–5 travel.

TL 15: (High Stellar) Black globe generators suggest a new direction for defensive technologies, while the development of synthetic anagathics means that the human lifespan is now vastly increased. Jump–6 travel.

Higher Technology Levels exist (indeed, there is no theoretical upper limit) and may appear in other settings or be discovered by pioneering scientists in the Third Imperium.

Galactic Directions

North, south, east, and west are insufficient terms for referring to directions within the galaxy. Instead, the following conventions have achieved widespread acceptance when referring to direction: *Coreward* – toward the galactic core; *Rimward* – toward the rim of the galaxy; *Spinward* – towards the direction the galaxy is rotating (or spinning); *Trailing* – opposite the spin of the galaxy.

CHARACTER CREATION

In *Traveller,* a character's abilities and skills are determined largely by his training and past experience. Character creation begins with rolling your character's characteristics, six values that describe his beginning physical and mental capabilities. After determining characteristics and a few background skills from your homeworld, it is time to embark on a career. Each character goes through one or more four-year career terms, which give him various skills and benefits. There are risks associated with each career – serving a tour of duty in the Star Marines may give a character a grounding in combat and weapons use, but the character risks injury in battle. A term spent in a corporation is unlikely to get the character injured or killed, but won't usually give skills valuable in combat.

In addition to skills, characters can pick up benefits such as cash or contacts from a career. However, there are limits on how many career terms a character can go through – the risks of aging or injury mount up over time, and most characters will find themselves trying two or three careers. Do not be surprised if your character turns out quite different to how you originally anticipated!

After going through one or more careers and collecting the benefits, you can establish ties between your character and other player characters and pick a campaign package, both of which give extra skills.

Basic character generation should be done as a group by all the players. For generating characters solitaire, and for other alternate forms of character generation such as point allocation, see page 40.

CHARACTERISTICS

Every person and creature in *Traveller* has several characteristics that describe their base mental and physical potential. The basic characteristics for a human are:

Strength (Str): A character's physical strength, fitness and forcefulness.
Dexterity (Dex): Physical co-ordination and agility, reflexes. A character's Dexterity affects his accuracy in ranged combat and his reaction speed.
Endurance (End): A character's ability to sustain damage, stamina and determination. A character's resilience is based on his Endurance score, so a character with a low Endurance score will be very vulnerable in a firefight.
Intelligence (Int): A character's intellect and quickness of mind. Intelligence is used in a great many skill checks.
Education (Edu): A measure of a character's learning and experience. Education is also used in a great many skill checks.
Social Standing (Soc): A character's place in society. Characters with a high Social Standing can claim a noble title in the Imperium and will find life much easier thanks to their reputation and contacts.

Character Generation Checklist
Basic character generation uses the following steps:

1. Roll characteristics and determine characteristic modifiers.
2. *a.* Choose a homeworld.
   b. Gain background skills.
3. *a.* Choose a career. You cannot choose a career you have already left.
   b. Roll to qualify for that career.
   c. If you qualify for that career, go to Step 4.
   d. If you do not qualify for that career, then you can go to the Draft or enter the Drifter career. The Draft can put you back into a career you have been forced to leave, at your old rank. You can only apply for the Draft once.
4. If this is your first time on this career, get your basic training.
5. Choose a specialisation for this career.
6. *a.* Choose one of the Skills and Training tables for this career and roll on it.
   b. Roll for survival on this career.
   c. If you succeed, go to Step 7.
   d. If you did not succeed, then events have forced you from this career. Roll on the Mishap table, then go to Step 9.
7. *a.* Roll for Events.
   b. Optionally, establish a Connection with another player character.
8. *a.* Roll for Advancement
   b. If you succeed, choose one of the skills and training tables for this career and roll on it. Increase your Rank and take any bonus skills from the Ranks table for this career.
   c. If you roll less than the number of terms spent in this career, you must leave this career.
   d. Military characters (Army, Navy, Marines) can roll for commission instead of rolling for advancement.
9. Increase your age by 4 years. If your character is 34 or older, roll for Aging.
10. If you are leaving the career, roll for Benefits.
11. If you have left your current career, then go to Step 3 to choose a new career, or to Step 12 if you wish to finish your character. Otherwise, go to Step 5.
12. Finalise any Connections with other characters.
13. Choose a Campaign Skill Pack and allocate skills from that pack.
14. Purchase starting equipment and, if you can afford it, a spacecraft.

Social Standing	Sample Titles
11	Knight
12	Baron
13	Marquis
14	Count
15	Duke

To determine your character's characteristics, roll 2d6 six times and allocate them to the six basic characteristics in any order. Record them on the character sheet. Strength, Dexterity and Endurance are collectively referred to as 'physical characteristics'. Intelligence and Education are referred to as 'mental characteristics'.

For each characteristic, determine the characteristic Dice Modifier (DM).

CHARACTERISTIC MODIFIERS

Characteristic	Dice Modifier
0	−3
1−2	−2
3−5	−1
6−8	+0
9−11	+1
12−14	+2
15	+3

The maximum level for a characteristic for an unaugmented human character is 15.

SKILLS

Skills are the most important aspect of a character in *Traveller*, and are discussed in detail in the chapter starting on page 48. A character's proficiency in a skill is denoted by his level in that skill.

If a character has *no* level in a skill, then he is *untrained* and will suffer a −3 Dice Modifier when trying to use that skill.

If a character has *zero* level in a skill (Skill 0), then he is competent in using that skill, but has little experience. He does not get any bonus from his skill ranks when using that skill but at least he avoids the penalty for being untrained.

If a character has one or more level in a skill (Level 1, Level 2, and so on) then he is trained in that skill. Each rank represents several years of experience using that skill. A character with Level 2–3 in a skill is a skilled professional in that field. A character with Medic 2 could be a doctor; a character with Medic 4 is a famous surgeon or specialist.

Some skills have *specialities* – specialised forms of that skill. A character picks a speciality when he gains level 1 in a skill with specialities. For example, a character might have Engineer 0,

allowing him to make any Engineer skill checks without an unskilled penalty. He might then gain a level in Engineer, giving him Engineer (Jump drives) 1. He would make all Engineer checks involving Jump drives at a +1 DM, but would make all other Engineer checks at a +0 DM. A character can have multiple specialities in a skill – an engineer might have Engineer (Jump drives) 1 and Engineer (power plant) 2. He would make checks related to Jump drives with a +1 DM, checks related to power plants with a +2 DM and all other Engineer checks with a +0 DM.

BACKGROUND SKILLS

Before embarking on your careers, you get a number of background skills equal to 3 + your Education DM (1 to 5, depending on your Education score). You must take the skills listed for your homeworld; any extra skills can be taken from the education list.

Homeworld: Growing up on your homeworld gave you skills that depend on the planet's nature. You can select any skill that matches your homeworld's planetary description and trade codes. If you came from a planet already established by *Traveller* books or by the Referee, then consult those sources for the planet's description. Otherwise, just note down what traits you chose for your homeworld – you can generate the world later using the rules on page 167.

Agricultural:	Animals 0
Asteroid:	Zero-G 0
Desert:	Survival 0
Fluid Oceans:	Seafarer 0
Garden:	Animals 0
High Technology:	Computers 0
High Population:	Streetwise 0
Ice-Capped:	Vacc Suit 0
Industrial:	Trade 0
Low Technology:	Survival 0
Poor:	Animals 0
Rich:	Carouse 0
Water World:	Seafarer 0
Vacuum:	Vacc Suit 0

(The definitions for these terms can be found on page 181.)

Education: A formal education gives you a basic level of competence in various sciences and academic disciplines. Any character may choose from the following list:

Admin 0, Advocate 0, Art 0, Carouse 0, Comms 0, Computer 0, Drive 0, Engineer 0, Language 0, Medic 0, Physical Science 0, Life Science 0, Social Science 0, Space Science 0, Trade 0.

At this point, you are eighteen years old.

For example, Morn has an Education characteristic of 8, which has a DM of +0. He therefore has 0+3 background skills. He comes from a poor desert world, so he takes Animals 0 and Survival 0. He takes Drive 0 from the education list.

Name: *Alexander Lascelles Jamison* **Race:** *Human*
Age: *42* **Racial Traits:**
Homeworld: *High Population, High Technology*

Characteristics

Modifier	−3	−2			−1			+0			+1			+2			+3
Score	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Str																
Dex																
End																
Int																
Edu																
Soc																

Armour

Type:

Rating

Special Notes

Skills

Admin — 1	Drive ( ) — 0	Language ( )	Seafarer ( )
Advocate	Drive ( )	Language ( )	Seafarer ( )
Animals ( )	Engineer (*electronics*) — 1	Leadership	Sensors — 1
Animals ( )	Engineer ( )	Life Sciences ( )	Social Sciences ( )
Athletics ( )	Explosives	Life Sciences ( )	Social Sciences ( )
Athletics ( )	Flyer ( )	Mechanic — 2	Space Sciences ( )
Athletics ( )	Flyer ( )	Medic — 1	Space Sciences ( )
Art ( )	Gambler	Melee ( )	Stealth
Art ( )	Gunner (*turrets*) — 1	Melee ( )	Steward — 0
Astrogation	Gunner ( )	Navigation	Streetwise — 1
Battle Dress	Gun Combat (*slug pistols*) — 1	Persuade — 0	Survival
Broker — 1	Gun Combat ( )	Pilot (*spacecraft*) — 3	Tactics ( )
Carouse	Gun Combat ( )	Pilot (*small craft*) — 1	Tactics ( )
Comms — 0	Heavy Weapons ( )	Physical Sciences ( )	Trade ( )
Computers — 2	Heavy Weapons ( )	Physical Sciences ( )	Trade ( )
Deception — 1	Investigate	Recon	Vacc Suit
Diplomat	Jack of all Trades	Remote Operations	Zero-G

Finances

Pension

Debt

Cash on Hand
Cr. 40,000

Monthly Ship Payment
Cr. 162,175

Equipment

Equipment	Mass
Free Trader	*Plenty*

Total Mass =

Weapons

Weapon	Attack	Damage	P	C	S	M	L	VL	D	Notes
Blade	*Melee (blade)*	*2d6*	*0*	*−1*	*−*	*−*	*−*	*−*	*−*	

Career History

Career	Branch	Events	Rank	Title
Merchant	*Merchant*		*4*	*2nd Officer*
	Marine			
Entertainer	*Journalist*	*Ejected by a rival!*	*0*	

Allies, Contacts, Enemies, Rivals

Contact: Tash (player character)

Rival: Corrupt journalist!

CAREERS

Next, your character must take one or more career terms, representing his previous experiences and adventures before the start of the campaign. Each career term lasts for four years, even if a character fails a Survival roll and is forced to leave a career.

At many points during a career, a character will have to make a throw of some sort. Most of these throws are characteristic throws – roll 2d6, add the DM from the listed characteristic, and try to get a total higher than the listed value. A throw of Int 8+ means 'roll 2d6, add your Intelligence DM, and you succeed if you roll an 8 or more'. A few throws are skill checks, where you add any levels in that skill and the DM from an appropriate characteristic. For example, a throw of Gunnery 8+ would mean 'roll 2d6, add your Gunnery skill and the DM from an appropriate characteristic such as Dexterity, and get over 8'. If the appropriate characteristic is not obvious, consult the Skills chapter that starts on page 48.

In each career, there are three specialisations. Pick one of those when you enter the career.

Career Format

Qualification: What you need to roll to enter that career. Military careers use 'Enlistment' as the description for this roll instead of qualification. If you fail this check then you cannot enter your chosen career this term. You must either submit to the Draft (see opposite) or take the Drifter career for this term. You suffer a –1 DM to qualification rolls for each previous career you have entered. Once you leave a career you cannot return to it. The Draft and the Drifter career are exceptions to this rule – you can be Drafted into a career you were previously in but got ejected from and the Drifter career is always open.

Skills and Training: Each career has four or five skill tables associated with it – Personal Development, Service Skills, Specialist Skills (divided into three subtables corresponding to assignments) and Advanced Education. In each term you spend in a career, pick one of these tables and roll 1d6 to see which skill you increase. You may only roll on the third table (Advanced Skills) if your character has the listed qualification (usually Education 8+ or a certain Rank). You may only roll on the fourth table (Officer Skills) if your career has one and if you have received a commission (see right).

Skills can be listed with or without an associated level. If no rank is listed, then you gain that skill at Level 1 if you do not have it already, or increases its level by one if you are already trained in that field. If a rank is listed, then you gain the skill at that level as long as it is *better* than your current level in that skill.

Examples:

Gambler 0 means you get the Gambler skill at level 0. This is of benefit to you only if you have no Gambler skill.

Vacc Suit means you increase your Vacc Suit skill by 1, or gain it at level 1 if you have no Vacc Suit skill to begin with. If you have Vacc Suit 0, it increases to 1. If you have Vacc Suit 3, it rises to 4. And so on.

Streetwise 1 means you get the Streetwise skill at level 1. If your Streetwise skill is already 1 or more, then this is of no benefit to you. If you have no Streetwise skill, or it is only at 0, you jump straight to 1.

Basic Training: For your first career *only*, you get all the skills listed in the Service Skills table at Level 0 as your basic training. For any subsequent careers, you may pick any one skill listed in the Service Skills table at Level 0 as your basic training.

Survival: Each career has a survival roll. If you fail this roll, roll on the mishap table. This mishap is always enough to force you to leave the service. You lose the benefit roll for the current term only. A natural 2 is always a failure.

Events: If you are still in your career after resolving the survival roll, roll on the events table to see what interesting things befall you this term.

The Connections Rule

If both players agree, then any event can involve another suitable player character. Only one character needs to have rolled the specific event. If this is done, then you *both* get one extra skill. This can be any skill you like, although it is good form to relate it to the connection you have just formed. You may gain a maximum of *two* free skills from this rule, and each connection must be with a different player character.

For example, Erik is serving as an Agent, and he rolls an undercover mission (Event number 8 on the Agent event table). Erik's player suggests that Erik could have met Kathya while on this mission, and Kathya's player agrees. When finalising characters, both will gain an extra skill roll.

Note down ideas for connections as you generate your character but these connections are only finalised at the end of character generation. See page 37.

Later during character creation, Erik rolls a mishap on his Agent career, and is nearly killed when an undercover operation goes wrong. Kathya's player suggests that she helped him escape and so he owes her his life.

Commission: This only applies to the military careers of Army, Navy and Marines. A character who succeeds at a commission roll becomes a Rank 1 officer in that career, and uses the officer Rank table from then on. A character may attempt a commission roll once per term, and trying for commission is optional.

If you obtain a commission after having already advanced several ranks, you become a Rank 1 officer as normal but you may add your two final ranks together for the purposes of determining benefits and pensions.

Some events give a bonus DM to advancement rolls (see below), or give automatic advancement. You can apply these DMs to commission rolls also.

+++The DeSalo corporation is hiring freelance security personnel and transport vessels for a private operation. Contact our representative at the starport hiring hall if you have suitable qualifications. We offer extremely competitive rates and full medical cover.+++

Advancement: Each career has an advancement roll. The advancement roll is mandatory. If an Event has already automatically promoted the character this term this is in addition to the advancement roll (so it is possible character may be promoted twice in a single term).

If you make a successful Advancement roll, then you move to the next rank and gain an extra roll on any of the Skills and Training Tables for this career. You also get any benefits listed for your new rank. You may only attempt to advance once per term.

If your result is equal to or less than the number of terms you have spent in this career, then you cannot continue in this career after this term. Either your services are no longer required, or events have caused you to leave, or perhaps you are simply bored and want a new challenge.

If you roll a natural 12, then you *must* continue in this career.

Ranks and Benefits: You start at Rank 0 in your career. Each time you succeed at an advancement check, you move onto the next Rank. Ranks are most important for military careers, like the Army or Navy, but every career has its own internal hierarchies and levels of authority and responsibility. Not all ranks have a title.

Some ranks have benefits associated with them, such as extra skills or more benefits. You gain these benefits as soon as you attain that rank.

Mustering-Out Benefits: When you leave a career for any reason, you gain material benefits from that career. There are two tables – Cash and Benefits. You may only roll on the cash tables a maximum of three times, regardless of how many careers or benefit rolls you have. You get one benefit roll per full term served. Leaving due to a mishap means you lose the benefit roll for that term, but not previous full terms in that career.

If you reached rank 1 or 2, you get an extra benefit roll when leaving that service. If you reached rank 3 or 4, you get two extra benefit rolls, and if you reached rank 5 or 6, you get *three* extra benefit rolls and may apply a +1 to rolls on the Benefits table that you gain from that career. Benefits are described more fully on page 34.

Drifters and The Draft

You may attempt to enlist in one career each term if you are not continuing on in an existing career. If you fail to for a new career, you have two options. You can apply to the Draft and be randomly sent to one of the military services or you may spend that term travelling through known space as a Drifter without a career or purpose. A character may only enter the Draft once.

DRAFT TABLE

1d6	Career (speciality)
1	Navy (any)
2	Army (any)
3	Marines (any)
4	Merchants (merchant marine)
5	Scouts (any)
6	Agent (law enforcement)

CAREER SUMMARY TABLE

Career	Specialisation	Qual.	Survival	Adv.
Agent		Int 6+		
Page 10	Law Enforcement		End 6+	Int 6+
	Intelligence		Int 7+	Int 5+
	Corporate		Int 5+	Int 7+
Army		End 5+		
Page 12	Support		End 5+	Edu 7+
	Infantry		Str 6+	Edu 6+
	Cavalry		Dex 7+	Int 5+
Citizen		Edu 5+		
Page 14	Corporate		Soc 6+	Int 6+
	Worker		End 4+	Edu 8+
	Colonist		Int 7+	End 5+
Drifter		Auto		
Page 16	Barbarian		End 7+	Str 7+
	Wanderer		End 7+	Int 7+
	Scavenger		Dex 7+	End 7+
Entertainer		Int 5+		
Page 18	Artist		Soc 6+	Int 6+
	Journalist		Edu 7+	Int 5+
	Performer		Int 5+	Dex 7+
Marines		End 6+		
Page 20	Support		End 5+	Edu 7+
	Star Marine		End 6+	Edu 6+
	Ground Assault		End 7+	Edu 5+
Merchants		Int 4+		
Page 22	Merchant Marine		Edu 5+	Int 7+
	Free Trader		Dex 6+	Int 6+
	Broker		Edu 5+	Int 7+
Navy		Int 6+		
Page 24	Line/Crew		Int 5+	Edu 7+
	Engineering/Gunnery		Int 6+	Edu 6+
	Flight		Dex 7+	Edu 5+
Nobility		Soc 10+		
Page 26	Administrator		Int 4+	Edu 6+
	Diplomat		Int 5+	Soc 7+
	Dilettante		Soc 3+	Int 8+
Rogue		Dex 6+		
Page 28	Thief		Int 6+	Dex 6+
	Enforcer		End 6+	Str 6+
	Pirate		Dex 6+	Int 6+
Scholar		Int 6+		
Page 30	Field Researcher		End 6+	Int 6+
	Scientist		Edu 4+	Int 8+
	Physician		Edu 4+	Edu 8+
Scout		Int 5+		
Page 32	Courier		End 5+	Edu 9+
	Survey		End 6+	Int 8+
	Exploration		End 7+	Edu 7+

AGENT

Law enforcement agents, spies, corporate operatives and others who work in the shadows.

Qualification: Int 6+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Law Enforcement:** You were a police officer or detective.
- **Intelligence:** You worked as a spy or saboteur.
- **Corporate:** You worked for a corporation, spying on rival organisations.

CAREER PROGRESS

	Survival	Advancement
Law Enforcement	End 6+	Int 6+
Intelligence	Int 7+	Int 5+
Corporate	Int 5+	Int 7+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	1,000	Scientific Equipment
2	2,000	+1 Int
3	5,000	Ship Share
4	7,500	Weapon
5	10,000	Combat Implant
6	25,000	+1 Social or Combat Implant
7	50,000	TAS Membership

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)
1	Gun Combat (any)	Streetwise	Advocate
2	+1 Dex	Drive (any)	Comms
3	+1 End	Investigate	Computers
4	Melee (any)	Computers	Medic
5	+1 Int	Recon	Stealth
6	Athletics (any)	Gun Combat (any)	Remote Operations

Roll	Specialist: Law Enforcement	Specialist: Intelligence	Specialist: Corporate
1	Investigate	Investigate	Investigate
2	Recon	Recon	Computers
3	Streetwise	Comms	Stealth
4	Stealth	Stealth	Gun Combat (any)
5	Melee (any)	Persuade	Deception
6	Advocate	Deception	Streetwise

RANKS AND BENEFITS

Rank	Law Enforcement	Skill or Benefit	Intelligence/Corporate	Skill or Benefit
0	Rookie			
1	Corporal	Streetwise 1	Agent	Deception 1
2	Sergeant		Field Agent	Investigate 1
3	Lieutenant			
4	Detective	Investigate 1	Special Agent	Gun Combat (any) 1
5	Chief	Admin 1	Assistant Director	
6	Commissioner	+1 Social	Director	

MISHAPS

1d6	Mishap
1	Severely injured in action. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	A criminal or other figure under investigation offers you a deal. Accept, and you leave this career without further penalty (although you lose the Benefit roll as normal). Refuse, and you must roll twice on the Injury table and take the lower result. You gain an Enemy and one level in any skill you choose.
3	An investigation goes critically wrong or leads to the top, ruining your career. Roll Advocate 8+. If you succeed, you may keep the Benefit roll from this term.
4	You learn something you shouldn't know, and people want to kill you for it. Gain an Enemy and Deception 1.
5	Your work ends up coming home with you, and someone gets hurt. Choose one of your Contacts, Allies or family members, and roll twice on the Injury table for them, taking the lower result.
6	Injured. Roll on the Injury table.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	An investigation takes on a dangerous turn. Roll Investigate 8+ or Streetwise 8+. If you fail, roll on the mishap table. If you succeed, increase one of these skills by one level: Deception, Jack of all Trades, Persuade or Tactics (any).
4	You complete a mission for your superiors, and are suitably rewarded. Gain a +1 DM to any one Benefit roll from this career.
5	You establish a network of contacts. Gain 1d3 Contacts.
6	You are given advanced training in a specialist field. Throw Education 8+ to increase any one skill you already have by one level.
7	Life Event. Roll on the Life Events table (page 34).
8	You go undercover to investigate an enemy. Roll Deception 8+. If you succeed, roll immediately on the Rogue or Citizen events table and make one roll on any Specialist skill table for that career. If you fail, roll immediately on the Rogue or Citizen mishap table.
9	You go above and beyond the call of duty. Gain a +2 DM to your next Advancement check.
10	You are given specialist training in vehicles. Gain one of Drive (any) 1, Flyer (any) 1, Pilot (any) 1 or Gunner (any) 1.
11	You are befriended by a senior agent. Either increase Investigate by one level or take a +4 DM to an Advancement roll thanks to his aid.
12	Your efforts uncover a major conspiracy against your employers. You are automatically promoted.

ARMY

Members of the planetary armed fighting forces. Soldiers deal with planetary surface actions, battles, and campaigns. Such individuals may also be mercenaries for hire.

Enlistment: End 5+.
If you are aged 30 or more, −2 DM
Per previous career, −1 DM

Assignments: Choose one of the following:

- **Support:** You were an engineer, technician, medic, cook or in some other role behind the front lines.
- **Infantry:** You were one of the Poor Bloody Infantry on the ground.
- **Cavalry:** You rode a tank or other ground vehicle.

CAREER PROGRESS

	Survival	Advancement
Support	End 5+	Edu 7+
Infantry	Str 6+	Edu 6+
Cavalry	Dex 7+	Int 5+

Commission: Soc 8+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	2,000	Combat Implant
2	5,000	+1 Int
3	10,000	+1 Edu
4	10,000	Weapon
5	10,000	Armour
6	20,000	Combat Implant or +1 End
7	30,000	+1 Soc

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)	Officer Skills (Commissioned Only)
1	+1 Str	Drive (any)	Comms	Tactics (military)
2	+1 Dex	Athletics (any)	Sensors	Leadership
3	+1 End	Gun Combat (any)	Navigation	Advocate
4	Gambler	Recon	Explosives	Diplomat
5	Medic	Melee (any)	Engineer (any)	Tactics (military)
6	Melee (unarmed)	Heavy Weapons (any)	Survival	Admin

Roll	Specialist: Support	Specialist: Infantry	Specialist: Cavalry
1	Mechanic	Gun Combat (any)	Mechanic
2	Drive (any)	Melee (any)	Drive (any)
3	Flyer (any)	Heavy Weapons (any)	Flyer (any)
4	Explosives	Stealth	Recon
5	Comms	Athletics (any)	Gunnery (any)
6	Medic	Recon	Sensors

RANKS AND SKILLS

Rank	NCO	Skill or Benefit	Officer	Skill or Benefit
0	Private	Gun Combat (slug rifle or energy rifle) 1		
1	Lance Corporal	Recon 1	Lieutenant	Leadership 1
2	Corporal		Captain	
3	Lance Sergeant	Leadership 1	Major	Tactics (military) 1
4	Sergeant		Lt Colonel	
5	Gunnery Sergeant		Colonel	
6	Sergeant Major		General	Social Standing 10 or +1 Social Standing, whichever is higher.

MISHAPS

1d6	Mishap
1	Severely injured in action. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	Your unit is slaughtered in a disastrous battle, for which you blame your commander. Gain him as an Enemy as he has you removed from the service.
3	You are sent to a very unpleasant region (jungle, swamp, desert, icecap, urban) to battle against guerrilla fighters and rebels. You are discharged because of stress, injury or because the government wishes to bury the whole incident. Increase Recon or Survival by one level but also gain the rebels as an Enemy.
4	You discover that your commanding officer is engaged in some illegal activity, such as weapon smuggling. You can join his ring and gain him as an Ally before the inevitable investigation gets you discharged, or you can co-operate with the military police – the official whitewash gets you discharged anyway but you may keep your Benefit roll from this term of service.
5	You are tormented by or quarrel with an officer or fellow soldier. Gain that officer as a Rival as he drives you out of the service.
6	Injured. Roll on the Injury table.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You are assigned to a planet with a hostile or wild environment. Gain one of Vacc Suit 1, Engineer (any) 1, Animals (riding or training) 1 or Recon 1.
4	You are assigned to an urbanised planet torn by war. Gain one of Stealth 1, Streetwise 1, Persuade 1 or Recon 1.
5	You are given a special assignment or duty in your unit. Gain a +1 DM to any one Benefit roll.
6	You are thrown into a brutal ground war. Throw Endurance 8+ to avoid injury; if you succeed, you gain one level in Gun Combat (any) or Leadership.
7	Life Event. Roll on the Life Events table (page 34).
8	You are given advanced training in a specialist field. Throw Education 8+ to increase any one skill you already have by one level.
9	Surrounded and outnumbered by the enemy, you hold out until relief arrives. Gain a +2 DM to your next Advancement check.
10	You are assigned to a peacekeeping role. Gain one of Admin 1, Investigate 1, Deception 1 or Recon 1.
11	Your commanding officer takes an interest in your career. Either gain Tactics (military) 1 or take a +4 DM to your next Advancement roll thanks to his aid.
12	You display heroism in battle. You may gain a promotion or a commission automatically.

CITIZEN

Individuals serving in a corporation, bureaucracy or industry, or who are making a new life on an untamed planet.

Qualification: Edu 5+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Corporate:** You are an executive or manager in a large corporation. Alternatively, you are a bureaucrat or functionary in some government or civil institution.
- **Worker:** You are a blue-collar citizen on an industrial world.
- **Colonist:** You are building a new life on a recently settled world that still needs taming.

Basic Training: Unlike other careers, a Citizen gains level 0 skills from the appropriate Specialist table instead of the Service Skills table in basic training.

CAREER PROGRESS

	Survival	Advancement
Corporate	Soc 6+	Int 6+
Worker	End 4+	Edu 8+
Colonist	Int 7+	End 5+

MUSTERING-OUT BENEFITS

Roll	Cash	Benefits
1	1,000	One Ship Share
2	5,000	Ally
3	10,000	+1 Int
4	10,000	Gun
5	10,000	+1 Edu
6	50,000	Two Ship Shares
7	100,000	TAS Membership

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 10)
1	+1 Edu	Drive (any)	Art (any)
2	+1 Int	Flyer (any)	Advocate
3	Carouse	Streetwise	Diplomat
4	Gambler	Melee (any)	Language (any)
5	Drive (any)	Steward	Computers
6	Jack of all Trades	Trade	Medic

Roll	Corporate	Worker	Colonist
1	Advocate	Drive (any)	Animals (any)
2	Admin	Mechanic	Athletics (any)
3	Broker	Trade (any)	Jack of all Trades
4	Computers	Engineer (any)	Drive (any)
5	Diplomat	Trade (any)	Survival
6	Leadership	Science	Recon

RANKS AND BENEFITS

Rank	Corporate	Skill or Benefit	Worker	Skill or Benefit	Colonist	Skill or Benefit
0						
1						
2	Manager	Admin 1	Technician	Trade 1	Settler	Survival 1
3						
4	Senior Manager	Advocate 1	Craftsman	Mechanic 1	Explorer	Navigation 1
5						
6	Director	+1 Social	Master Technician	Engineering 1		Gun Combat 1

MISHAPS

1d6	Mishap
1	Injured. Roll on the Injury table.
2	You are harassed and your life ruined by a criminal gang. Gain the gang as an Enemy.
3	Hard times caused by a lack of interstellar trade costs you your job. Lose one Social Standing.
4	Your business is investigated by the planetary authorities (or your colony suffers interference from interests offworld). Co-operate, and the business or colony is shut down, but you gain a +2 DM to the Qualification check for your next career as a reward for your aid. Refuse, and gain an Ally.
5	A revolution, attack or other unusual event throws your life into chaos, forcing you to leave the planet. Roll Streetwise 8+. If you succeed, increase any skill you have by one level.
6	One of your co-workers develops a hatred of you, and sabotages your life. Gain a Rival.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	Political upheaval strikes your homeworld, and you are caught up in the revolution. Gain either Advocate 1, Persuade 1, Explosives 1 or Streetwise 1. Throw whichever skill you chose 8+. If you succeed you come out on the winning side, and gain a +2 DM to your next Advancement roll. Fail, and you suffer a −2 DM to your next Survival roll.
4	You spend time maintaining and using heavy vehicles, either as part of your job or as a hobby. Increase Mechanic, Drive (any), Flyer (any) or Engineer (any) by one level.
5	Your business expands, your corporation grows, or the colony thrives. Gain a +1 DM to any one Benefit roll.
6	You are given advanced training in a specialist field. Throw Education 10+ to gain any one skill of your choice at level 1.
7	Life Event. Roll on the Life Events table (page 34).
8	You learn something you shouldn't have – a corporate secret, a political scandal – which you can profit from illegally. If you choose to do so, then you gain a +1 DM to a Benefit roll from this career and gain Streetwise 1, Deception 1 or a criminal Contact. If you refuse, you gain nothing.
9	You are rewarded for your diligence or cunning. Gain a +2 DM to your next Advancement check.
10	You gain experience in a technical field as a computer operator or surveyor. Increase Comms, Computers, Engineer (any) or Sensors by one level.
11	You befriend a superior in the corporation or the colony. Gain an Ally. Either gain Diplomat 1, or take a +4 DM to your next Advancement roll thanks to his aid.
12	You rise to a position of power in your colony or corporation. You are automatically promoted.

DRIFTER

Wanderers, hitch-hikers and travellers, drifters are those who roam the stars without purpose or direction.

Qualification: Automatic.

Assignments: Choose one of the following:
- **Barbarian:** You lived on a primitive world without the benefits of technology.
- **Wanderer:** You lived hand to mouth in slums and starports across the galaxy, travelling at random.
- **Scavenger:** You worked as a belter (asteroid miner) or on a salvage crew.

Basic Training: Unlike other careers, a Drifter gains level 0 skills from the appropriate Specialist table instead of the Service Skills table in basic training.

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills
1	+1 Str	Athletics (any)
2	+1 End	Melee (unarmed)
3	+1 Dex	Recon
4	Jack of all Trades	Streetwise
5	+1 End	Stealth
6	+1 Int	Survival

Roll	Specialist: Barbarian	Specialist: Wanderer	Specialist: Scavenger
1	Animals (any)	Athletics (any)	Pilot (small craft)
2	Carouse	Deception	Mechanic
3	Melee (blade)	Recon	Astrogation
4	Stealth	Stealth	Vacc Suit
5	Seafarer (any)	Streetwise	Zero-G
6	Survival	Survival	Gun Combat (any)

CAREER PROGRESS

	Survival	Advancement
Barbarian	End 7+	Str 7+
Wanderer	End 7+	Int 7+
Scavenger	Dex 7+	End 7+

When advancing as a Drifter, even if you roll under the number of terms spent in this career, you are not forced to leave the career.

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	None	Contact
2	None	Weapon
3	1,000	Ally
4	2,000	Weapon
5	3,000	+1 Edu
6	4,000	Ship Share
7	8,000	Two Ship Shares

RANKS AND BENEFITS

Rank	Barbarian	Skill or Benefit	Wanderer	Skill or Benefit	Scavenger	Skill or Benefit
0						
1		Survival 1		Streetwise 1		Vacc Suit 1
2	Warrior	Melee (blade) 1				
3				Deception 1		Trade (belter) 1 or Mechanic 1
4	Chieftain	Leadership 1				
5						
6						

Behind the Claw

A slang term used by inhabitants of the Spinward Marches, Deneb and Trojan Reach sectors to refer to those areas. The term derives from a supposed resemblance between a claw and the Great Rift as seen on maps of the Imperium. Inhabitants of this region feel a certain pride in this designation, and is used to imply they share a camaraderie and common interest. The name was once used as the title of a popular news magazine with a circulation area encompassing the three sectors named above. The term is rarely used by inhabitants of other areas of the Imperium.

MISHAPS

1d6	Mishap
1	Severely injured. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	Injured. Roll on the Injury table.
3	You run afoul of a criminal gang, corrupt bureaucrat or other foe. Gain an Enemy.
4	You suffer from a life-threatening illness. Reduce your Endurance by 1.
5	Betrayed by a friend. One of your Contacts or Allies betrays you, ending your career. That Contact or Ally becomes a Rival or Enemy. If you have no Contacts or Allies, then you are betrayed by someone you never saw coming and still gain a Rival or Enemy.
6	You don't know what happened to you. There is a gap in your memory.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	A patron offers you a chance at a job. If you accept, you gain a +4 DM to your next Qualification roll, but you owe that patron a favour.
4	You pick up a few useful skills here and there. Gain one level of Jack of all Trades, Survival, Streetwise or Melee (any).
5	You manage to scavenge something of use. Gain a +1 DM to any one Benefit roll.
6	You encounter something unusual. Go to the Life Events table (page 34) and have an Unusual Event.
7	Life Event. Roll on the Life Events table (page 34).
8	You are attacked by enemies. Gain an Enemy if you do not have one already, and roll either Melee (any) 8+, Gun Combat (any) 8+ or Stealth 8+ to avoid a roll on the Injury table.
9	You are offered a chance to take part in a risky but rewarding adventure. If you accept, roll 1d6: On a 1–2, you are injured – roll on the Injury table. On 3–4, you survive, but gain nothing. On a 5–6, you succeed. Gain +4 to one Benefit roll.
10	Life on the edge hones your abilities. Increase any skill you already have by one level.
11	You are forcibly drafted. Roll for the Draft next term.
12	You thrive on adversity. You are automatically promoted.

ENTERTAINER

Individuals who are involved with the media, whether as reporters, artists or celebrities.

Qualification: Int 5+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Artist:** You are a writer, sculptor, holographer or other creative.
- **Journalist:** You report on local or galactic events for a news feed, the TAS or another organisation.
- **Performer:** You are an actor, dancer, acrobat, professional athlete or other public performer.

CAREER PROGRESS

	Survival	Advancement
Artist	Soc 6+	Int 6+
Journalist	Edu 7+	Int 5+
Performer	Int 5+	Dex 7+

MUSTERING-OUT BENEFITS

Roll	Cash	Benefits
1	None	Contact
2	None	+1 Social
3	10,000	Contact
4	10,000	+1 Social
5	40,000	+1 Int
6	40,000	2 Ship Shares
7	80,000	+1 Social, +1 Education

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 10)
1	Dex +1	Art (any)	Advocate
2	Int +1	Art (any)	Art (any)
3	Soc +1	Carouse	Deception
4	Edu +1	Deception	Science (any)
5	Carouse	Persuade	Streetwise
6	Stealth	Steward	Diplomat

Roll	Specialist: Artist	Specialist: Journalist	Specialist: Performer
1	Art (any)	Art (writing or holography)	Art (acting, dance or instrument)
2	Carouse	Comms	Athletics (co-ordination or endurance)
3	Computer	Computers	Carouse
4	Gambler	Investigate	Deception
5	Persuade	Recon	Stealth
6	Trade (any)	Streetwise	Streetwise

RANKS AND BENEFITS

Rank	Artist	Skill or Benefit	Journalist	Skill or Benefit	Performer	Skill or Benefit
0						
1		Art (any)	Freelancer	Comms		+1 Dex
2			Staff	Investigate		
3		Investigate				+1 Str
4			Correspondent	Persuade		
5	Famous Artist	+1 Social			Famous Performer	+1 Social
6			Senior Correspondent	+1 Social		
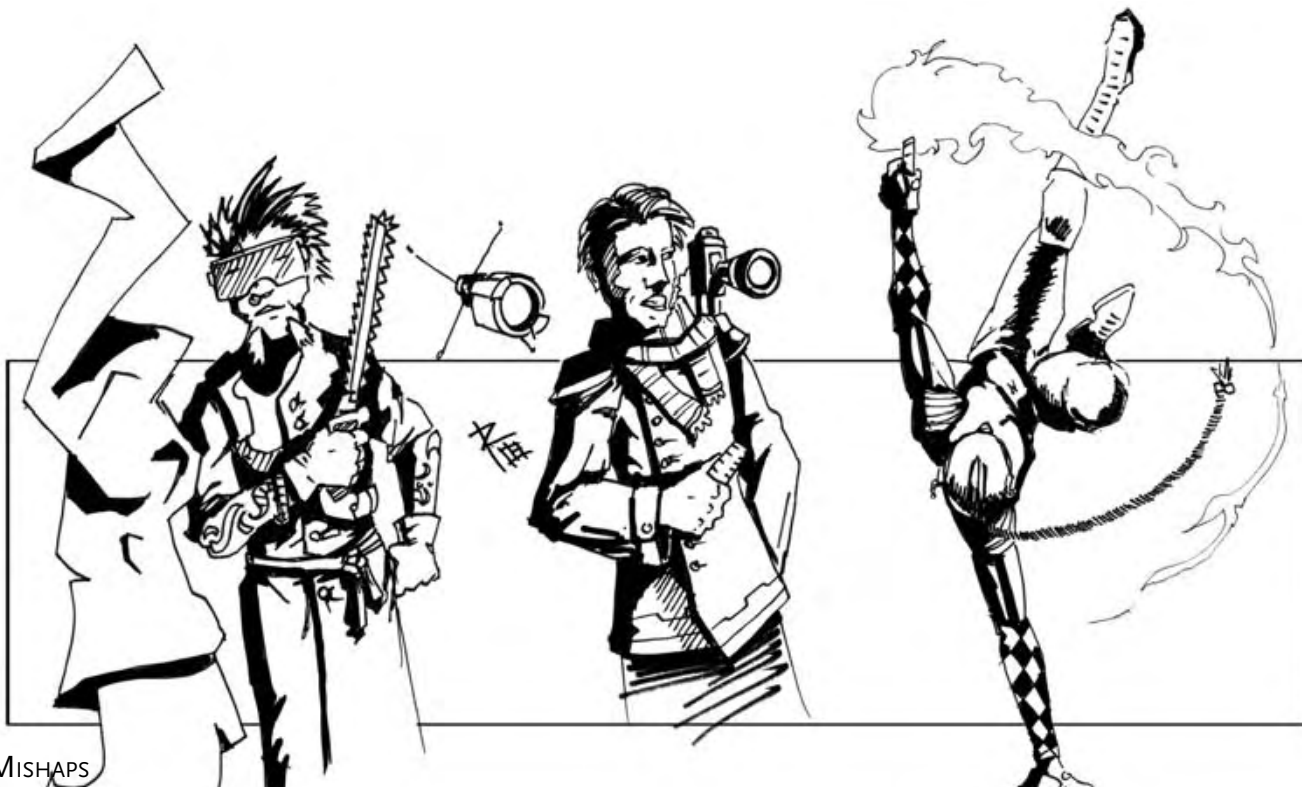
MISHAPS

1d6	Mishap
1	Injured. Roll on the Injury table.
2	You expose or are involved in a scandal of some sort.
3	Public opinion turns on you. Reduce your Social Standing by 1.
4	You are betrayed by a peer. One of your Contacts or Allies betrays you, ending your career. That Contact or Ally becomes a Rival or Enemy. If you have no Contacts or Allies, then you are betrayed by someone you never saw coming and still gain a Rival or Enemy.
5	An investigation, tour, project or expedition goes wrong, stranding you far from home. Gain one of Survival 1, Pilot (any) 1, Persuade 1 or Streetwise 1.
6	You are forced out because of censorship or controversy. What truth did you get too close to? You gain a +2 DM to the Qualification roll for your next career.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You are invited to take part in a controversial event or exhibition. Roll Art or Investigate 8+. If you succeed, gain one Social Standing. If you fail, lose one Social Standing.
4	You are a part of your homeworld's celebrity circles. Gain one of Carouse 1, Persuade 1, Steward 1 or a Contact.
5	One of your works is especially well received and popular, making you a minor celebrity. Gain a +1 DM to any one Benefit roll.
6	You gain a patron in the arts. Gain a +2 DM to your next Advancement check and an Ally.
7	Life Event. Roll on the Life Events table (page 34).
8	You have the opportunity to criticise or even bring down a questionable political leader on your homeworld. If you refuse and support the leader, you gain nothing. If you accept, gain an Enemy and roll Art or Persuade 8+. If you succeed, gain one level in any skill you already have. If you fail, increase a skill anyway and roll on the Mishap table.
9	You go on a tour of the sector, visiting several worlds. Gain 1d3 Contacts.
10	One of your pieces of art is stolen, and the investigation brings you into the criminal underworld. Gain one of Streetwise 1, Investigate 1, Recon 1 or Stealth 1.
11	As an artist, you lead a strange and charmed life. Go to the Life Events table (page 34) and have an Unusual Event.
12	You win a prestigious prize. You are automatically promoted.

MARINES

Members of the armed fighting forces carried aboard starships. marines deal with piracy and boarding actions in space, defend the starports and bases belonging to the navy and supplement ground forces such as the army.

Enlistment: End 6+.
If you are aged 30 or more –2 DM.
Every previous career: –1 DM

Assignments: Choose one of the following:
- **Support:** You were a quartermaster, engineer or battlefield medic in the Marines.
- **Star Marines:** You were trained to fight boarding actions and capture enemy vessels.
- **Ground Assault:** They kicked you out of a spacecraft in high orbit and said 'capture that planet'.

CAREER PROGRESS

	Survival	Advancement
Support	End 5+	Edu 7+
Star Marines	End 6+	Edu 6+
Ground Assault	End 7+	Edu 5+

Commission: Soc 8+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	2,000	Armour
2	5,000	+1 Int
3	5,000	+1 Edu
4	10,000	Weapon
5	20,000	TAS Membership
6	30,000	Armour or +1 End
7	40,000	+2 Soc

SKILLS AND TRAINING

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)	Officer Skills (Commissioned Only)
1	+1 Str	Athletics (any)	Medic	Leadership
2	+1 Dex	Battle Dress	Survival	Tactics (any)
3	+1 End	Tactics (any)	Explosives	Admin
4	Gambler	Heavy Weapons (any)	Engineer (any)	Advocate
5	Melee (unarmed)	Gun Combat (any)	Pilot (any)	Battle Dress
6	Melee (blade)	Stealth	Medic	Leadership

Roll	Specialist: Support	Specialist: Star Marine	Specialist: Ground Assault
1	Comms	Battle Dress	Battle Dress
2	Mechanic	Zero-G	Heavy Weapons (any)
3	Drive (any) or Flyer (any)	Gunnery (any)	Recon
4	Medic	Melee (blade)	Melee (blade)
5	Heavy Weapons (any)	Sensors	Tactics (military)
6	Gun Combat (any)	Gun Combat (any)	Gun Combat (any)

RANKS AND BENEFITS

Rank	NCO	Skill or Benefit	Officer	Skill or Benefit
0	Marine	Melee (blade) 1 or Gun Combat (any) 1		
1	Lance Corporal	Gun Combat (any) 1	Lieutenant	Leadership 1
2	Corporal		Captain	
3	Lance Sergeant	Leadership 1	Force Commander	Tactics (any) 1
4	Sergeant		Lt Colonel	
5	Gunnery Sergeant	+1 Endurance	Colonel	Social Standing 10 or +1 Social Standing, whichever is higher.
6	Sergeant Major		Brigadier	

MISHAPS

1d6	Mishap
1	Severely injured in action. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	A mission goes wrong; you and several others are captured and mistreated by the enemy. Due to your injuries, you are discharged early. Gain your jailer as an Enemy and reduce your Strength and Dexterity by one because of your injuries.
3	A mission goes wrong and you are stranded behind enemy lines. Increase Stealth or Survival by one level but, due to the mission's failure, you are ejected from the service.
4	You are ordered to take part in a black ops mission that goes against your conscience. If you refuse you are ejected from the service. If you accept you may stay with the marines but gain the lone survivor as an Enemy.
5	You are tormented by or quarrel with an officer or fellow marine. Gain that character as a Rival as he drives you out of the service.
6	Injured. Roll on the Injury table.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	Trapped behind enemy lines, you have to survive on your own. Gain one of Survival 1, Stealth 1, Deception 1 or Streetwise 1.
4	You are assigned to the security staff of a space station. Increase Vacc Suit or Zero-G by one level.
5	You are given advanced training in a specialist field. Throw Education 8+ to gain any one skill of your choice at level 1.
6	You are assigned to an assault on an enemy fortress. Throw Melee or Gun Combat 8+ and gain Tactics (military) or Leadership if you succeed. If you fail, you are injured and lose 1 point from any physical characteristic.
7	Life Event. Roll on the Life Events table (page 34).
8	You are on the front lines of a planetary assault and occupation. Gain one of Recon 1, Gun Combat (any) 1, Leadership 1 or Comms 1
9	A mission goes disastrously wrong due to your commander's error or incompetence, but you survive. If you report your commanding officer for his failure then you gain a +2 DM to your next Advancement roll. If you say nothing and protect him, gain him as an Ally.
10	You are assigned to a black ops mission. Gain a +2 DM to your next Advancement roll.
11	Your commanding officer takes an interest in your career. Either gain Tactics (any) 1, or take a +4 DM to your next Advancement roll thanks to his aid.
12	You display heroism in battle. You are automatically promoted.

MERCHANTS

Members of commercial enterprises. Merchants may crew the ships of the large trading corporations, or they may work for the independent free traders which carry chance cargos and passengers between worlds.

Qualification: Int 4+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Merchant Marine:** You worked on one of the massive cargo haulers run by the Imperium or the mega-corporations.
- **Free Trader:** You were part of the crew of a tramp trader.
- **Broker:** You worked in a planetside brokerage or starport

CAREER PROGRESS

	Survival	Advancement
Merchant Marine	Edu 5+	Int 7+
Free Trader	Dex 6+	Int 6+
Broker	Edu 5+	Int 7+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	1,000	Blade
2	5,000	+1 Int
3	10,000	+1 Edu
4	20,000	Gun
5	20,000	Ship Share
6	40,000	Free Trader
7	40,000	Free Trader

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)
1	+1 Str	Drive (any)	Social Science (any)
2	+1 Dex	Vacc Suit	Astrogation
3	+1 End	Broker	Computers
4	+1 Int	Steward	Pilot (any)
5	Melee (blade)	Comms	Admin
6	Streetwise	Persuade	Advocate

Roll	Specialist: Merchant Marine	Specialist: Free Trader	Specialist: Broker
1	Pilot (spacecraft or capital ship)	Pilot (spacecraft)	Admin
2	Vacc Suit	Vacc Suit	Advocate
3	Zero-G	Zero-G	Broker
4	Mechanic	Mechanic	Streetwise
5	Engineer (any)	Engineer (any)	Deception
6	Gunner (any)	Sensors	Persuade

RANKS AND BENEFITS

Rank	Merchant Marine	Skill or Benefit	Trader	Skill or Benefit	Broker	Skill or Benefit
0	Crewman					
1	Senior Crewman	Mechanic 1		Persuade 1		Broker 1
2	4th Officer					
3	3rd Officer		Experienced Trader	Jack of all Trades 1	Experienced Broker	Streetwise 1
4	2nd Officer	Pilot (any) 1				
5	1st Officer	+1 Social Standing				
6	Captain					
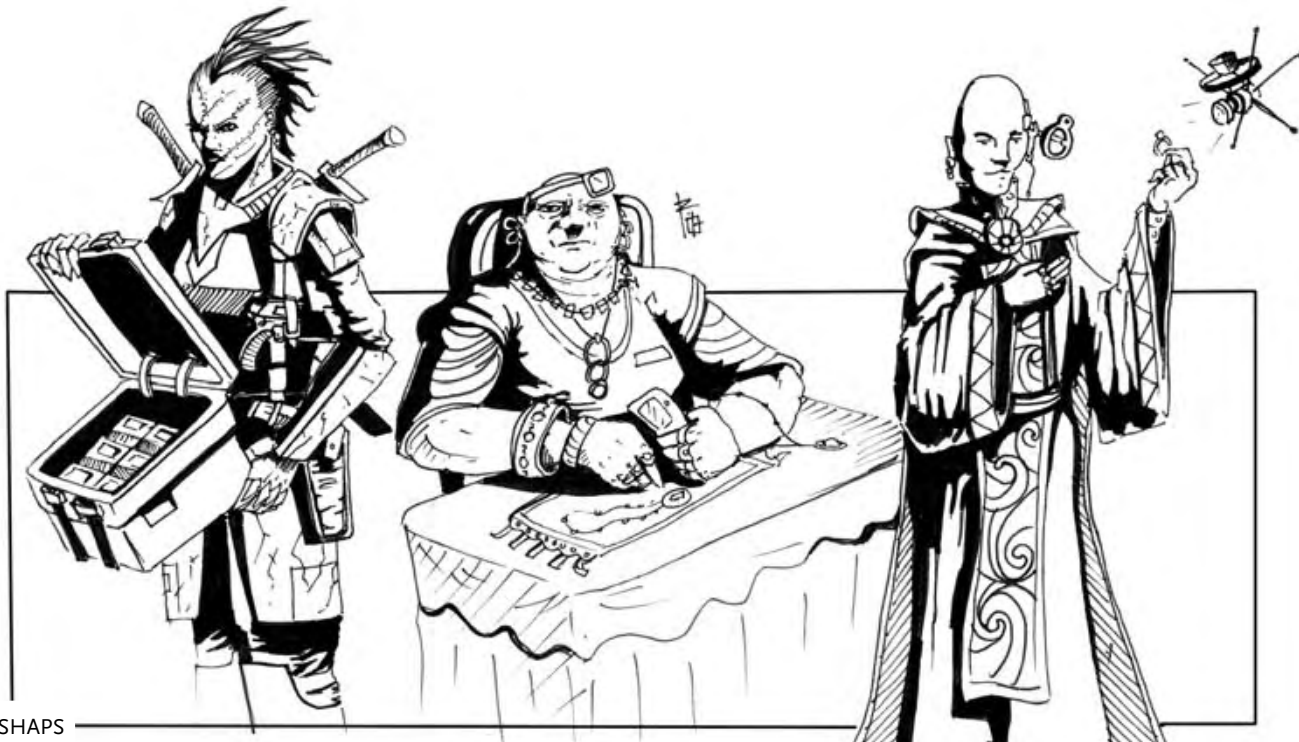
MISHAPS

1d6	Mishap
1	Injured. Roll on the Injury table.
2	You are bankrupted by a rival. You lose all Benefits from this career, and gain the other trader as a Rival.
3	A sudden war destroys your trade routes and contacts, forcing you to flee that region of space. Gain Gun Combat (any) 1 or Pilot (any) 1.
4	Your ship or starport is destroyed by criminals. Gain them as an Enemy.
5	Imperial trade restrictions force you out of business. You may take the Rogue career for your next term without needing to roll for qualification.
6	A series of bad deals and decisions force you into bankruptcy. You salvage what you can. You may take a Benefit roll for this term as well as any others you are entitled to.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You are offered the opportunity to smuggle illegal items onto a planet. If you accept, roll Deception 8+ or Persuade 8+ to gain Streetwise 1 and an extra Benefit roll. If you refuse, you gain an Enemy in the criminal sphere.
4	Gain any one of these skills, reflecting your time spent dealing with suppliers and spacers. Trade (any) 1, Engineer (any) 1, Animals (any) 1 or Social Science (any) 1
5	You have a chance to risk your fortune on a possibility lucrative deal. You may gamble a number of Benefit rolls and roll Gambler 8+ or Broker 8+. If you succeed, you gain half as many Benefit rolls as you risked, rounding up. If you fail, you lose all the rolls risked. Either way, gain one level in whichever skill you used.
6	You make an unexpected connection outside your normal circles. Gain a Contact.
7	Life Event. Roll on the Life Events table (page 34).
8	You are embroiled in legal trouble. Gain one of Advocate 1, Admin 1, Diplomat 1 or Investigate 1.
9	You are given advanced training in a specialist field. Throw Education 8+ to increase any one skill you already have by one level.
10	A good deal ensures you're living the high life for a few years. Gain a +1 DM to any one Benefit roll.
11	You befriend a useful ally in one sphere. Gain an Ally and either gain a level in Carouse or take a +4 DM to your next Advancement roll thanks to his aid.
12	Your business or ship thrives. You are automatically promoted.

NAVY

Members of the interstellar navy which patrols space between the stars. The navy has responsibility for the protection of society from foreign powers and from lawless elements in the interstellar trade channels.

Enlistment: Int 6+.
If you are aged 34 or more: −2 DM
Per previous career: −1 DM

Assignments: Choose one of the following:
- **Line/Crew:** You served as a general crewman or officer on a ship of the line. An average naval career.
- **Engineering/Gunnery:** You served as a specialist technician on a ship. This gives good technical skills, but is difficult to advance in unless you are highly intelligent.
- **Flight:** You served as the pilot of a shuttle, fighter or other vessel. This gives excellent piloting skills and is the fast track to promotion, but is also the most dangerous.

CAREER PROGRESS

	Survival	Advancement
Line/Crew	Int 5+	Edu 7+
Eng/Gun	Int 6+	Edu 6+
Flight	Dex 7+	Edu 5+

Commission: Soc 8+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	1,000	Air/Raft or one Ship Share
2	5,000	+1 Intelligence
3	5,000	+1 Education or two Ship Shares
4	10,000	Weapon
5	20,000	TAS Membership
6	50,000	Ship's Boat or two Ship Shares
7	50,000	+2 Social Standing

SKILLS AND TRAINING

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)	Officer Skills (Commissioned Only)
1	+1 Str	Pilot (any)	Remote Operations	Leadership
2	+1 Dex	Vacc Suit	Astrogation	Tactics (naval)
3	+1 End	Zero-G	Engineer (any)	Pilot (any)
4	+1 Int	Gunner (any)	Computers	Melee (blade)
5	+1 Edu	Mechanic	Navigation	Admin
6	+1 Social	Gun Combat (any)	Admin	Tactics (naval)

Roll	Specialist: Crew	Specialist: Eng/Gun	Specialist: Flight
1	Comms	Engineer (any)	Pilot (any)
2	Mechanic	Mechanic	Flyer (any)
3	Gun Combat (any)	Sensors	Gunner (any)
4	Sensors	Engineer (any)	Pilot (small craft)
5	Melee (any)	Gunner (any)	Astrogation
6	Vacc Suit	Computer	Zero-G

RANKS AND BENEFITS

Rank	NCO Rank	Skill or Benefit	Officer Rank	Skill or Benefit
0	Crewman			
1	Able Spacehand	Mechanic 1	Ensign	Melee (blade) 1
2	Petty Officer, 3rd Class	Vacc Suit 1	Sublieutenant	Leadership 1
3	Petty Officer, 2nd Class		Lieutenant	
4	Petty Officer, 1st Class	+1 End	Commander	Tactics (naval) 1
5	Chief Petty Officer		Captain	Social Standing 10 or +1 Social Standing, whichever is higher.
6	Master Chief		Admiral	Social Standing 12 or +1 Social Standing, whichever is higher.

MISHAPS

1d6	Mishap
1	Severely injured in action. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	Placed in the frozen watch (cryogenically stored on board ship) and revived improperly. Reduce Strength, Dexterity or Endurance by 1 due to muscle wastage.
3	During a battle, defeat or victory depends on your actions. You must make an 8+ roll using a skill that depends on your branch: Sensors or Gunner (any) if you are crew, Mechanic or Vacc Suit if you are engineering/gunnery, and Pilot (small craft or spacecraft) or Tactics (naval) if you are flight. If you fail, the ship suffers severe damage and you are blamed for the disaster. You are court-martialed and discharged. If you succeed, your efforts ensure that you are honourably discharged. You still leave the career, but may keep your benefit roll from this term.
4	You are blamed for an accident that causes the death of several crew members. If you were responsible, then you gain one free roll on the Skills and Training table before you are ejected from this career as your guilt drives you to excel. If you were not, then gain the officer who blamed you as an Enemy, but you keep your benefit roll from this term.
5	You are tormented by or quarrel with an officer or fellow crewman. Gain that character as a Rival, as he forces you out of the Navy.
6	Injured. Roll on the Injury table.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You join a gambling circle on board. Gain Gambler 1 or Deception 1. If you wish, throw Gambler 8+. If you succeed, gain an extra Benefit roll from this career; if you fail, you lose one Benefit roll from this career.
4	You are given a special assignment or duty on board ship. Gain a +1 DM to any one Benefit roll.
5	You are given advanced training in a specialist field. Throw Education 8+ to gain one level in any skill you already have.
6	Your vessel participates in a notable military engagement. Gain one of Sensors 1, Engineer (any) 1, Gunnery (any) 1 or Pilot (any) 1.
7	Life Event. Roll on the Life Events table (page 34).
8	Your vessel participates in a diplomatic mission. Gain one of Recon 1, Diplomacy 1, Steward 1 or a Contact.
9	You foil an attempted crime on board, such as mutiny, sabotage, smuggling or conspiracy. Gain an Enemy, but also gain a +2 DM to your next Advancement roll in the Navy.
10	You have the opportunity to abuse your position for profit. If you do so, gain an extra Benefit roll from this term. Refuse, and you get a +2 DM to your next Advancement roll.
11	Your commanding officer takes an interest in your career. Either gain Tactics (naval) 1, or take a +4 DM to your next Advancement roll thanks to his aid.
12	You display heroism in battle, saving the whole ship. You may gain a promotion or a commission automatically.

NOBILITY

Individuals of the upper classes who perform little consistent function, but often have large amounts of ready money.

Qualification: Soc 10+.
−1 DM for every previous career.
You qualify automatically if your Social Standing is 10 or higher.

Assignments: Choose one of the following:
- **Administrator:** You served in the planetary government or even ruled over a fiefdom or other domain.
- **Diplomat:** You were a diplomat or other state official.
- **Dilettante:** Like a drifter, only with more baths.

CAREER PROGRESS

	Survival	Advancement
Administrator	Int 4+	Edu 6+
Diplomat	Int 5+	Soc 7+
Dilettante	Soc 3+	Int 8+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	10,000	One Ship Share
2	10,000	Two Ship Shares
3	50,000	Blade
4	50,000	+1 Social
5	100,000	TAS Membership
6	100,000	Yacht
7	200,000	+1 Social, Yacht

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)
1	Carouse	Admin	Admin
2	+1 Edu	Advocate	Advocate
3	Deception	Comms	Language (any)
4	+1 Dex	Diplomat	Leader
5	Melee (blade)	Investigate	Diplomat
6	+1 Soc	Persuade	Computer

Roll	Specialist: Administrator	Specialist: Diplomat	Specialist: Dilettante
1	Admin	Advocate	Carouse
2	Advocate	Carouse	Deception
3	Broker	Comms	Flyer (any)
4	Diplomat	Steward	Streetwise
5	Leader	Diplomat	Gambler
6	Persuade	Deception	Jack of all Trades

RANKS AND BENEFITS

Rank	Administrator	Skill or Benefit	Diplomat	Skill or Benefit	Dilettante	Skill or Benefit
0	Assisstant		Intern		Wastrel	
1	Clerk	Admin 1	3rd Secretary	Admin 1		
2	Supervisor		2nd Secretary		Ingrate	Carouse 1
3	Manager	Advocate 1	1st Secretary	Advocate 1		
4	Chief		Counsellor		Black Sheep	Persuade 1
5	Director	Leadership 1	Minister	Diplomat 1		
6	Minister		Ambassador		Scoundrel	Jack of all Trades 1

MISHAPS

1d6	Mishap
1	Injured. Roll on the Injury table.
2	A family scandal forces you out of your position. Lose one Social Standing.
3	A disaster or war strikes. Roll Stealth 8+ or Deception 8+ to escape unhurt. If you fail, roll on the Injury table.
4	Political manoeuvrings usurp your position. Increase Diplomat or Advocate by one level and gain a Rival.
5	An assassin attempts to end your life. Roll Endurance 8+. If you fail, roll on the Injury table.
6	Your fortunes change at court, forcing you to leave. Gain a Contact in the nobility and the Streetwise skill.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You are challenged to a duel for your honour and standing. If you refuse, reduce your Social Standing by 1. If you accept, roll Melee (blade) 8+. If you succeed, gain one Social Standing. If you fail, roll on the Injury table and reduce your Social Standing by one. Either way, gain one level in Melee (blade), Leadership, Tactics (any) or Deception.
4	Your time as a ruler or playboy gives you a wide range of experiences. Gain one of Animals (riding) 1, Art (any) 1, Carouse 1, or Streetwise 1
5	You inherit a gift from a rich relative. Gain a +1 DM to any one Benefit roll.
6	You become deeply involved in politics on your world of residence, becoming a player in the political intrigues of government. Gain one level in Advocate, Admin, Diplomacy or Persuade, but also gain a Rival.
7	Life Event. Roll on the Life Events table (page 34).
8	A conspiracy of nobles attempts to recruit you. If you refuse, gain the conspiracy as an Enemy. If you accept, roll Deception 8+ or Persuade 8+. If you fail, roll on the mishap table as the conspiracy collapses. If you succeed, Gain one level of Deception, Persuade, Tactics (any) or Carouse.
9	Your reign is acclaimed by all as being fair and wise – or in the case of a dilettante, you sponge off your family's wealth a while longer. Gain either a jealous relative or an unhappy subject as an Enemy. Gain a +2 DM to your next Advancement check.
10	You manipulate and charm your way through high society. Gain one level of Carouse, Diplomat, Persuade or Steward, as well as a Rival and an Ally.
11	You make an alliance with a powerful and charismatic noble, who becomes an Ally. Either gain one level of Leadership or take a +4 DM to your next Advancement roll thanks to his aid.
12	Your efforts do not go unnoticed by the Imperium. You are automatically promoted.

ROGUE

Criminal elements familiar with the rougher or more illegal methods of accomplishing tasks.

Qualification: Dex 6+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Thief:** You stole from the rich and gave to... well, yourself, usually.
- **Enforcer:** You were a leg breaker, thug or assassin for a criminal group.
- **Pirate:** You were a space-going corsair.

CAREER PROGRESS

	Survival	Advancement
Thief	Int 6+	Dex 6+
Enforcer	End 6+	Str 6+
Pirate	Dex 6+	Int 6+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	None	Ship Share
2	None	Weapon
3	10,000	+1 Int
4	10,000	Two Ship Shares
5	50,000	Armour
6	100,000	+1 Dex
7	100,000	Corsair

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 10)
1	Carouse	Deception	Computers
2	+1 Dex	Recon	Comms
3	+1 End	Athletics (any)	Medic
4	Gambler	Gun Combat (any)	Investigation
5	Melee (any)	Stealth	Persuade
6	Gun Combat (any)	Streetwise	Advocate

Roll	Specialist: Thief	Specialist: Enforcer	Specialist: Pirate
1	Stealth	Gun Combat (any)	Pilot (any)
2	Computers	Melee (any)	Astrogation
3	Remote Operations	Streetwise	Gunner (any)
4	Streetwise	Persuade	Engineer (any)
5	Deception	Athletics (any)	Vacc Suit
6	Athletics (co-ordination)	Drive (any)	Melee (blade)

RANKS AND BENEFITS

Rank	Thief	Skill or Benefit	Enforcer	Skill or Benefit	Pirate	Skill or Benefit
0					Lackey	
1		Stealth 1		Persuade 1	Henchman	Pilot (any) 1 or Gunner (any) 1
2					Corporal	
3		Streetwise 1		Gun Combat (any) 1 or Melee (any) 1	Sergeant	Gun Combat (any)1 or Melee (any) 1
4					Lieutenant	
5		Recon 1		Streetwise 1	Leader	Engineering (any) 1 or Navigation 1
6					Captain	
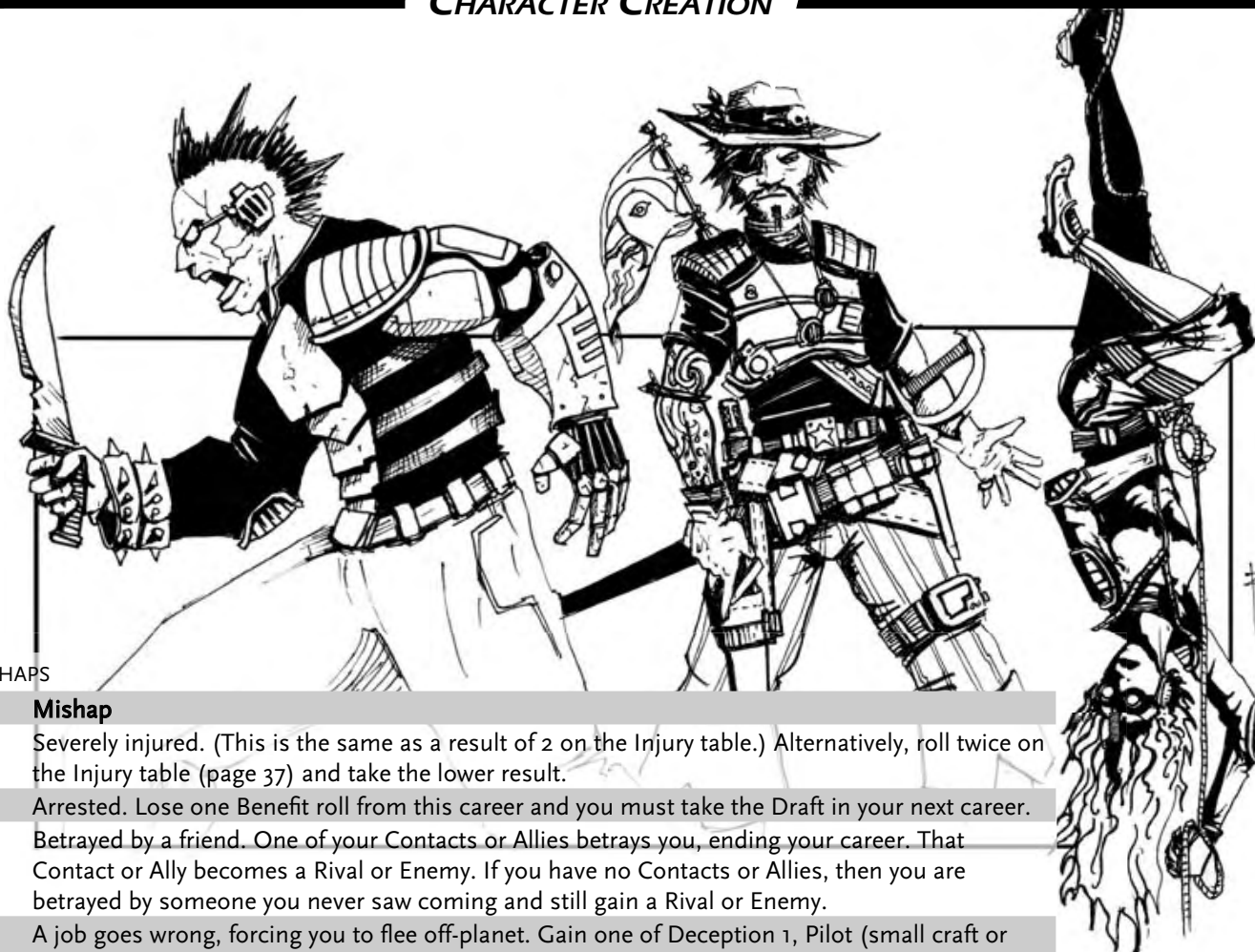
MISHAPS

1d6	Mishap
1	Severely injured. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	Arrested. Lose one Benefit roll from this career and you must take the Draft in your next career.
3	Betrayed by a friend. One of your Contacts or Allies betrays you, ending your career. That Contact or Ally becomes a Rival or Enemy. If you have no Contacts or Allies, then you are betrayed by someone you never saw coming and still gain a Rival or Enemy.
4	A job goes wrong, forcing you to flee off-planet. Gain one of Deception 1, Pilot (small craft or spacecraft) 1, Zero-G 1 or Gunner (any) 1.
5	A police detective or rival criminal forces you to flee and vows to hunt you down. Gain an Enemy.
6	Injured. Roll on the Injury table.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You are arrested and charged. You can choose to defend yourself, or hire a lawyer. If you defend yourself, roll Advocate 8+. If you succeed, the charges are dropped. If you fail, lose one Benefit roll and gain an Enemy. If you hire a lawyer, lose one Benefit roll and gain the lawyer as a Contact.
4	You are involved in the planning of an impressive heist. Gain one of Computers 1, Sensors 1, Comms 1 or Mechanic 1.
5	One of your crimes pays off. Gain a +2 DM to any one Benefit roll, and gain your victim as an Enemy.
6	You have the opportunity to backstab a fellow rogue for personal gain. If you do so, gain a +4 DM to your next Advancement check. If you refuse, gain him as an Ally.
7	Life Event. Roll on the Life Events table (page 34).
8	You spend months in the dangerous criminal underworld. Gain one of Streetwise 1, Stealth 1, Melee (any) 1 or Gun Combat (any) 1.
9	You become involved in a feud with a rival criminal organisation. Roll Stealth or Gun Combat (any) 8+. If you fail, roll on the Injury table. If you succeed, gain an extra Benefit roll.
10	You are involved in a gambling ring. Gain Gambler 1. You may wager any number of Benefit rolls. Roll Gambler 8+; if you fail, lose all the wagered Benefit rolls. If you succeed, gain half as many Benefit rolls as you wagered (round up).
11	A crime lord considers you his protégé. Either gain Tactics (military) 1 or take a +4 DM to your next Advancement roll thanks to his aid.
12	You commit a legendary crime. You are automatically promoted.

SCHOLAR

Individuals trained in technological or research sciences who conduct scientific investigations into materials, situations and phenomena, or who practise medicine.

Qualification: Int 6+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Field Researcher:** You were an explorer or field researcher, equally at home in the laboratory or the wilderness.
- **Scientist:** You were a researcher in some corporate or Imperial research institution, or a mad scientist in an orbiting laboratory.
- **Physician:** You were a doctor, healer, or researcher in the life sciences.

CAREER PROGRESS

	Survival	Advancement
Field Researcher	End 6+	Int 6+
Scientist	Edu 4+	Int 8+
Physician	Edu 4+	Edu 8+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	5,000	+1 Int
2	10,000	+1 Edu
3	20,000	Two Ship Shares
4	30,000	+1 Soc
5	40,000	Scientific Equipment
6	60,000	Lab Ship
7	100,000	Lab Ship

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 10)
1	+1 Int	Comms	Art (any)
2	+1 Edu	Computers	Advocate
3	+1 Soc	Diplomat	Computers
4	+1 Dex	Medic	Language (any)
5	+1 End	Investigate	Engineer (any)
6	Computers	Any Science (any)	Any Science (any)

Roll	Specialist: Field Researcher	Specialist: Scientist	Specialist: Physician
1	Sensors	Admin	Medic
2	Diplomat	Engineer (any)	Comms
3	Language (any)	Any Science (any)	Investigate
4	Survival	Sensors	Medic
5	Investigate	Computers	Persuade
6	Any Science (any)	Any Science (any)	Any Science (any)

RANKS AND BENEFITS

Rank	Field Researcher	Skill or Benefit	Scientist	Skill or Benefit	Physician	Skill or Benefit
0						
1		Social Science 1		Physical Science 1		Medic 1
2						
3		Investigate 1		Investigate 1		Life Science 1
4						
5		Computers 1		Computers 1		Social Science 1
6						

MISHAPS

1d6	Mishap
1	Injured. Roll on the Injury table.
2	A disaster leaves several injured, and others blame you, forcing you to leave your career. Roll on the Injury table twice, taking the higher result, and gain a Rival.
3	The planetary government interferes with your research for political or religious reasons. If you continue with your work openly, increase any Science skill by one level and gain an Enemy. If you continue with your work secretly, increase any Science skill by one level and reduce your Social Standing by 2. This mishap does not cause you to leave this career.
4	An expedition or voyage goes wrong, leaving you stranded in the wilderness. Gain Survival 1 or Athletics (co-ordination or endurance) 1. By the time you find your way home, your job is gone.
5	Your work is sabotaged by unknown parties. You may salvage what you can and give up (leave the career but retain this term's Benefit roll) or start again from scratch (lose all Benefit rolls from this career but you do not have to leave).
6	A rival researcher blackens your name or steals your research. Gain a Rival but you do not have to leave this career.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	You are called upon to perform research that goes against your conscience. Accept, and you gain an extra Benefit roll, a level in each of any two Science (any) skills and 1d3 Enemies.
4	You are assigned to work on a secret project for a patron or organisation. Gain one of Medic 1, Any Science (any) 1, Engineer (any) 1, Computers 1 or Investigate 1.
5	You win a prestigious prize for your work, garnering both the praise and envy of your peers. Gain a +1 DM to any one Benefit roll.
6	You are given advanced training in a specialist field. Throw Education 8+ to gain any one skill of your choice at level 1.
7	Life Event. Roll on the Life Events table (page 34).
8	You have the opportunity to cheat in some fashion, advancing your career and research by stealing another's work, using an alien device, taking a shortcut and so forth. If you refuse, you gain nothing. If you accept, roll Deception 8+ or Admin 8+. If you succeed, you gain a +2 DM to any one Benefit roll and may increase any skill by one level, but you also gain an Enemy. If you fail, you gain an Enemy and lose one Benefit roll from this career.
9	You make a breakthrough in your field. Gain a +2 DM to your next Advancement check.
10	You become entangled in a bureaucratic or legal morass that distracts you from your work. Gain one of Admin 1, Advocate 1, Persuade 1 or Diplomat 1.
11	You work for an eccentric but brilliant mentor, who becomes an Ally. Either increase any Science skill by one level, or take a +4 DM to your next Advancement roll thanks to his aid.
12	Your work leads to a considerable breakthrough. You are automatically promoted.

SCOUT

Members of the exploratory service. Scouts explore new areas, map and survey known or newly discovered areas, and maintain the communications ships which carry information and messages between the worlds of the galaxy.

Enlistment: Int 5+
−1 DM for every previous career.

Assignments: Choose one of the following:
- **Courier:** You served lonely duty on the X-boat network, carrying the messages that keep the Imperium together.
- **Survey:** You visited border worlds and assessed their worth to the Imperium.
- **Exploration:** You went wherever the map was blank, exploring unknown worlds and uncharted space.

CAREER PROGRESS

	Survival	Advancement
Courier	End 5+	Edu 9+
Survey	End 6+	Int 8+
Exploration	End 7+	Edu 7+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	20,000	Ship Share
2	20,000	+1 Int
3	30,000	+1 Edu
4	30,000	Weapon
5	50,000	Weapon
6	50,000	Scout Ship
7	50,000	Scout Ship

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)
1	+1 Str	Pilot (spacecraft or small craft)	Medic
2	+1 Dex	Survival	Navigation
3	+1 End	Mechanic	Engineer (any)
4	+1 Int	Astrogation	Computer
5	+1 Edu	Comms	Space Science (any)
6	Jack of all Trades	Gun Combat (any)	Jack of all Trades

Roll	Specialist: Courier	Specialist: Survey	Specialist: Exploration
1	Comms	Sensors	Sensors
2	Sensors	Persuade	Pilot (spacecraft)
3	Pilot (spacecraft)	Pilot (small craft)	Pilot (small craft)
4	Vacc Suit	Navigation	Life Science (any)
5	Zero-G	Diplomat	Stealth
6	Astrogation	Streetwise	Recon

RANKS AND SKILLS

Rank	Title	Skill or Benefit
0		
1	Scout	Vacc Suit 1
2		
3	Senior Scout	Pilot 1
4		
5		
6		

Ancient Technology

The Ancients left technological wonders scattered throughout space, and these artefacts are sought after by the Imperium as well as rival governments, megacorporations, research institute, criminals and mad scientists. Those lucky enough to find such artefacts may have made their fortunes – or signed their death warrants. Ancient artefacts range in size from personal items or weapons to starships, or even vast ringworlds millions of kilometres across. The more intact an Ancient device is, the more likely it is to be defended...

The artefact...
1. ...is severely damaged. The characters will need to find the missing parts to repair it.
2. ...is a fake, planted by a criminal gang who intended to sell the location to the Imperium. By removing the artefact, the characters have unwittingly foiled the gang and incurred their wrath.
3. ...has military applications – it could be a weapon, or a personal force shield. If the characters can discover how to operate it, they can use it to survive.
4. ... is intelligent, and has its own agenda.
5. ... opens up a portal to a distant planet or even a pocket universe.
6. ... is planetary in scale – an orbital, an artificial planet, a rosette, even a ringworld.
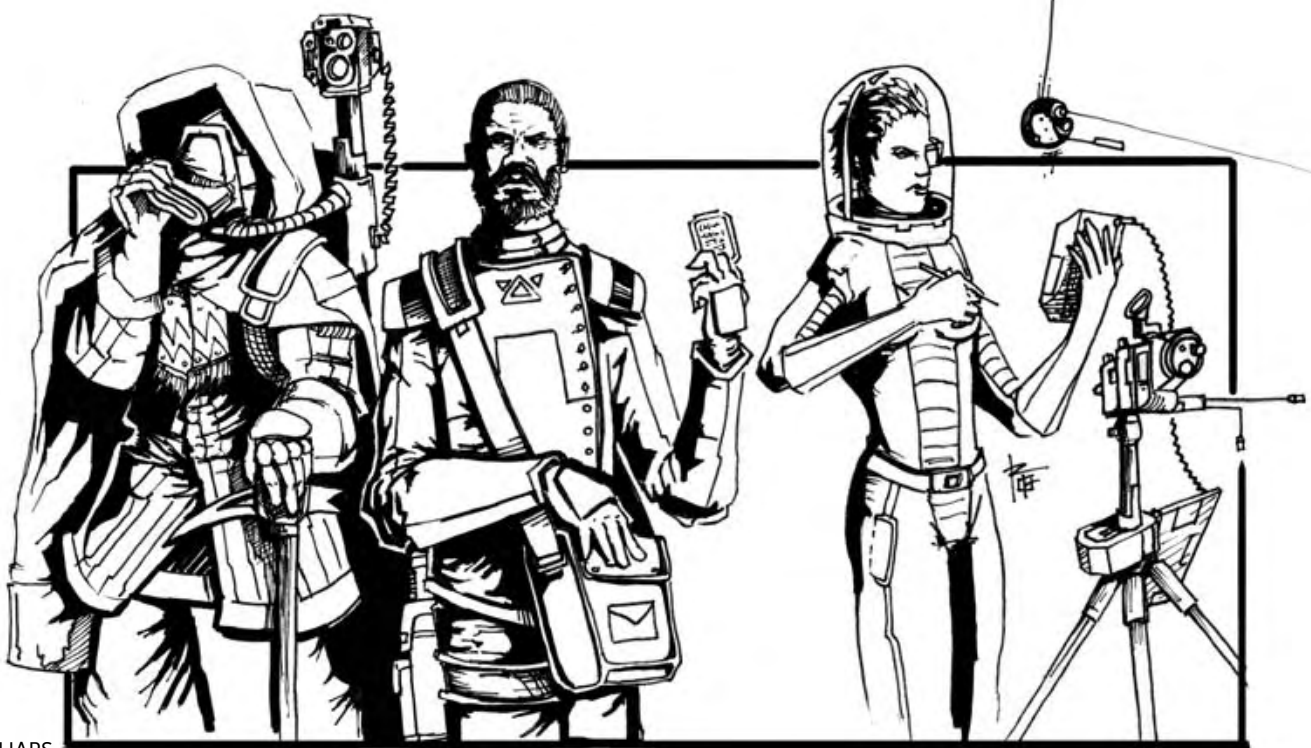
MISHAPS

1d6	Mishap
1	Severely injured in action. (This is the same as a result of 2 on the Injury table.) Alternatively, roll twice on the Injury table (page 37) and take the lower result.
2	Psychologically damaged by your time in the scouts. Reduce your Intelligence or Social Standing by 1.
3	Your ship is damaged, and you have to hitch-hike your way back across the stars to the nearest scout base. Gain 1d6 Contacts and 1d3 Enemies.
4	You inadvertently cause a conflict between the Imperium and a minor world or race. Gain a Rival and Diplomat 1.
5	You have no idea what happened to you – they found your ship drifting on the fringes of friendly space.
6	Injured. Roll on the Injury table.

EVENTS

2d6	Events
2	Disaster! Roll on the mishap table, but you are not ejected from this career.
3	Your ship is ambushed by enemy vessels. Either run, and throw Pilot 8+ to escape, or treat with them and throw Persuade 10+ to bargain with them. If you fail the check, then your ship is destroyed and you may not re-enlist in the Scouts at the end of this term. If you succeed, you survive and gain Sensors 1. Either way, gain an Enemy.
4	You survey an alien world. Gain one of Animals (riding or training) 1, Survival 1, Recon 1 or Life Science (any) 1
5	You perform an exemplary service for the scouts. Gain a +1 DM to any one Benefit roll.
6	You spend several years jumping from world to world in your scout ship. Gain one of Astrogation 1, Navigation 1, Pilot (small craft) 1 or Mechanic 1.
7	Life Event. Roll on the Life Events table (page 34).
8	When dealing with an alien race, you have an opportunity to gather extra intelligence about them. Roll either Sensors 8+ or Deception 8+. If you succeed, gain an Ally in the Imperium and a +2 DM to your next Advancement roll. If you fail, roll on the Mishap table, but you are not ejected from this career.
9	Your scout ship is one of the first on the scene to rescue the survivors of a disaster. Roll either Medic 8+ or Engineer 8+. If you succeed, gain a Contact and a +2 DM to your next Advancement check. If you fail, gain an Enemy.
10	You spend a great deal of time on the fringes of known space. Roll Survival 8+ or Pilot 8+. If you succeed, gain a Contact in an alien race and one level in any skill of your choice. If you fail, roll on the Mishap table.
11	You serve as the courier for an important message from the Imperium. Either gain one level of Diplomat, or take a +4 DM to your next Advancement roll.
12	You discover a world, item or information of worth to the Imperium. You are automatically promoted.

LIFE EVENTS

Even in the distant future, humans are still people. (In fact, some non-humans are also people...) They work, they quarrel, they get sick, they fall in love, they complain about their in-laws... in short, life goes on. If you roll a Life Event on the Events table for your career, roll on the Life Events table at the bottom of this page.

MUSTERING OUT BENEFITS

In the course of a character's career, he may manage to save some money. He may also acquire equipment and other benefits from his previous employers – a scout might be mustered out of the service with a reserve scout ship, a marine might get to keep his battle armour and so on. These are determined by Benefit Rolls.

Benefits are gained when a character leaves a career for any reason other than failing a survival roll (willingly leaving the career, an event, an aging crisis, or just wishing to finish character generation). A character gets one Benefit Roll for every full term served in that career. You also get extra benefit rolls if you reached a higher rank.

BENEFITS OF RANK

Highest Rank Reached	Bonus Benefit Rolls
1–2	1
3–4	2
5–6	3, and you get a +1 DM to all Benefit Rolls in this career.

There are two tables for Benefit Rolls – the Cash table and the Other Benefits table. You may only roll on the Cash table a maximum of three times no matter how many careers you have had.

Cash Benefits

A character with the Gambler skill at level 1 or better gets a +1 DM to all rolls on the Cash table.

If the character has any money after rolling on the Cash table then he may purchase personal equipment worth up to 2,000 credits immediately. More expensive items can be bought in play but the characters will have to seek them out. Any left-over money can be taken as cash, trade goods or just saved with a financial institution.

Other Benefits

When you leave a career in good standing with your previous employers, you are permitted to keep various pieces of equipment or even shares of a vessel. Different careers give different benefits. For details of material benefits, see the Equipment chapter that starts on page 86. For details regarding Allies and Contacts, see page 76.

Air/Raft: You receive an air/raft (see page 103). If you roll this benefit again, gain a level of Flyer (grav).

Armour: Select one of the following types of armour – Cloth, Reflec, Vacc Suit, HEV Suit, Combat Armour or Subdermal Armour. (See the Equipment chapter starting on page 86.) If you roll this benefit again, then gain the Vacc Suit or Battle Dress skill or another type of armour.

LIFE EVENTS

2d6	Event
2	**Sickness or Injury:** The character is injured or contracts a bad sickness. Roll on the Injury table (page 37).
3	**Birth or Death:** Someone close to the character dies, like a friend or family member. Alternatively, someone close to the character gives birth (or is born!). The character is involved in some fashion (father or mother, relative, godparent, or similar).
4	**Ending of Relationship:** A romantic relationship involving the character ends. Badly.
5	**Improved Relationship:** A romantic relationship involving the character deepens, possibly leading to marriage or some other emotional commitment.
6	**New Relationship:** The character becomes involved in a romantic relationship.
7	**New Contact:** The character gains a new Contact.
8	**Betrayal:** The character is betrayed in some fashion by a friend. If you have any Contacts or Allies, convert one into a Rival or Enemy. Otherwise, gain a Rival or an Enemy.
9	**Travel:** The character moves to another world. You gain a +2 DM to your next Qualification roll.
10	**Good Fortune:** Something good happens to the character; he comes into money unexpectedly, has a lifelong dream come true, gets a book published or has some other stroke of good fortune. Gain a +2 DM to any one Benefit roll from his current career.
11	**Crime:** The character commits a crime, is accused of a crime, or is the victim of a crime. Lose one Benefit roll or reduce your Social Standing by 1.
12	**Unusual Event:** Something weird. Roll 1d6: 1 – Psionics. The character encounters a Psionic institute. You may immediately test your Psionic Strength (see page 152) and, if you qualify, take the Psion career in your next term (see page 152). 2 – Aliens. You spend time among an alien race. Gain Life Sciences (biology) and a contact among an alien race. 3 – Alien artefact. You have a strange and unusual device from an alien culture that is not normally available to humans. 4 – Amnesia. Something happened to you, but you don't know what it was. 5 – Contact with government. You briefly came into contact with the highest echelons of the Imperium – an Archduke or the Emperor, perhaps, or Imperial intelligence. 6 – Ancient technology. You have something older than the Imperium, or even something older than *humanity*.

Contacts, Allies, Rivals and Enemies

Over the course of their previous careers, characters will have made friends and foes and establish ties with various non-player characters who may play a part in future adventures. There are four categories of such associates:

Contacts are individuals that the character knows and has had friendly dealings with in the past. They have useful skills or positions, and may be willing to aid the character.

Allies are like contacts, but are willing to help the characters and will actively go out of their way to provide aid.

Both allies and contacts can be **patrons** (see page 77).

Rivals are people who hate or oppose the character, and will attempt to interfere or harass him. **Enemies** are even worse than rivals – a rival seeks to one-up or humiliate, but an enemy wants the character dead, imprisoned or otherwise doomed.

When you gain an associate from a random event, note it on your character sheet. You can give as much detail as you wish, from the sketchy ('*Rival in Navy*') to the detailed ('*Captain Harrick of the* Pride of Sylea *is my rival, because I disobeyed his orders while on a mission. He had me drummed out of the Navy, damn him! I'll have my revenge on him one day!*')

Other player characters can be Contacts, Allies or even Rivals for the purposes of the Connections rule (see page 8).

Ally: Gain an Ally.

Blade: Select any blade weapon. If you roll this benefit again, you may take another blade of the same type, a different blade, or one level in the Melee (blade) skill.

Characteristic Increases: Increase the listed characteristic by the listed amount, up to your racial maximum. Human characters are limited to a score of 15. Characteristic increases above 15 are lost, with the exception of Social Standing increases – excess Social Standing increases become bonus Ship Shares.

Combat Implant: Gain any one of the following augmentations (see page 89): Skill Augmentation, Wafer Jack, Subdermal Armour or Characteristic Augmentation. You must take the lowest-TL Augmentation of that type. If you roll this benefit again, then you may either take a different Augmentation or the upgrade one you already possess to the next higher TL.

Contact: Gain a Contact.

Corsair: You receive 5 ship shares towards the use of a Corsair raider, or 2 ship shares towards the use of any other vessel.

Free Trader: You receive 5 ship shares towards the use of a Free Trader merchant ship, or 2 ship shares towards the use of any other vessel.

Gun: Select any common or military ranged weapon. If you roll this benefit again, you may take another weapon of the same type, a different weapon, or one level in the appropriate Gun Combat skill for a weapon already received as a mustering-out benefit.

Lab Ship: You receive 5 ship shares towards the use of a Laboratory Ship research vessel, or 2 ship shares towards the use of any other vessel.

Scientific Equipment: Gain any one piece of scientific equipment: a communications device, a toolkit, a sensor, a computer or a computer program, gained at the lowest Technology Level if multiple TLs are listed. If you roll this benefit again, then you take another piece of scientific experiment or gain Comms, Sensors, Computers or any one Science skill.

Scout Ship: You receive a Scout ship. The first receipt provides use of the ship, but the ship is still the property of the Scout service, and can be called back into active duty if needed. Alternatively, you can take 1d6 ship shares instead.

Ship's Boat: You receive a Ship's Boat (see page 132). If you roll this benefit again, gain a level of Pilot (small craft).

Ship Shares: You obtain one or more ship shares that can be put towards obtaining a ship. (See overleaf.)

Weapon: Select any weapon. If you roll this benefit again, you may take another weapon of the same type, a different weapon, or one level in the appropriate Melee or Gun Combat speciality for a weapon already received as a mustering-out benefit.

TAS: You are a member of the Traveller's Aid Society (TAS), a private organisation that maintains hostels and facilities at all class A and B starports in many parts of human space. Facilities are available to members and their guests. Membership may only be achieved once per character. Receipt of membership in the Traveller's Aid Society upon mustering out may be construed as a reward for heroism or extraordinary service to the Society rather than an official benefit of service. Membership is for life and is not transferable.

Membership may be purchased at the cost of 1,000,000 Credits although it is possible for an application to be 'black-balled' by an existing member. The Traveller's Aid Society is an exclusive organisation, made up of those who are truly citizens of the galaxy, not just a single world.

The TAS invests its membership fees and other incomes; it uses its capital and return to provide benefits to its members. Every two months, it pays dividends in the form of one high passage (see page 142) to each member. This passage may be used, retained or sold.

If you roll this benefit again, gain two ship shares instead.

Yacht: You receive 5 ship shares towards the use of a luxury Yacht, or 2 ship shares towards the use of any other vessel.

Ship Shares

Ship shares represent contacts, credit rating, savings and favours owed that a character can put towards ownership of a space vessel. Characters can pool their ship shares towards the use of a vessel, but cannot trade ship shares for cash. It's very unlikely that the characters will be able to own anything other than the smallest starship outright at the start of the game, so most *Traveller* crews end up working to support the mortgage on their spacecraft.

Characters can also get extra ship shares by taking an older and more damaged ship, to a maximum of 10 bonus ship shares. See Old Ships on page 136.

Each ship share reduces the cost of the ship by 1%.

SHIP COSTS

Ship Type	Value (Cr.)	Ship Share Value (1%)
Scout*	27,040,500	270,405
Seeker Mining Ship	22,765,500	227,655
Free Trader	36,567,000	365,670
Fat Trader	97,182,000	971,820
Far Trader	51,385,500	513,855
Yacht	50,517,000	505,170
Corsair	142,794,000	1,427,940
Laboratory Ship	125,874,000	1,258,740
Mercenary Cruiser	433,440,000	4,334,400

*If you roll a Scout ship on the Scout Benefits table, then you have a ship on loan from the Scout Service and do not need to pay for it.

Retirement Pay

A character that leaves a service (other than Scout, Rogue or Drifter) at the end of the 5th or later term of service is considered to have retired and receives retirement pay. This pension is paid at the beginning of each year, effective upon leaving the service, and may be collected at any class A or B starport.

Terms	Pay
5	Cr. 10,000
6	Cr. 12,000
7	Cr. 14,000
8	Cr. 16,000
9+	+2,000 per term beyond 8

AGING AND INJURIES

Aging and injuries can both reduce characteristics before play begins. There are ways to ameliorate the effects of both aging and injuries. Characters can prolong their youth using anagathics (drugs that slow the aging process), but these are hard to find, expensive, and illegal or socially unacceptable in many parts of the Imperium. Injuries can be cured using medical care.

Both drugs and medical care are expensive, and will drain a character's finances. A character must keep track of how much money he spends on anagathics and medical care.

Aging

The effects of aging begin when a character reaches 34 years of age (their fourth four-year career term). At the end of the fourth term, and at the end of every term thereafter, the character must roll 2d6 on the Aging Table. Apply the character's total number of terms as a negative Dice Modifier on this table.

AGING TABLE

2d6	Effects of Aging
−6	Reduce three physical characteristics by 2, reduce one mental characteristic by 1
−5	Reduce three physical characteristics by 2.
−4	Reduce two physical characteristics by 2, reduce one physical characteristic by 1
−3	Reduce one physical characteristic by 2, reduce two physical characteristic by 1
−2	Reduce three physical characteristics by 1
−1	Reduce two physical characteristics by 1
0	Reduce one physical characteristic by 1
1+	No effect

The character may choose which characteristics are affected by aging.

Aging Crisis: If any characteristic is reduced to 0 by aging, then the character suffers an aging crisis. The character dies unless he can pay 1d6 × 10,000 credits for medical care, which will bring any characteristics back up to 1. The character automatically fails any Qualification checks from now on – he must either continue in the career he is in or become a Drifter if he wishes to take any more terms.

Anagathics: A character can start taking anagathics at any time. While using anagathic drugs, the character effectively does not age – add the number of terms since the character started taking anagathics as a positive Dice Modifier to rolls on the aging table. If

> ### Optional Rule: Maximum Terms
> A character sticking to well-paying and safe careers can avoid aging almost indefinitely. The Referee may wish to impose a limit on the number of terms taken during character creation. A limit of three terms will produce characters that are competent in one or two fields, but still have a lot to learn. A limit of six terms will give experienced and skilled characters who can take on dangerous missions. Past six terms, it becomes increasingly likely that the characters will be much too rich and influential to bother with minor assignments. ('*I'm a duke, and my friend here was an admiral! Why are we wandering the galaxy instead of sitting in our palaces?*')

a character stops taking anagathics, then he must roll immediately on the aging table to simulate the shock that comes from his system beginning to age again.

Anagathics have two drawbacks. Firstly, the risk of trying to obtain a reliable supply and the disruption to the character's biochemistry means the character must make a second Survival check if he passes his first Survival check in a term. If either check is failed, the character suffers a mishap and is ejected from the career.

Secondly, the drugs cost 1d6 × 2,500 Credits for each term that the character uses the drugs. These costs are paid out of the character's eventual mustering-out cash benefits. If the character cannot pay these bills, he goes into debt – see Medical Debt on the following page.

Aging and Anagathics During Play: If your campaign lasts long enough, characters will have to make further aging rolls every four years. Characters may also seek out anagathic drugs during play – see Anagathic Drugs on page 94.

Injuries

Characters that are wounded in combat or accidents during character creation must roll on the Injury table to see how bad their injuries were.

INJURY TABLE

1d6	Injury
1	Nearly killed. Reduce one physical characteristic by 1d6, reduce both other physical characteristics by 2 (or one of them by 4).
2	Severely injured. Reduce one physical characteristic by 1d6.
3	Missing eye or limb. Reduce Strength or Dexterity by 2.
4	Scarred. You are scarred and injured. Reduce any one physical characteristic by 2.
5	Injured. Reduce any physical characteristic by 1.
6	Lightly injured. No permanent effect.

The character may choose which characteristics are affected by injury.

Injury Crisis: If any characteristic is reduced to 0, then the character suffers an injury crisis. The character dies unless he can pay 1d6 × 10,000 credits for medical care, which will bring any characteristics back up to 1. The character automatically fails any Qualification checks from now on – he must either continue in the career he is in or become a Drifter if he wishes to take any more terms.

Medical Care: If your character has been injured, then medical care may be able to undo the effects of damage. Some worlds in the Imperium have the technology to clone or rebuild damaged organs; other worlds specialise in transplants or cybernetic replacements. Regardless of the technique used, medical care is expensive.

The restoration of a lost characteristic costs 5,000 Credits per point.

If your character was injured in the service of a patron or organisation, then a portion of his medical care may be paid for by that patron. Roll 2d6 on the table below, adding your Rank as a DM. The result is how much of his medical care is paid for by his employer.

MEDICAL BILLS

Career	Roll of 4+	Roll of 8+	Roll of 12+
Army/Navy/Marines	75%	100%	100%
Agent/Nobility/ Scholar/Entertainer/ Merchant/Citizen	50%	75%	100%
Scout/Rogue/Drifter	0%	50%	75%

For example, Morn suffers a missing limb during his career as a barbarian, reducing his Strength by 2. He has the limb regrown at the starport hospital, at the cost of 10,000 credits. He has to pay this entire amount himself – but he has no money. Morn starts the game with a 10,000 Credit debt to the hospital.

Medical Debt

During finishing touches, you must pay any outstanding costs from medical care or anagathic drugs out of your Benefits before anything else. Any debt left is hanging over your character at the start of the game.

FINISHING TOUCHES

Once you have gone through all the career terms you want, rolled for your skills and benefits, and resolved the effects of any aging or injuries, it is time to move onto finishing touches.

Finalise Connections

The connections between characters rule (see page 8) can give you bonus skills. At this stage, you may make (or finalise) a connection between your character and up to two other player characters. For each connection you make, you may gain one level in any skill, but you cannot bring a skill above level 3 using this rule nor may you take the Jack of all Trades skill.

For example, Erik has a bonus skill from his connection to Kathya. He could use it to bring his Stealth skill from level 2 to level 3, but could not use it to bring his Computer score from level 3 to level 4.

Breathing Life Into Your Character

At this stage of character generation, you have guided your character from his homeworld to the present day. Take some time to consider the parts of his nature that are not represented by numbers on the character sheet. Who is he? How has his past shaped his beliefs? What cause is he willing to fight for? Does he have any odd tics or habits? What does he want?

Skill Packages

As a group, select one of the following skill packages, which are collections of basic skills you will use while adventuring and

+++Mining drone 7 to control. Asteroid 'QUA–55442' located. Scan confirms presence of vanadium and platinum. Beginning extraction now... Alert! Proximity alert! Incoming mis----signal lost.+++

travelling. Taking a skill package ensures that your group will at least have basic competency in the situations that will come up in the game. When you have collectively decided which skill package is most suitable for the campaign you want to play, each player takes it in turns to select an item from the package. Keep going until all skills have been selected.

Traveller Skill Package: This is an all-round skill package, good for a campaign where the characters are trading one week and blowing things up the next.
Pilot (any) 1, Sensors 1, Comms 1, Gunner (any) 1, Gun Combat (any) 1, Persuade 1, Stealth 1, Medic 1.

Mercenary Skill Package: This skill package focuses on ground combat, and is obviously aimed at combat-heavy games.
Sensors 1, Comms 1, Medic 1, Leadership 1, Heavy Weapons (any) 1, Gun Combat (any) 1, Gun Combat (any) 1, Stealth 1.

Trader Skill Package: This skill package is for campaigns where trading and commerce are the primary activities of the player characters.
Pilot (any) 1, Sensors 1, Medic 1, Streetwise 1, Broker 1, Advocate 1, Diplomat 1, Astrogation 1.

Starship Skills Package: This is for campaigns where the characters will spend almost all their time on their spacecraft.
Pilot (any) 1, Gunner (any) 1, Engineer (any) 1, Mechanic 1, Sensors 1, Medic 1, Comms 1, Astrogation 1.

Explorer Skills Package: For campaigns where the characters are operating on the fringe of known space, dealing with new worlds and ancient relics.
Pilot (any) 1, Astrogation 1, Sensors 1, Survival 1, Recon 1, Gun Combat (any) 1, Stealth 1, Medic 1

Diplomat Skill Package: For campaigns where the characters are government operatives and ambassadors.
Advocate 1, Diplomat 1, Persuade 1, Stealth 1, Streetwise 1, Deception 1, Computers 1, Comms 1.

Investigator Skill Package: For campaigns with an emphasis on solving crimes and investigating mysteries.
Advocate 1, Admin 1, Investigate 1, Persuade 1, Stealth 1, Streetwise 1, Computers 1, Sensors 1, Gun Combat (any) 1

Criminal Skill Package: For campaigns involving seedy crimes or elaborate heists.
Pilot (any) 1, Sensors 1, Stealth 1, Deception 1, Persuade 1, Streetwise 1, Broker 1, Medic 1.

Why Are You Travelling?

The final step of character generation is to choose your character's initial goal – why is he travelling? The lure of the unknown? The chance to strike it rich? Running from his past? Loyalty to another character?

CHARACTER CREATION EXAMPLE

The following example is given to illustrate the process of character generation. Actual die throws are shown in brackets, as are comments on the application of game rules. Die modifications are labelled DM.

Alexander Lascelles Jamison: First, Jamison rolls for his Characteristics. He rolls: Str 6 (DM +0) Dex 8 (DM +0) End 8 (DM +0) Int 12 (DM +2) Edu 8 (DM +0) Soc 9 (DM +1). His Edu DM of +0 gives him three background skills based on his homeworld – a high-population, high-technology world. He takes Computers 0 and Streetwise 0 for his homeworld skills, and chooses Drive 0 from the education list.

Having just finished school, Jamison sets out to win his fortune in the universe. Taking stock of himself and his personal qualities, he soon decides that his characteristics adapt him best for the merchant service.

He visits his local starport, checks out the situation [required roll of 4+ to enlist, with a DM of +2 allowed for his intelligence of 12; he rolls a 2! (+2=4)], and just barely manages to convince a merchant captain to let him sign on. He is now in the merchant marine.

First Term: As this is Jamison's first term in this new career, he is given a basic training in all aspects of ship handling [he gains all the Service Skills at level 0, gaining Vacc Suit 0, Broker 0, Steward 0, Comms 0 and Persuade 0.] He would also learn Drive 0 as a service skill but he has already got Drive at level 0 from his background and so gains no benefit. He also learns to pilot the ship [Roll of a 1 on the Merchant Marine Specialist skills table].

During his first term of service [survival roll required is 4+; he rolls 11 (+0=11)] he faces no great dangers. The merchant ship has a run of luck [Event roll of 10, giving him a +1 DM to any one Benefit roll], and Jamison studies in the hopes of being promoted. He scrapes past his exams [Merchant Marine promotion requires 7; he rolls a 5, +2 for his Intelligence] and is promoted to 4th Officer [gaining the Mechanic 1 skill]. He also gains another skill [Roll of a 1 on the Advanced Education table gives him a Social Science.]

Second Term: The ship's luck runs out as it heads into dangerous space. Jamison is trained to man the guns [Roll of a 6 on the merchant Marine Specialist table gives him Gunner (any) 1]. Jamison survives [passing his Survival roll easily with a 7] and picks up a basic knowledge of electronics [roll of a 4 on the Events table, taking Engineer (electronics) 1.] He tries for promotion again, and succeeds [Requires a 7; he rolls a 6, and has a +2 for his Int, giving him an 8]. He continues his advanced studies, learning to operate the ship's computer [roll of a 3 on the Advanced Education table, giving him Computers 1.]

Third Term: Jamison serves in the engineering section, improving his Mechanic skill [rolls a 4 on the Merchant Marine specialist table,

and he already has Mechanic 1, so it goes up to Mechanic 2]. He again avoids disaster [passes his Survival roll]. In a starport on a distant world, he runs into a scout named Tash [Event roll of 6] who hitches a ride on the merchant ship and the two become friends. [Tash is another player character, and the two now have a potential Connection.]

Jamison continues to advance in the Merchant service [rolls an 8 for promotion, with a +2 DM for his Intelligence]. He is now a 2nd Officer. His new role involves taking care of the ship's paperwork [rolls a 5 on the Advanced Education table, picking up Admin 1].

Fourth Term: Having heard tales of terror from his new Scout friend, Jamison tries to pick up some weapons skills, but he really just learns to keep his head down [rolls on the Personal Development table, hoping for the Melee (blade) skill, but rolls a 6 and picks up Streetwise instead). Again, he is uninjured [rolls an 8 on his Survival roll], but he is given an interesting proposition – a criminal syndicate wants to smuggle some goods offworld, and Jamison's role as 2nd Officer means he could alter the cargo manifest to hide the goods. [Rolls a 3 on Event table]. If he refuses, the criminal syndicate will be... displeased. Jamison has to persuade the cargo master to go along with the scam [requires a Persuade check; Jamison has Persuade 0 and a +1 DM from his Social Standing, but he only rolls a 6, failing the check and gaining nothing].

Despite the black mark on his record for his attempted smuggling, he again wins promotion [rolls a 9 for his promotion roll, +2 for Intelligence]. He is now a 1st Officer. [This rank gives the Pilot 1 skill; as Jamison already has Pilot (spacecraft) 1, applying his new skill there would do no good so he applies this second Pilot skill to small craft instead.]

At the end of this term, Jamison must make an Aging roll. [He rolls a 4, −4 for his total number of terms, for a result of 0. He loses one point from any one Physical Characteristic, and chooses to reduce his Dexterity to 7.]

Fifth Term: Jamison learns the art of negotiation [rolls a 3 on the Service Skill table, gaining Broker 1]. Perhaps feeling that he has been too focussed on his career, Jamison begins courting a beautiful woman in the Bureau of Trade named Sya [rolls a 7 on the Event table, for a life event, and rolls a 5 on the Life Events table, indicating a new Relationship. One of the other players leaps on this, suggesting that Jamison has fallen for her undercover agent, Sya.]

Next, he tries for promotion, but is instead forced to leave the service at the end of this term (he rolls a 3, +2 for his Intelligence, but his total of five is less than or equal to the number of terms spent in this service. Finally, he rolls for Aging again [with a −5 DM for five terms served, he rolls a 5, for another 0, dropping his Endurance to 7)

Mustering Out: Having completed twenty years of active duty in the merchant service, 1st Officer Jamison is eligible for a variety of service benefits [five rolls on the tables for terms served, plus two by virtue of his rank; in addition, he is allowed a single +1 modifier from the event in his first term]. He receives [Cash table, rolls of a 6, a 4 and a 4] a severance bonus of Cr. 80,000. He also receives:
[Roll of a 4, +1 for his event in Term 1 = 5]: A blade.
[Roll of a 6] Shares towards a free trader.
[Roll of a 6] More shares towards his free trader.
[Roll of a 3] An education benefit [+1 Edu].

Sixth Term: Jamison could go adventuring now, but he decides to risk another term in one of the services. He can't re-enter the Merchants, so he picks the Entertainer class, aiming at the Journalist speciality. He needs to roll a 5+, adding his Intelligence DM of +2, but has a −1 DM because he's already gone through one career. He rolls a 6, and passes.

He picks up Deception 0 [one skill from the service skills list] as basic training and rolls Computers on the Journalist skill table. Unfortunately, he fails his Survival check for the term, and is betrayed by a peer (result #4). As the only contact that Jamison has picked up is another player character, and the Referee doesn't want in-fighting at the start of the campaign, it's agreed that Jamison is betrayed by a fellow journalist, who becomes a Rival. So much for Jamison's planned expose of insider trading!

As Jamison failed his Survival roll in the first term of this career, he doesn't get any Benefits. All that's left to do this term is roll for aging, which passes without incident.

Jamison has two Connections – one to the Scout Tashen, and the other to Sya. He chooses to use both to increase his Pilot (spacecraft) skill to 3. Next, the group pick a Skill Package – Jamison gets Gun Combat (slug pistol) 1 and Sensors 1 out of it.

Pooling the ship shares of the other characters, the group is able to afford a reasonable mortgage on a Free Trader. He hires his old Scout friend as navigator, and invites Sya to travel with him.

Alexander Lascelles Jamison is now 42 years old, a retired merchant captain, with a pension of Cr. 10,000 per year and a healthy cash balance. Considering that the merchants forced him out of the service at the peak of his career, he has some slight resentment against the merchant service. He is also utterly unaware that his love is actually an Imperial agent who is using him as a cover...

Merchant Captain Alexander Jamison

Age 42, 6 terms, Cr. 80,000
Str 6 (+0) Dex 7 (+0) End 7 (+0)
Int 12 (+2) Edu 9 (+1) Soc 9 (+1)
Skills: Admin 1, Broker 1, Comms 0, Computers 2, Deception 1, Drive 0, Engineer (electronics) 1, Gun Combat (slug pistols) 1, Gunner (turrets) 1, Mechanic 2, Medic 1, Persuade 0, Pilot (spacecraft) 3, Pilot (small craft) 1, Sensors 1, Steward 0, Streetwise 1.
Equipment: Blade, Type A Free Trader

ALTERNATE CHARACTER GENERATION RULES

The standard form of *Traveller* character generation is recommended for most campaigns, but some players or Referees may prefer these alternate modes.

Alternate Characteristics and Events

Referees are encouraged to customise characteristics and events for their campaigns. For example, if a campaign is set in a particular Milieu such as the Rule of Man, the Referee might replace one or two generic events in each events table with ones tailored to that campaign.

It is also possible to add characteristics. In a campaign centred around political intrigue and diplomacy, an Influence or Charm characteristic could be added. A game where the characters encounter ancient alien space gods who drive people insane might add a Sanity characteristic. An investigative game might add a Perception characteristic.

Solo Generation

Solo character generation works just like normal character generation, with the following minor changes:

- **The Connections Rule:** Instead of making connections to other player characters, the Referee should provide a list of characters, organisations or places in his campaign that are suitable for connections. For example, you might get a bonus skill if you had a connection with the Imperial Intelligence service, or were on the run from the law and were willing to take passage on the first ship to hire you.
- **Skill Packages:** Instead of picking a skill package, gain any one skill at Level 1.

Iron Man Character Generation

In the original *Traveller* rules, if you failed a survival roll, your character was killed. The Iron Man rules repeat that challenge – instead of rolling on the mishap table if you fail a survival roll, your character is killed and you must start again. Under the Iron Man rules, you must balance the advantages garnered from spending another term in a career with the risk of dying in action.

Other than these changes, Iron Man works just like normal character generation.

Select Skills

In this variant, the player picks skills from the various Skills and Training tables instead of rolling randomly for them. In all other ways, it is identical to standard generation.

Point Allocation

Instead of rolling on the career tables, you can buy a character's characteristics and skills using points.

CHARACTERISTICS

Characteristic	Point Cost
2	−3
3	−2
4	−1
5	0
6	1
7	2
8	3
9	5
10	6
11	8
12	10
13	12
14	15
15	18

SKILLS

Skill Level	Point Cost
0	1
1	2
2	4
3	6
4	8

The *Jack of all Trades* skill costs five times normal.

Rank costs two points per level, and gives the normal skills and benefits for that rank. Military characters using the Point Allocation rules may gain a commission automatically.

Benefit Rolls cost two points each. A character may only buy two benefit rolls per term.

Point Allocation characters do not receive background skills or roll on the Events tables, but may still benefit from the Connections rule by deciding on a backstory that includes other player characters.

The number of points available varies depending on how powerful the Referee intends the characters to be:
One Term: 24 points, minimum 10 points spent on characteristics.
Two Terms: 30 points, minimum 12 points spent on characteristics.
Three Terms: 35 points, minimum 14 points spent on characteristics.
Four Terms: 40 points, minimum 16 points spent on characteristics.
Per term thereafter: +10 points.

The Universal Personality Profile

Characters may be precisely defined using the *Universal Personality Profile* (the UPP), which expresses the basic characteristics in a specific sequence, using a notation which resembles hexadecimal (base 16). In hexadecimal notation, the digits 0 through 9 are represented by common Arabic numbers; the digits 10 to 15 are represented by the letters A through F. The highest single digit in base 16 is 15, denoted as F. Characteristics are listed as a string of six digits, in the order of Strength, Dexterity, Endurance, Intelligence, Education and Social Standing.

A character who is average in all respects would have a UPP of 777777. If, however, he was highly intelligent, his UPP would be 777B77 (the B for Intelligence indicating an Intelligence of 11). Captain Jamison would have 677B99.

The UPP is extensively used in *Traveller*: it makes it possible to easily list large numbers of characters.

ALIENS

Humanity shares the stars with hundreds of alien races. Most are restricted to a handful of worlds, but there are several races who rival the Imperium in power and influence.

Alien characters use many of the same characteristics as humans – they have Strength, Dexterity, Endurance, Intelligence and Education. However, alien species may have different criteria for Social Standing: Caste (a genetic structure for social hierarchy) or Charisma (small group hierarchy). Even Social Standing for aliens may not apply when interacting with humans. When dealing with a race that has a different concept of Social Standing, all DMs from Social Standing or its alien equivalent – whether positive or negative – are halved.

In addition to their characteristics, aliens may have one or more of the alien traits below.

Armoured: The alien possess thick fur, scales, a bony exoskeleton or other natural protection that gives it one point of natural armour. This works in the same way as normal armour – see page 66.

Aquatic: The alien is adapted to life underwater. It can breathe underwater, or hold its breath for a long period (Endurance × 10 minutes on average). If amphibious, its Dexterity is halved on land. If the species is not amphibious, then it cannot operate out of water without mechanical aid or telepresence.

Atmospheric Requirements: The species requires an unusual combination of gasses to breathe, and cannot survive in most atmospheres without artificial aid. Creatures with this trait usually come from homeworlds with an Exotic atmosphere.

Engineered: The species has been altered by some external factor to adapt to changed circumstances or a different environment. Medical treatment of Engineered species by a facility of a lower Technology Level than that at which the species was created receives a negative DM equal to the difference. Some strains of humans have been engineered to tolerate unusual atmospheres, to live on water worlds, or to cope with the stresses of space travel.

Fast Metabolism: Creatures with a fast metabolism require more food than most species, and their life support costs are doubled. In combat, fast-metabolism creatures gain a +2 initiative bonus. Fast-metabolism creatures halve their Endurance for the purposes of determining fatigue.

Feral: Feral species are uncivilised, regardless of their technological knowledge. Often, such species have acquired their technology from other races, or from Ancient ruins. Feral species are much less likely to accept the laws of more civilised societies. Feral species roll Education on 1d6 only.

Flyer: The species can fly using wings, glider membranes, gasbags or other means. Characters of this species gain the Athletics (flying) skill at Level 0 and can travel at a speed noted in their description. Flying creatures who are aloft must spend one minor action every round on movement or stall and fall out of the air.

- Winged flight is tiring and can only be sustained for a number of rounds equal to the creature's Endurance before requiring a like amount of rest. Some specialised avians can increase this to minutes or even hours equal to Endurance.
- Species with glider membranes cannot gain altitude while flying. They descend one metre every time they move forwards and cannot use more than one minor action for flying movement in a round.
- Species that float using gasbags or some other method do not need to move to remain aloft. They are typically slower than other fliers, though.

Large: The species is considerably larger than the average for sophonts. Large creatures generally have a Strength and Endurance of 3d6 or even 4d6, and a Dexterity of 1d6. Life support requirements for Large creatures are doubled and they often have trouble operating in buildings and spacecraft designed for smaller creatures.

- Some Large creatures are described as Huge. Attacks against Huge creatures receive a +1 DM to hit.

Natural Weapon: The species has a natural weapon, such as claws, a strong bite or a poisonous stinger. Such weapons are usable at Personal range and deal ×1 damage. The creature gains Melee (natural weapons) at level 0.

No Fine Manipulators: The species has no fingers or other prehensile appendages, preventing them from easily picking things up, pushing small buttons, reaching into tight spaces, and so on. The species will need special equipment to function in most civilised settings.

Notable (Characteristic): Some species are notably dextrous, intelligent, tough or strong. Characters from such races have a positive Dice Modifier when rolling for that characteristic (+2 unless otherwise specified), and their racial maximum for that characteristic is increased by the same amount. Any characteristic can be Notable.

Psionic: All members of the species are Psionic, and may determine their Psionic Strength and talents at the start of character generation. For more information on psionics, see the chapter starting on page 152.

Small: Small species generally have a Strength and Endurance of only 1d6, and a Dexterity of 3d6. The minimum size for a sophont is about half that of a human, as smaller creatures lack the cranial capacity for sophont-level intelligence. This assumes that the species has a brain structure comparable to humans. Species with a more distributed neural structure, hive intelligences, or artificial intelligences can be even smaller.
- Some Small creatures are described as Tiny. Attacks against Tiny creatures receive a –1 DM to hit.

Slow Metabolism: Creatures with a slow metabolism require less food than most species, and their life support costs are halved. In combat, slow-metabolism creatures suffer a –2 initiative penalty.

Uplifted: This species was originally non-sentient, but has been raised to a higher intelligence by another species. Uplifted races generally become client species of their patron. Two common uplifted animals are apes and dolphins:
- Uplifted apes have Notable Strength and Endurance (+2) but all other characteristics are Weak (–2). They have the Uplifted trait.
- Uplifted dolphins have Notable Strength (+4) and Notable Endurance (+2) but Weak Intelligence, Education and Social Standing (–2). They have the Uplifted, Aquatic (fully aquatic, air-breathers) and No Fine Manipulators traits.

Weak (Characteristic): The opposite of Notable (Characteristic), some species are weaker, less resilient or less well educated than others. Characters from such races have a negative Dice Modifier when rolling for that characteristic (–2 unless otherwise specified), and their racial maximum for that characteristic is decreased by the same amount. Any characteristic can be Weak.

For the most part, aliens use the same careers and event tables as humans, but the Referee and player should modify the tables to reflect the unique cultures and biologies of alien races. A Hiver Naval Officer, for example, might replace the event *'You foil an attempted mutiny or crime on board. Gain an Enemy, but also gain a +2 DM to your next Advancement roll in the Navy.'* with *'You drive a human ship out of an interdicted system. Gain an Enemy, but also gain a +2 DM to your next Advancement roll in the Navy'*. In particular, the Life Events table should be rewritten for each race. (Upcoming *Traveller* sourcebooks will give more details for different species and cultures.)

Alien Species in the Third Imperium

The Third Imperium setting features a number of distinct alien races. Presented here is an overview of the six major ones, although it should be pointed out that since each could fill a book all to itself the coverage here is necessarily brief and incomplete.

ASLAN

Aslan are roughly human-sized and humanoid, and are descended from four-limbed, upright, bipedal carnivore-pouncer stock. The earliest Terran explorers saw in them a vague resemblance to the Terran lion, and they have been described by Terrans as lion-like ever since. There are two sexes, male and female. The male is most easily distinguishable by his larger size and prominent mane. Females outnumber males three to one.

Aslan have a single highly specialised dewclaw that folds into a horny covering along the interior of the thumb and palm when not in use.

An individual Aslan is usually a member of a family of two to twelve individuals under a patriarchal leader. Several families will combine into a pride with one family dominant. A number of prides form a clan, again with a top pride. Aside from military organisations and the ruling council, the clan is the highest socio-political organisation among the Aslan.

A deep-seated territorial instinct causes the Aslan to have an inordinate (from a Human standpoint) drive to own property. For male Aslan, owning land is a major goal in life. An Aslan's stature is determined by the amount of land he (or her husband, for females) controls, or by the amount of land owned by any higher lord the Aslan may be vassal to. The lowest classes of Aslan society are landless and provide the farmers, labourers, craftsmen and factory workers. A holder of a large territory will often grant authority over it to vassals (usually sons, brothers or male relatives by marriage) who administer the land in his name.

The sexes have very different roles in Aslan society. Males in all but the lowest classes are concerned mostly with military operations, acquisition of territory, and political affairs. Females are concerned with trade, industry, and the accumulation of knowledge.

A typical Aslan mercenary unit will be organised by a wealthy married female, who will then assign its operation, for a share of the proceeds, to an unmarried female relative. The battle commander and most of the troops will be unmarried males (many of them also relatives) hired with the promise of land grants (and the opportunity to gain honour and reputation in combat); however, staff, operations, supply and intelligence officers will generally be female.

Aslan have Notable Strength (+2), Weak Dexterity (–2) and a Natural Weapon (claw). They have an additional characteristic called Territory which they sometimes use in social interaction with each other.

DROYNE

Droyne are an intelligent major race inhabiting scattered worlds within an area slightly larger than the region of the current Imperium. They are a small race derived from winged herbivorous gatherers. They vary in size depending on caste but generally stand one metre tall (large workers and warriors can be larger than Humans). The history of their evolution remains a puzzle because their home world is not known with certainty.

Droyne society is divided into rigid castes determined when an individual reaches adolescence. The six castes of the Droyne all serve different functions within Droyne society. Although identical at the time of caste selection, caste members develop pronounced physical and mental differences by maturity. Different genetic programs are awakened by differences in diet and environment among the various castes. Young leaders, for instance, experience a nearly 30% increase in brain size in the first year after casting, drones develop sexual organs, and so on. The following are descriptions and definitions of the castes:

- **Worker:** Manual labour and mundane ordinary activity are the province of the worker. Workers are none too smart and are temperamentally suited to contentment with ordinary labour and subservient tasks.
- **Warrior:** Trained for combat and possessing comparatively well-developed muscles and reflexes, the warrior is the security

troop, the soldier, the marine and the policeman of the Droyne culture. They are common in frontier bases, and less numerous in civilised areas.
- **Drones** have a variety of purposes in Droyne society. They perform a reproductive role which makes them parents to Droyne young and they have a role in the ceremonies which determine caste. In addition, drones comprise a sort of management caste which is responsible for many of the routine functions in business, trade and administration.
- **Technicians** are the science-orientated portion of Droyne society and are concerned with both research and practical implementation of technology.
- **Sport:** Although the caste system of the Droyne is rather rigid, the Sport is the deliberately accepted exception to caste structure. Sports are special individuals who cross caste lines to become individual scouts, messengers, representatives, hunters, prospectors, and to take other occupations that require individual initiative or separation from Droyne society for long periods of time. A Sport is the most encountered Droyne type away from a Droyne world.
- **Leaders** are required to manage and direct society. They are ultimately responsible for everything that Droyne as a whole do.

There is little individual freedom in Droyne society and, as a result, society and government join into one concept. Workers work,

Leaders lead. All of society is dedicated to continuing the existence that provides all members with food, shelter and the other amenities that make life enjoyable. In addition, there is little discord in Droyne society when things are running smoothly, as each member of society has its own function to perform. Only when disaster happens is the harmony strained.

A typical Droyne group consists of a variety of Droyne from the different castes. There will be many Workers, few Drones and Leaders, and Technicians and Warriors based on current needs. Each group will also have several Sports, although they may not be present; instead they may be occupied with their own individual tasks.

This is not to say Droyne are mindless. Leaders are quite capable and responsible; warriors have strategic and tactical senses, technicians are inventive and clever, but all accept the central group as the purpose of their lives and work for its benefit over their own.

Droyne are Flyers (winged, 18 metres per round) and Small. Warriors are not Small. Leaders have Notable Intelligence (+2). Droyne replace Social Standing with Caste, which is generated on 1d6.

HIVERS

Hivers are an intelligent major race with a large federation of their own. Hivers average 1.5 metres from ground to top of upraised head. Descended from omnivore gatherer/scavenger stock, they are among the most alien of the major races from a human standpoint. Hivers exhibit a modified six-fold radial symmetry; six limbs equally spaced around a roughly circular central body.

The head is a modification of one of the limbs and contains six eyestalks and six manipulative tentacles, plus paired infra-red sensory organs. The other five limbs are identical (except for slight modification of the hand opposite the head) and are used as arms and legs indiscriminately. Each limb ends in a six-fingered radial hand. Fingers are very flexible and have muscular suction cups on the lower surface about half-way to the tips. Hiver arms and legs are generally weaker than a human's but are very tough and difficult to injure.

A digestive opening is on the lower surface of the body. Hivers have no way of producing vocal sound but do have three ears placed around the neck near the head.

Hivers have only one sex. Reproductive cells are exchanged each time Hivers meet, using the modified rear hand (the process has been termed by humans 'shaking hands'). The cells are kept in a reproductive pouch on the lower body surface where they conjugate and exchange genetic material. Once every forty days or so a cell will develop into a larva, which then drops from the parent's body. Hive planets are mostly wilderness and the larvae enter the wilds where most are killed. After about a year, any survivors return to civilisation, where they are welcomed into any nest and begin their education as citizens. Parental instinct in Hivers is very strong and the entire nest adopts the young. This instinct applies only to the year-old returnees however; Hivers have no concern for the younger larvae, and in fact consider them minor pests.

Hiver language is a combination of limb-waving and physical contact. The written language is ideographic (each symbol represents a concept) and is used as a standard language among the races of the Hive Federation. Hivers talking among themselves use all three aspects of language (gesture, touch and writing) at once, a process of great subtlety and sophistication but unintelligible to the outsider.

Hive society is highly individualistic. The term 'Hive' results from an early Human misconception stemming from the appearance of the Hivers' buildings and tunnel complexes, which were seen as resembling a nest of social insects and labelled a hive. Nests contain from five to five hundred individuals, who are usually centred around some common endeavour. While one hundred is an average size for a nest, and was the size in pre-civilised times, larger groups may come together for some civilised purpose such as large manufacturing companies or universities. Small nests are usually spaceship crews or isolated research parties. A young Hiver will spend his first fifteen years in his home nest; thereafter, nest changes may take place as often as a modern human might change jobs.

Hive industry and business excel at communications technology and robot construction. Major exports include computer languages,
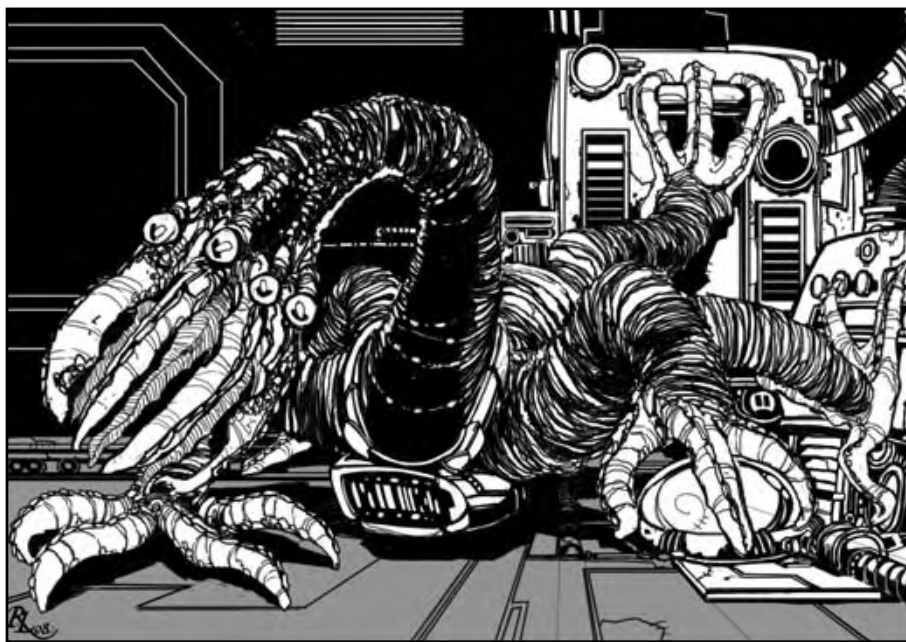
translators, and sophisticated electronics of all types. Hiver mathematical systems are much in demand for their power and elegance.

The Hiver parental instinct was aroused by the discovery of numerous intelligent species less fortunate than themselves, and work began immediately to lift the 'children' to civilization. An early experience with an aggressive race led to the establishment of a system of quarantined worlds, denied entry to (or knowledge of) interstellar society.

Covert operations are in progress on quarantine worlds to modify overly aggressive cultures into acceptable members of the Hive Federation, and several quarantined planets have been opened since the beginning of the program. So far, no quarantined race is close to achieving interstellar travel on its own; public debate continues on what to do in such a case.

Hivers have Notable Intelligence (+2) and Weak Dexterity (–2). Hivers can also see into the infra-red spectrum.

K'KREE

K'kree (once called Centaurs by humans) are among the most massive of the major races and are the only one of the major races to be descended from herbivores. An adult K'kree stands about 1.5 meters at the shoulder and between 2.0 and 2.4 meters tall when standing erect. Weight averages 550 kg. They bear some resemblance to the centaurs of ancient Terran myth, a trait noted by the earliest human explorers.

The word K'kree comes from their own language, and translates literally as 'all the nobles', or more broadly, 'the herd'.

The arrangement of the manipulative organ (or hand) on the front limb is one of their most interesting features. Complex or cartilaginous tubes permit the fingers of the K'kree hand to telescope out of the way when the hand is used as a weapon. The K'kree hand is very flexible but somewhat weaker in grasping power than the human hand.

The K'kree are covered with a short gray or black fur and with a dense black mane covering the head, neck and upper back of both sexes. Unlike Terran mammals, the young are fed partially digested, regurgitated food instead of milk. Males average 15 percent to 20 percent larger than females.

K'kree are extremely conservative in all aspects of their culture. Ceremonial military units (such as bodyguards) are armed with equipment which K'kree military technology outdated centuries ago, and (aside from modifications made necessary by the discovery of space flight) K'kree government has not changed significantly in centuries.

Because of their origins as plains-dwelling herd animals, the K'kree are claustrophobics; they cannot stand to be enclosed. K'kree cities are clumps of low, broad, buildings; the interior is never more than one storey in height, which allows the sky to be visible. Internal building divisions are achieved with curtains or tapestries.

K'kree are extremely gregarious. They are never found alone, and will quickly sicken and die if removed from other K'kree for any length of time. Receiving a trade or diplomatic delegation from the K'kree means entertaining the entire family (one or more wives, servants, scribes, assistants, and so on) of the merchant or the ambassador. The K'kree word for 'mine' refers to a possession of an individual's herd, not to that of an individual. Privacy and individuality are exotic and little-understood concepts for the K'kree.

K'kree society is divided into castes. The system is a remnant of ancient times which no longer fits K'kree culture perfectly, but the K'kree stick with it because it is traditional. There are hundreds of castes, but the distinctions are too faint for non-K'kree to understand. For simplicity, castes can be divided into three general groupings: noble, merchant, and servant. It is possible for a family to rise in caste, but this is a rare occurrence.

The lowest caste, the **servants**, has come to include farmers, factory workers, and unskilled laborers as well as servants for all classes.

The next higher caste, the **merchants**, includes most skilled workers, scientists, engineers, technicians, scribes, and government administrators, as well as merchants and businessmen.

Nobles are the governmental officials: the high military officers, diplomats, and heads of trade and manufacturing concerns. Nobles are usually garbed in much more ornate fashion than the lower castes.

Every male K'kree must serve a term in the military upon coming of age. Warriors are drawn from all castes; rank in the military is determined by the caste of origin (nobles enter the service as general officer trainees, merchants as lower officers and noncommissioned officers, and servants make up the grunt troops). Upon completing the required term of service, a warrior returns to his original caste and position. Warriors are the only K'kree permitted to bear weapons, and they are further distinguished by their peculiar flared and horned helmets. They serve as soldiers, police, firefighters, and bodyguards for diplomatic and mercantile expeditions.

Female K'kree are casteless, and take on the caste of their father or husband. Females have no position in government or society other than the rearing of young.

K'kree are Large (3d6 Strength and Endurance) and replace Social Standing with Caste.

Vargr

Vargr are an Intelligent Major Race derived from Ancient genetic manipulations of Terran carnivore/chaser stock, apparently dating from approximately the same time that humanity was scattered to the stars.

Inhabiting a region rimward of the Imperium, the Vargr were for years a puzzle to Imperial xenologists. The Vargr biochemistry and genetic makeup are almost identical with a number of terrestrial animals, but differ radically from most of the flora and fauna indigenous to Lair, the purported Vargr home world. Researches during the early years of the Third Imperium concluded them to be the result of genetic manipulation of transplanted Terran animals of the family Canidae, almost certainly of genus Canis. The obvious conclusion, supported by archeological evidence, is that the race known as the Ancients was responsible.

Physically, the Vargr are not very impressive. The typical Vargr is about 1.6 meters in height and weighs approximately 60 kilograms. They have approximately the same physical parameters as humans and are able to use the same equipment without modification or additional instruction. On average their reactions are slightly faster than those of the typical human, but individuals vary widely. The Vargr senses of smell and sight are superior to those of humans.

There is no central Vargr government; indeed, there is no governmental type that can be said to be 'typically Vargr'. Every conceivable form of governmental organization can be found somewhere in the Vargr Extents. The only cohesive force in the Extents is a fierce racial pride which causes a slight tendency towards racial cooperation. The higher the level of the Vargr government, the more unstable it becomes because of the difficulty of obtaining the consent of all Vargr involved.

Centralised authority is extremely limited at the upper levels of Vargr society, and action is based on broad coalitional concerns, with a constant splitting and rejoining of dissident factions. Traditionally, this has made it very difficult for more centralised and organized societies such as the Imperium to deal on a meaningful basis with what passes for Vargr states. The Vargr have little respect for formal authority, decreasing as that authority becomes more remote. Vargr generally have more respect for more informal authority figures, and are more likely to obey superiors who are better known to them.

The Vargr have an intense racial pride and are easily insulted. They are prone to enter into fights without regard to possible consequences. Even among the most stable Vargr governments a highly charismatic leader can attract followers for almost anything. The neighbours of the Vargr are constantly the subject of impromptu raids and scattered piracy by bands of Vargr who have been talked into a raid, a battle, or a war by a charismatic leader.

Vargr have Notable Dexterity (+1), Weak Strength (−1), Weak Endurance (−1), a Natural Weapon (bite), they are Uplifted and they replace Social Standing with Charisma.

ZHODANI

Zhodani are independently descended from human stock transplanted by the Ancients. In general, they tend to be taller than Solomani or Vilani (other independent branches of the human 'tree') and lithe of build. Averaging 2.0 meters in height and massing upwards of 90 kilograms, they tend to be swarthy in complexion and dark-haired. Their most important difference is the acceptance and use of psionics. Zhodani nobles often wear a turban-like head-dress which serves to accentuate their height.

Zhodani society is divided into three hereditary groups:

- **Nobles** are the enfranchised ruling class. They perform all high governmental functions, and receive extensive psionic training from childhood.
- **Intendants** are the managers and administrators of society. They comprise most business executives, military officers below the ranks of admiral or general, and fill most non-elective governmental positions. Intendants are rewarded for great diligence, service to the state, or victory in the psionic games, with the grant of a noble title.
- **Proles** (or proletarians) constitute the masses, are forbidden the use of psionics, and do not receive training. Proles include all members of the military below officer grade, most merchants and scouts, supervisory and junior management personnel, technicians, craftsmen, and labourers.

There is no upward mobility for proles unless psionic powers are detected in them as children, in which case they will be inducted into the intendant class. Intendants who perform well in their positions can be elevated into the ranks of the nobility. In this way, proles can have some hopes for an improved lot for their children, intendants are encouraged to strive hard, and there is a constant infusion of new blood into the nobility. Extensive psionic ability among the ruling classes permits the Zhodani government to weed out subversives early in life, and re-educate them as useful members of society. With rare exceptions, Zhodani are extremely patriotic. Zhodani citizens possess a high degree of personal honesty. Indeed, the Zhodani feel uncomfortable in most places outside the Consulate, where 'liars and thieves are allowed to wander around loose'. Privacy of thoughts is highly respected among the Zhodani upper classes, although proles have no such right. Nobles have almost complete right of personal privacy, and intendants nearly as much. Rights of foreign nationals vary with whatever treaty is in effect between the Consulate and the foreign power. The treaty with the Imperium is unclear in its protections. Most visitors have no protections for mental privacy, but diplomatic personnel and some selected commercial representatives are provided visas which allow psionic shields to be worn.

The Zhodani have a general distaste for other human races which do not practice psionics. Effective indoctrination and ever-present possibility that one's mind is being read have removed dishonesty and deviance as common features of society. Disagreements still occur, competition thrives, passions flare. But all takes place in an atmosphere of honesty and truth. Individuals can express their feelings without fear and problems are openly dealt with. In non-psionic societies, much is kept secret within the mind. A Zhodani visiting the Imperium would be appalled by the deviousness and dishonesty that pervades society.

Imperial distaste for the Zhodani is based on two facts. First, the Zhodani practice psionics, and an Imperial cannot be sure that a Zhodani is not invading his mental privacy at any time. Second, because of their psionic abilities, the Zhodani have the most effective authoritarian rule in history. Imperial citizens, used to a great degree of local autonomy, fear Zhodani conquest because of the loss of freedom it would entail.

Zhodani intendants and nobles are Psionic.

Enemies

There are plenty of ways that a malicious foe can make trouble for the characters. The presence of an enemy can turn an otherwise mundane trade run into a dangerous adventure.

The enemy...

1. ... has agents within the planetary government, who will frame the characters as enemies of the state.
2. ... informs local criminals of the characters' activities and movements.
3. ... is here on unrelated business, but when he learns of the characters' presence, he becomes convinced they are chasing him and takes offensive action.
4. ... was secretly responsible for the characters' arrival here – it's a trap!
5. ... is spying on the characters – one of the natives of the planet is working for him.
6. ... is manipulating the characters. They're his pawns.

Skills and Tasks

Most of the actions undertaken by characters do not require a skill check. A player does not have to roll Athletics to run through a forest, or roll Computers to access information from his ship's library. Some actions will require the character to have a particular skill, but will still not require a roll. A character with Flyer 0 can fly an air/raft under normal conditions without having to make a roll.

The Referee should only call for checks:
- When the characters are in danger.
- When the task is especially difficult or hazardous.
- When the characters are under the pressure of time.
- When success or failure is especially important or interesting.

Task Checks
To make a check, the player rolls 2d6 and any appropriate Dice Modifiers. If the total is 8 or more, the character succeeds.

The most common forms of task checks are characteristic checks and skill checks.

Characteristic Check: These checks are used when the task is one not covered by an obvious skill, or where the character's innate abilities are the most important influence on the result. To make a Characteristic check, roll 2d6 and add the appropriate characteristic Dice Modifier. For example:
- When forcing open a sealed door on a derelict ship, a character would use his Strength Dice Modifier.
- When balancing on a narrow beam, a character uses his Dexterity Dice Modifier.
- When trying to endure a long trek through the desert, a character would use his Endurance Dice Modifier.
- When trying to decipher an alien puzzle-box, a character uses his Intelligence Dice Modifier.
- When attempting to remember some trivia or piece of common knowledge, a character uses his Education Modifier.
- When trying to impress a guard with his wealth or position, a character uses his Social Standing Dice Modifier.

Skill Check: For a skill check, the character adds both his skill level and an appropriate characteristic DM. The combination of skill and characteristic varies depending on the situation:
- Shooting a gun would use the appropriate Gun Combat sub-skill and the character's Dexterity Dice Modifier.
- Repairing a damaged gun might use Gun Combat and Education.
- Trying to work out what sort of gun caused a particular wound might use Gun Combat and Intelligence (or Investigation and Intelligence).
- Hiding from an enemy soldier would call for Dexterity and Stealth, while staying still for a long time to avoid detection would be an Endurance plus Stealth check.

- Just generally carousing at a party might use Carouse on its own, without any particular characteristic. If the character wants to beat someone in a drinking contest, then he might use Endurance + Carouse; spotting who is out of place at a party would be Intelligence + Carouse, and snubbing someone might use Social Standing + Carouse.

In general, skills can be matched to any appropriate characteristic depending on the situation at hand. Certainly you will roll Dexterity and Gun Combat more often than Social Standing and Gun Combat but you never know what might come up.

When making a skill check, if a character does not have any levels in that skill, then he suffers a −3 unskilled Dice Modifier.

To repeat; **to make a skill check, a character rolls 2d6 + his Skill Level + his Characteristic DM + any other DMs, and tries to get 8 or more.** Anything more than this is detail that can be used or not as the group sees fit.

Examples:
Yuri (Intelligence 9, Medic 2) is trying to apply first aid to a wounded ally. First Aid uses his Intelligence DM of +1, plus his Medic skill level of 2 for a total DM of +3. Yuri's player rolls 2d6 and adds 3. If the total is 8 or more, then he has successfully applied first aid.

Kathya (Dexterity 10, Stealth 0), Erik (Dexterity 6, Stealth 2) and Morn (Dexterity 12, no Stealth) are all trying to sneak down a corridor. Kathya has a +1 Dexterity DM, and while she gets no DM from only having level zero Stealth, she at least avoids the unskilled penalty. Her final total DM is +1; she rolls 2d6+1 and tries to get 8 or more. Erik has a Dexterity DM of +0, but has level 2 Stealth. His final total DM is +2; he rolls 2d6+2 and tries to get 8 or more. Morn is more dexterous than either of his companions, with his Dexterity DM of +2. However, he has no Stealth skill at all, and so suffers a −3 DM for being unskilled. His final total DM is −1, so he rolls 2d6−1 and tries to get 8 or more.

Task Difficulties
Simple tasks are trivial for everyone. A simple task might be requesting weather data from a standard tourist computer system, ordering a meal in a language you know well, or sneaking up on a drugged guard. Simple tasks have a difficulty DM of **+6**.

Easy tasks are trivial for a trained professional, and simple for an amateur. An easy task might be hiking cross-country for a few hours, holding a ship in perfectly level flight, or activating an unfamiliar device that has a clear and simple interface. Easy tasks have a DM of **+4**.

A **routine** task is trivial for a trained professional, and relatively easy even for an amateur. A routine task might be hitting a prone victim

in melee, landing a ship in optimum conditions with computer assistance, translating a newspaper and so on. Routine tasks have a difficulty DM of **+2**.

An **average** task is a moderate obstacle to a trained professional. Shooting a gun accurately at range, plotting the jump calculations for a starship, repairing a damaged circuit board or finding a buyer for a cargo bay full of machine parts on an industrial world are all examples of average tasks, which have a difficulty DM of **+0**.

A **difficult** task is difficult even for a trained professional. Examples might be making an accurate shot in the middle of a ferocious storm, defending a client in court when he is clearly guilty, hacking into a secure computer network, or spotting the flash of sunlight reflecting off a sniper's scope. Difficult tasks have a difficulty DM of **–2**.

Very difficult tasks are hard for a trained professional, and nearly impossible for an amateur. They have a DM of **–4**.

Formidable tasks are exceptionally hard, such as performing surgery in zero-gravity in a ship that is under attack, hacking a military-grade computer network, disarming a terrorist bomb, or convincing a city of superstitious natives that you are a peaceful trader and not a demon from the outer darkness when you don't speak a word of their language. Formidable tasks have a difficulty DM of **–6**.

TASK DIFFICULTY DICE MODIFIERS

Difficulty	DM
Simple	+6
Easy	+4
Routine	+2
Average	+0
Difficult	–2
Very Difficult	–4
Formidable	–6

For example, Erik (Int 9, Carouse 1) is trying to find information about a mysterious ship that landed at the starport. He goes to a bar frequented by travellers and spacers, hoping to pick up on a rumour. This is a Carouse check, and the Referee says that it is a Difficult (–2) task. Erik has one level of Carouse, which gives him a DM of +1, an Intelligence of 9 (for another +1 DM) and he subtracts –2 for the difficulty of the task, giving him a final DM of +0. He rolls 2d6 + 0 and tries to get 8 or more.

Situational Modifiers

If a character has help, such as good tools, competent aids or other beneficial circumstances, he receives a +1 DM to his skill check. Characters can choose instead to use riskier task chains (see page 51) to give other characters bigger Dice Modifiers by linking skill checks together.

Probability of Success

The probability of rolling 8 or more on 2d6 without modifiers is 41.67%. The table below shows the probability of success after all Dice Modifiers have been applied, as a guide for how likely the character is to succeed at a skill check.

Total Dice Modifier	Target Number	% Chance of Success
–5 or more	13+	0
–4	12+	2.78
–3	11+	8.33
–2	10+	16.67
–1	9+	27.78
0	8+	41.67
+1	7+	58.33
+2	6+	72.22
+3	5+	83.33
+4	4+	91.67
+5	3+	97.22
+6	2+	100

Calling For Task Checks

Often, if the characters have the requisite skills the Referee can just assume they succeed. For example, if the characters are trying to find an informant in a city you could keep calling for Streetwise or Carouse checks until the characters succeed, but that's dull. It's just the players rolling dice until they can move on. However, if failure carries a consequence – say, a failed check will result in the characters picking up a false rumour – then it's a good time to call for a skill check.

Which Characteristic?

The characteristic that applies to a skill check will be obvious in most cases – balancing atop a wall is patently a Dexterity-based check, while using brute force to disable a mechanism is governed by Strength. The main area of overlap is between Intelligence and Education. The former covers inspiration, improvisation and pure reasoning, while the latter is for trained responses and known solutions. For example, a brilliant but unschooled mechanic might fix a ship using Intelligence and Engineering, while a trained mechanic might follow the procedure in the book by rolling Education and Engineering. Some checks can be attempted with either characteristic, but no amount of Education will help you deal with a totally unfamiliar problem, and no amount of Intelligence will let a character know some piece of trivia or technical information unless he has learned it.

Oort Cloud

A spherical shell around most stars, containing numerous small bodies of cometary material. A typical Oort cloud is about 0.5 to 1 light year from its primary and has an aggregate mass about that of Earth; density is thus extremely low. The main constituents of cometary bodies are ice and dust ('dirty snowballs'). Bodies in the Oort cloud are occasionally perturbed by collisions or by the influence of nearby stars into orbits which pass near the star; these form the visible comets.

Effect

If the degree of success is important, then subtract 8 from the total of the dice roll plus Dice Modifiers. This margin of success is referred to as the Effect. For example, if a player rolls a 4 and 3, and has a +3 DM for a total of 10, then his Effect is 10 − 8 = 2.

SUCCESS

Effect Total	Success
0	**Marginal Success:** The character barely succeeds at the task, and may have to accept a condition on his success. He fixes the engine but it will overheat. He finds a buyer for the goods but the buyer is a untrustworthy criminal.
1–5	**Average Success:** The character succeeds normally.
6+	**Exceptional Success:** The character succeeds in an impressive and elegant fashion.

FAILURE

Effect Total	Failure
Less than −6	**Exceptional Failure:** The character failed as completely as it is possibly to fail. Anything that can go wrong goes wrong. If attempting to repair a device, the device is further damaged or even destroyed. In a social situation, the character gets into further trouble.
−2 to −5	**Average Failure:** The character has failed the task.
−1	**Marginal Failure:** The character has almost, almost succeeded, and the Referee may permit him to scrape a success if he takes a significant consequence. A character trying to jump across a chasm hangs onto the far side by his fingernails but can only pull himself up if he drops his backpack. A character trying to land a ship can bring it down safely but the ship may never fly again. A character hacking a computer gets in but the security programs can trace his location.

Timing

Each task has a time frame of one to six time units. The unit depends on the task – shooting someone or throwing a punch takes 1–6 seconds, while prepping an air/raft for flight might take 1–6 minutes, looking for rumours on the street might take 1–6 hours, and repairing a damaged component on a ship might take 10–60 hours.

To determine how long a task takes, roll 1d6 and multiply it by the increment listed for that action.

Going Faster or Slower

You can choose, before you roll, to move up or down one or two rows on the Time Frames table. Moving up (reducing the time increment) gives you a −1 DM for every row you move; moving down and increasing the time taken gives you a +1 DM for every row you move.

TIME FRAMES TABLE

Time Frame	Increment	Example Action
1–6 Seconds	One second	Shooting, punching, jumping.
10–60 Seconds	Ten seconds	Rerouting power, opening a comms channel.
1–6 Minutes	One minute	Applying first aid, basic technical tasks.
10–60 Minutes	Ten minutes	More complex technical tasks, searching an area thoroughly.
1–6 Hours	One hour	Building a shelter, moving through the wilderness.
6–24 Hours	Four Hours	Researching a problem.
10–60 Hours	Ten hours	Repairing a damaged ship.
1–6 Days	One day	Combing a city for a missing person.

For example, Kathya is trying to fix a damaged jump engine in the middle of a battle. Repairing the engine would normally take 1–6 hours, but an enemy ship is closing fast and they need to jump as soon as possible. Kathya therefore decides to increase the difficulty and suffer a −1 DM to reduce the time by one step. Instead of 1–6 hours, it will only take 10–60 minutes.

The ship jumps successfully, but the engine needs more repairs. A week later, when they emerge from hyperspace, Kathya overhauls the engine. This time, there is no time pressure, so she opts to increase the time taken from 1–6 hours to 10–60 hours (two steps) to make the task easier, giving her a +2 DM.

Multiple Actions

A character can try to do two or more things at once, like firing a spacecraft's weapons while also flying, or disarming a bomb while hiding from guards. For every extra thing that the character is doing, he suffers a –2 DM to all skill checks.

Opposed Checks

If two characters are opposing each other directly in a task, then the character who obtains the highest Effect wins.

Aiding Another Character

Often, *Traveller* characters will find themselves working as a group, or performing a series of interlinked tasks. Finding a buyer for a cargo of illegal goods, for example, calls for a Streetwise check to find such a buyer, then a Broker check to negotiate a price. When coming up with a plan to attack a fortress, the characters would begin with a Recon check to scope the place out, then a Tactics check to find weak spots in its defences, then Stealth and Electronics rolls to get past the security system.

The result of one check can give a DM to the next.

Task Chain DMs

The Previous Check	DM to Current Check	The Previous Check	DM to Current Check
Failed With Effect –6 or less	–3	Succeeded With Effect 0	+0
Failed With Effect –2 to –5	–2	Succeeded With Effect 1–5	+1
Failed With Effect –1	–1	Succeeded With Effect 6+	+2

For example, Erik and Kathya are trying to locate a hidden base on an icy moon. Erik has Engineer (electronics), and suggests trying to augment their ship's scanners. Kathya has the Sensors skill, and stays on the bridge while Erik goes down to the sensor pods with his toolkit.

Firstly, Erik makes his Engineer (electronics) check. He gets an Effect of 5, which gives a +1 DM to the next task in the chain. Kathya will make her Sensors check with a +1 DM thanks to Erik's efforts.

Chains of linked task checks can be formed.

To continue the previous example, if Morn were then to use his Science (geology) skill to determine which of the heat traces from Kathya's sensor readings were the result of natural geological activity, and which were heat exhausts from a hidden base, then Kathya's Sensors check would be the previous check in the chain leading to his Science (geology) check, and so her Effect would give a DM for his check.

Skill Levels and What They Mean

This information is also presented in the chapter on character generation but is repeated here for clarity.

If a character has no level in a skill, then he is untrained and will suffer a –3 Dice Modifier when trying to use that skill.

If a character has zero level in a skill (Skill 0), then he is competent in using that skill, but has little experience. He does not get any bonus from his skill ranks when using that skill but at least he avoids the penalty for being untrained.

If a character has one or more level in a skill (Level 1, Level 2, and so on) then he is trained in that skill. Each rank represents several years of experience using that skill. A character with Level 2–3 in a skill is a skilled professional in that field. A character with Medic 2 could be a doctor; a character with Medic 4 is a famous surgeon or specialist.

Some skills have specialities – specialised forms of that skill. A character picks a speciality when he gains level 1 in a skill with specialities. For example, a character might have Engineer 0, allowing him to make any Engineer skill checks without an unskilled penalty. He might then gain a level in Engineer, giving him Engineer (Jump drives) 1. He would make all Engineer checks involving Jump drives at a +1 DM, but would make all other Engineer checks at a +0 DM. A character can have multiple specialities in a skill – an engineer might have Engineer (Jump drives) 1 and Engineer (power plant) 2. He would make checks related to Jump drives with a +1 DM, checks related to power plants with a +2 DM and all other Engineer checks with a +0 DM.

SKILLS

Each Skill is described using the following format:
Description: What the skill does.
Specialities: If the skill has several specialities, they are listed here. When a character reaches level 1 in a skill, he can take a speciality in that skill. When he gains another level in the skill, he may increase that speciality to level 2, or take a different speciality. Some skills have no specialities.
Common Checks: Common uses for the skill, and what time increment, characteristic DM and difficulty are associated with those uses.

Admin

This skill covers bureaucracies and administration of all sorts, including the navigation of bureaucratic obstacles or disasters. It also covers tracking inventories, ship manifests and other records.

Avoiding close examination of papers: Education or Social Standing, 10–60 seconds, Average (+0).
Dealing with police harassment: Education or Social Standing, 10–60 minutes, Difficult (–2).

Advocate

Advocate gives a knowledge of common legal codes and practises, especially interstellar law. It also gives the character experience in oratory, debate and public speaking, making it an excellent skill for lawyers and politicians. See also Law Level, page 173.

Arguing in court: Intelligence, Education, or Social Standing, 1–6 days, Average (+0), Opposed.
Debating an argument: Intelligence, 10–60 minutes, Average (+0).

Animals

This skill, rare on industrialised or technologically advanced worlds, is for the care of animals.

Specialities
* **Riding:** The character knows how to ride an animal who is trained to bear a rider. Unusual mounts raise the difficulty of the check.
  Riding a horse into battle: Dexterity, 1–6 seconds, Difficulty (–2). If successful, the character can control the horse for a number of minutes equal to his Effect before needing to make another check.
* **Veterinary:** The character is trained in veterinary medicine and animal care.
  Applying medical care: See the Medic skill on page 56. Vets can treat humans or other non-animal living things as a Very Difficult (–4 DM) task.
* **Training:** The character knows how to tame and train animals.
  Taming a strange creature: Intelligence, 1–6 days, Formidable (–6).
* **Farming:** The character can grow and harvest crops and raise animals.

Athletics

The character is a trained athlete and is physically fit. The Athletics skill effectively augments a character's physical characteristics: there is never an untrained penalty for *not* having the Athletics skill, you just use your Strength, Dexterity or Endurance DM as normal. Likewise, where a situation might call for a Strength, Dexterity or Endurance check you can always use the appropriate Athletics speciality to boost your roll.

Specialities
* **Co-ordination:** Climbing, juggling, throwing.
  Climbing: Dexterity, 10–60 seconds, Difficulty varies. So long as he succeeds, the character's Effect is usually irrelevant unless he is trying to do something while climbing, in which case the climbing is part of a task chain or multiple action.
  Sprinting: Dexterity or Strength, 1–6 seconds, Average (+0). If a character does *nothing* (including react) but sprint flat-out he can cover 24 + Effect metres with every check. Avoiding obstacles while sprinting requires another Athletics (co-ordination) check with the –2 DM for multiple actions.
  High jumping: Dexterity or Strength, 1–6 seconds, Average (+0). The character jumps a number of metres straight up equal to the Effect halved.
  Long jumping: Dexterity or Strength, 1–6 seconds, Average (+0). The character jumps a number of metres forward equal to the Effect with a running start.
* **Endurance:** Long-distance running, hiking.
  Long-distance running: Endurance, 10–60 minutes, Average (+0).
* **Strength:** Feats of strength, weight-lifting.
  Feats of strength: Strength, 10–60 seconds, Average (+0).
* **Flying:** Species that fly gain this skill for free at level 0. It covers aerobatics, conservation of energy, precise landings and other elements of self-powered flight.
  Flying through a narrow gap at speed: Dexterity, 1–6 seconds, Average (+0). More speed means higher difficulty.

Art

The character is trained in a type of creative art.

Specialities
* **Acting:** The character is a trained actor, at home on the stage, screen or holo.
  Performing a play: Education, 1–6 Hours, Average (+0).
  Convincing a person that you are actually someone else: Intelligence, 1–6 Minutes, Difficult (–2). The target's Intelligence DM is applied as a negative DM to your roll (so a target with an Intelligence DM of +1 gives you a –1 DM and a target with an Intelligence DM of –2 gives you a +2 to your roll).
* **Dance:** The character is trained dancer and performer.
  Performing an alien dance to show appreciation of their culture: Dexterity, 10–60 Minutes, Difficult (–2).
* **Holography:** Recording and producing aesthetically pleasing and clear holographic images.
  Surreptitiously switching on your recorder while in a secret meeting: Dexterity, 1–6 Seconds, Formidable (–6).

- **Instrument:** Playing a particular musical instrument, such a flute, piano or organ.
  Playing a concerto: Dexterity or Education, 10–60 minutes, Difficult (–2).
- **Sculpting:** Making artistic or abstract sculptures in a variety of media.
  Making a statue of someone: Intelligence, 1–6 days, Difficult (–2).
- **Writing:** Composing inspiring or interesting pieces of text.
  Rousing the people of a planet by exposing their government's corruption: Intelligence or Education, 1–6 hours, Difficult (–2).
  Writing the new edition of Traveller: Intelligence, 1–6 months, Formidable (–6).

Astrogation

This skill is for plotting the courses of starships and calculating accurate jumps. See Spacecraft Operations, page 137.

Plotting a course to a target world using a gas giant for a gravity slingshot: Education, 10–60 minutes, Difficult (–2)
Plotting a standard Jump: Education, 10–60 minutes, Easy (+4). Carries a -DM equal to the Jump distance.

Battle Dress

This skill permits the character to operate the advanced battle armour used by the Imperium. Normally, a character does not need to make checks using this skill to *use* the armour – just possessing

levels in the skill is enough – but it can sometimes be used for other things such as maintenance and identification. See battle dress, page 88. If the character does not have the requisite level of Battle Dress skill to use the suit he is wearing, he suffers a –2 DM to *all* skill checks for each missing level of the skill.

Performing a systems check on a Battle Dress: Education, 1–6 minutes, Average (+0).

Broker

The Broker skill allows a character to negotiate trades and arrange fair deals. It is heavily used in trading (see page 160).

Negotiating a deal: Intelligence, 1–6 hours, Average (+0).
Finding a buyer: Intelligence or Social Standing, 1–6 hours, Average (+0).

Carouse

Carousing is the art of socialising; of having fun, but also ensuring that other people have fun, of infectious good humour. It also covers social awareness and subterfuge in such situations.

Drinking someone under the table: Endurance, 1–6 hours, difficulty varies by liquor, Opposed.
Gathering rumours at a party: Social Standing, 1–6 hours, Average (+0).

Comms

The Comms skill covers the use of modern telecommunications – opening communications channels, querying computer networks, jamming signals and so on, as well as the proper protocols for communicating with starports and other spacecraft. See also communications technology (page 90), battlefield comms (page 62) and electronic warfare (page 150).

Requesting landing privileges at a starport: Education, 1–6 minutes, Routine (+2).
Accessing publicly available but obscure data over a comm: Education, 10–60 minutes, Average (+0).
Bouncing a signal off an orbiting satellite to hide your transmitter: Intelligence, 10–60 minutes, Difficult (–2).
Jamming a comms system: Intelligence, 1–6 minutes, Difficult (–2) for radio, Very Difficult (–4) for laser, Formidable (–6). for masers, Opposed. A character using a comms system with a higher Technology Level than his opponent has a +1 DM for every TL of difference.

Computers

The Computers skill is for using and controlling computer systems.

Accessing publicly available data: Education or Intelligence, 1–6 minutes, Easy (+4).
Activating a computer program on a ship's computer: Education or

Intelligence, 10–60 seconds, Routine (+2).

Searching a corporate database for evidence of illegal activity: Intelligence, 1–6 hours, Difficult (–2).

Hacking into a secure computer network: Intelligence, 10–60 hours, Very Difficult (–4). Hacking is aided by Intrusion programs and made more difficult by Security programs (see page 92). The Effect determines the amount of data retrieved; failure means that the targeted system may be able to trace the hacking attempt.

Deception

Deception allows a character to lie fluently, disguise himself, perform sleight of hand and fool onlookers. Most underhanded ways of cheating and lying fall under deception.

Convincing a guard to let you past without ID: Intelligence, 1–6 minutes, Very Difficult (–4).

Palming a credit chit: Dexterity, 1–6 seconds, Average (+0).

Disguising yourself as a wealthy noble to fool a client: Intelligence or Social Standing, 10–60 minutes, Difficult (–2).

Diplomat

The Diplomat skill is for negotiating deals, establishing peaceful contact and smoothing over social faux pas. It includes how to behave in high society and proper ways to address nobles. It is a much more formal skill than Persuade.

Greeting the Emperor properly: Social Standing, 1–6 minutes, Difficult (–2).

Negotiating a peace treaty: Education, 1–6 days, Average (+0).

Transmitting a formal surrender: Intelligence, 10–60 seconds, Average (+0).

Drive

This skill is for controlling ground vehicles of various types. There are several specialities.

Specialities
- **Mole:** For controlling vehicles that move through solid matter using drills or other earth-moving technologies, like plasma

torches or cavitation.

Surfacing in the right place: Dexterity, 10–60 minutes, Average (+0).

Precisely controlling a dig to expose a vein of minerals: Dexterity, 10–60 minutes, Difficult (–2).

- **Tracked:** For tanks and other vehicles that move on tracks.

Manoeuvring (or smashing, depending on vehicle) through a forest: Dexterity, 1–6 minutes, Difficult (–2).

Driving a tank into a cargo bay: Dexterity, 10–60 seconds, Average (+0).

- **Wheeled:** For automobiles and similar groundcars.

Driving a groundcar in a short race: Dexterity, Difficult (–2), Opposed by other driver(s). Longer races use Endurance instead of Dexterity.

Avoiding an unexpected obstacle on the road: Dexterity, 1–6 seconds, Average (+0).

Engineer

The Engineer skill is used to operate and maintain spacecraft and advanced vehicles. This skill has several specialities. See also Spacecraft Operations, page 137. Engineer can be used to make repairs on damaged systems on spacecraft and advanced vehicles. For repairs on simpler machines, see Mechanic on page 56.

- **Manoeuvre Drive (M-Drive):** Maintaining and operating a spacecraft's manoeuvre drive, as well as its artificial gravity.

Overcharging a thruster plate to increase a ship's agility: Intelligence, 1–6 minutes, Difficult (–2).

Estimating a ship's tonnage from its observed performance: Intelligence, 10–60 seconds, Average (+0).

- **Jump Drive (J-Drive):** Maintaining and operating a spacecraft's Jump drive.

Making a Jump: Intelligence, 10–60 minutes, Routine (+2).

- **Electronics:** All forms of computing hardware, sensors and other electronics and electrics.

Installing a new computer system: Education, 1–6 hours, Average (+0).

Repairing a damaged sensor: Education, 1–6 minutes, Average (+0).

- **Life Support:** Covers oxygen generators, heating and lighting and other necessary life support systems.

Safely reducing power to life support to prolong a ship's battery life: Education, 1–6 minutes, Average (+0).

- **Power:** Maintaining and operating a spacecraft's power plant.

Overcharging a ship's power planet to get extra output: Intelligence, 1–6 minutes, Difficult (–2).

Explosives

The Explosives skill covers the use of demolition charges and other explosive devices, including assembling or disarming bombs. You don't need the Explosives skill to throw grenades. A failed Explosives check with an Effect of –4 or less can result in a bomb detonating prematurely.

Planting charges to collapse a wall in a building: Education, 10–60 minutes, Average (+0). The damage from the explosive is multiplied

by the Effect.

Planting a breaching charge: Education, 10–60 seconds, Average (+0). The damage from the explosive is multiplied by the Effect.

Disarming a bomb equipped with anti-tamper trembler detonators: Dexterity, 1–6 minutes, Formidable (–6).

Flyer

The various specialities of this skill cover different types of flying vehicles. Flyers only work in an atmosphere; vehicles that can leave the atmosphere and enter orbit generally use the Pilot skill.

Specialities

- **Grav:** This covers air/rafts and other vehicles that use gravitic technology. Grav vehicles have theoretically perfect manoeuvrability and can hover, but skill checks may be necessary when performing high-speed aerobatics.
- **Rotor:** For helicopters, hovercraft and other similar craft. Rotor craft can hover but may require skill checks to keep steady in the face of adverse environmental conditions.
- **Wing:** For jets and other aeroplanes using a lifting body. Winged aircraft must keep moving forwards or they will stall and fall out of the sky.

Landing safely: Dexterity, 1–6 minutes, Routine (+2).

Racing another flyer: Dexterity, 10–60 minutes, Difficult (–2), Opposed.

Gambler

The character is familiar with a wide variety of gambling games, such as poker, roulette, blackjack, horse-racing, sports betting and so on, and has an excellent grasp of statistics and probability. Gambler increases the rewards from Cash Benefit rolls, giving the character a +1 DM to his rolls on that table if he has Gambler 1 or better.

A casual game of poker: Intelligence, 1–6 hours, Average (+0), Opposed.

Picking the right horse: Intelligence, 1–6 minutes, Average (+0).

Gunner

The various specialities of this skill deal with the operation of ship-mounted weapons in space combat. See also Space Combat, page 146. Most travellers have ships equipped solely with turret weapons.

Specialities

- **Turrets:** Operating turret-mounted weapons on board a ship.
  Firing a turret at an enemy ship: Intelligence or Dexterity, 10–60 seconds, Average (+0).
- **Ortillery:** An abbreviation of *Or*bital ar*tillery* – using a ship's weapons for planetary bombardment or attacks on stationary targets.
  Firing ortillery: Intelligence, 1–6 minutes, Average (+0).
- **Screens:** Activating and using a ship's energy screens like Black

Globe generators or meson screens.
  Activating a screen to intercept enemy fire: Dexterity, 1–6 seconds, Difficult (–2).
- **Capital Weapons:** Operating bay or spinal mount weapons on board a ship.
  Firing a spinal mount weapon: Intelligence or Dexterity, 10–60 minutes, Average (+0).

Gun Combat

The Gun Combat skill covers a variety of ranged weapons. See Combat, page 60, for details on using guns in combat.

Specialities

- **Slug Rifle:** Using rifle weapons such as the autorifle or gauss rifle.
- **Slug Pistol:** Using pistols like the body pistol or snub pistol.
- **Shotgun:** Using shotguns.
- **Energy Rifle:** Using advanced energy weapons like laser rifles or plasma rifles.
- **Energy Pistol:** Using advanced pistol-style energy weapons like laser pistols and stunners.

Firing a gun: Dexterity, 1–6 seconds, Average (+0).

Heavy Weapons

The Heavy Weapons skill covers man-portable and larger weapons that cause extreme property damage, such as rocket launchers, artillery and plasma weapons.

Specialities

- **Launchers:** Rocket launchers and grenade launchers.
- **Man Portable Artillery:** Man portable fusion and plasma weapons – the FGMP, PGMP and similar.
- **Field Artillery:** Fixed guns, mortars and other indirect-fire weapons.

Firing an artillery piece at a visible target: Dexterity, 1–6 seconds, Average (+0).

Firing an artillery piece using indirect fire: Intelligence, 10–60 seconds, Average (+0).

Investigate

The Investigate skill incorporates keen observation, forensics, and detailed analysis.

Searching a crime scene for clues: Intelligence, 10–60 minutes, Average (+0).

Watching a bank of security monitors in a starport, watching for one criminal: Intelligence, 1–6 hours, Difficult (–2).

Jack of All Trades

The Jack of All Trades skill works differently to other skills. It reduces the unskilled penalty a character receives for not having the appropriate skill by one for every level of Jack of All Trades. For

example, if a character does not have the Pilot skill, he suffers a −3 DM to all Pilot checks. If that character has Jack of All Trades 2, then that penalty is reduced by 2 to a −1 DM. With Jack of All Trades 3, a character can totally negate the penalty for being unskilled.

There is no benefit for having Jack of All Trades 0 or Jack of All Trades 4 or more.

Language

There are numerous different Language specialities, each one covering reading and writing a different language. All characters can speak and read their native language without needing the Language skill, and automated computer translator programs mean that Language skills are not always needed on other worlds. Having Language 0 implies that the character has a smattering of simple phrases in many languages.

Specialities

- **Anglic:** The common Trade language of the Third Imperium, derived originally from the English spoken in the Rule of Man.
- **Vilani:** The language spoken by the Vilani of the First Imperium; the 'Latin' of the Third Imperium.
- **Zdetl:** The Zhodani spoken language.
- **Oynprith:** The Droyne ritual language.

Ordering a meal, asking for basic directions: Education, 1–6 seconds, Routine (+2).
Holding a simple conversation: Education, 10–60 seconds, Average (+0).
Understanding a complex technical document or report: Education, 1–6 minutes, Difficult (−2).

Leadership

The Leadership skill is for directing, inspiring and rallying allies and comrades. A character may make a Leadership action in combat, which increases the initiative of one ally the leader can talk to by the Effect of the Leadership check. The skill can also be used to raise the morale of a losing side. See battlefield comms and leadership in battle, pages 62 and 64 respectively.

Shouting an order: Social Standing, 1–6 seconds, Average (+0).
Rallying shaken troops: Social Standing, 1–6 seconds, Difficult (−2).

Life Sciences

See Science, opposite.

Mechanic

The Mechanic skill allows the character to maintain and repair most equipment – some advanced equipment and spacecraft components may require the Engineer skill (see page 54). Unlike the narrower but more useful Engineer or Science skills, Mechanic does not allow a character to build new devices or alter existing ones – it is purely for repairs and maintenance but covers nearly everything.

Repairing a damaged system in battle: Intelligence or Education, 1–6 minutes, Average (+0)

Medic

The Medic skill covers emergency first aid and battlefield triage as well as diagnosis, treatment, surgery and long-term care. See Injury and Recovery, page 74.

First aid: Education, 1–6 minutes, Average (+0). The patient regains lost characteristic points equal to the Effect.
Treat poison or disease: Intelligence, 1–6 hours, Average (+0).
Long-term care: Education, 1–6 hours, Average (+0).

Melee

The melee skill covers attacking in hand-to-hand combat. See the Combat chapter starting on page 60 for more details.

Specialities:

- **Unarmed Combat:** Whether it is trained martial arts or street fighting learned the hard way, this is the skill for using your body as a weapon.
- **Blade:** Attacking with swords, rapiers, blades and other edged weapons.
- **Bludgeon:** Attacking with maces, clubs, staves and so on.
- **Natural Weapons:** The favoured combat skill of wild animals, this covers fighting with claws, teeth, and other weapons that are a part of you.

Attacking in melee: Strength or Dexterity, 1–6 seconds, Average (+0).

Navigation

Navigation is the planet-side counterpart of astrogation, covering plotting courses and finding directions on the ground.

Plotting a course using an orbiting satellite beacon: Intelligence or Education, 10–60 minutes, Average (+0).
Avoiding getting lost in thick jungle: Intelligence, 1–6 hours, Difficult (−2).

Persuade

Persuade is a more casual, informal version of Diplomacy. It covers fast talking, bargaining, wheedling and bluffing. It also covers bribery or intimidation.

Bluffing your way past a guard: Intelligence or Social Standing, 1–6
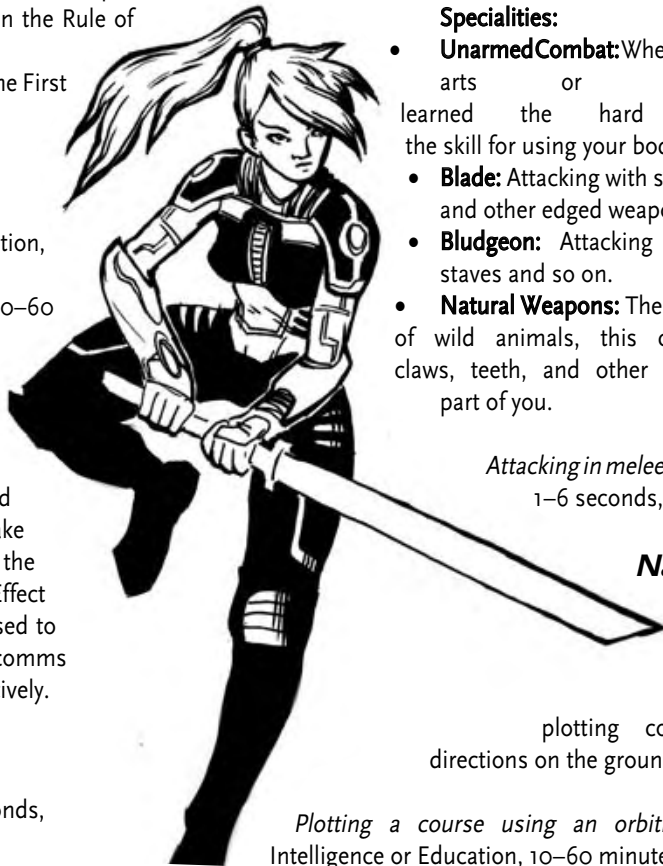
minutes, Difficult (−2).

Haggling in a bazaar: Intelligence or Social Standing, 1–6 minutes, Average (+0).

Intimidating a thug: Strength or Social Standing, 1–6 minutes, Difficult (−2).

Asking the alien space princess to marry you: Intelligence or Social Standing, 10–60 minutes, Formidable (−6).

Pilot

The Pilot skill specialities cover different forms of spacecraft. See also Spacecraft Operations, page 137.

Specialities
- **Small Craft:** Shuttles and other craft under 100 tons.
- **Spacecraft:** Trade ships and other vessels between 100 and 5,000 tons.
- **Capital Ships:** Battleships and other ships over 5,000 tons.

Physical Sciences

See Science, below.

Recon

A character trained in Recon is able to scout out dangers and spot threats, unusual objects or out of place people.

Working out the routine of a trio of guard patrols: Intelligence, 10–60 minutes, Average (+0).

Spotting the sniper before he shoots you: Intelligence, 10–60 seconds, Difficult (−2).

Remote Operations

Remote operations is the skill of using telepresence to remotely control drones, missiles, robots and other devices.

Using a mining drone to excavate an asteroid: Dexterity, 1–6 hours, Routine (+2).

Science

There are four separate Science skills – Physical Sciences, Life Sciences, Social Sciences and Space Sciences. Each science skill has a number of specialisations. Science skills cover not just knowledge but also practical application of that knowledge where such practical application is possible.

Physical Sciences
- **Physics:** The study of the fundamental forces.
- **Chemistry:** The study of matter at the atomic, molecular, and macromolecular levels
- **Electronics:** The study of circuits and computers.

Life Sciences
- **Biology:** The study of living organisms.
- **Cybernetics:** The study of blending living and synthetic life.
- **Genetics:** The study of genetic codes and engineering.
- **Psionicology:** The study of psionic powers and phenomena.

Social Sciences
- **Archeology:** The study of ancient civilisations, including the previous Imperiums and the Ancients. It also covers techniques of investigation and excavations.
- **Economics:** The study of trade and markets.
- **History:** The study of the past, as seen through documents and records as opposed to physical artefacts.
- **Linguistics:** The study of languages.
- **Philosophy:** The study of beliefs and religions.
- **Psychology:** The study of thought and society.
- **Sophontology:** The study of intelligent living creatures.

Space Sciences
- **Planetology:** The study of planet formation and evolution.
- **Robotics:** The study of robot construction and use.
- **Xenology:** The study of alien life forms.

Remembering a commonly known fact: Education, 1–6 minutes, Routine (+2).

Researching a problem related to a field of science: Intelligence, 1–6 hours, Average (+0).

Seafarer

The Seafarer skill covers all manner of watercraft and ocean travel. It is the Drive skill of the seas.

Specialities
- **Sail:** This skill is for wind-driven watercraft.
- **Submarine:** For vehicles that travel underwater.
- **Ocean Ships:** For large, motorised sea-going vessels.
- **Motorboats:** For motorised small craft.

Sensors

The Sensors skill covers the use and interpretation of data from electronic sensor devices, from observation satellites and remote probes to thermal imaging and densitometers. Unless otherwise noted in its description (see page 96) sensor equipment does not require a skill check to use, but interpreting data from those sensors can require a roll.

Analysing sensor data: Intelligence or Education, 1–6 hours, Average (+0).

Breaking through interference: Intelligence or Education, 1–6 minutes, Difficult (–2).

Social Sciences

See Science, on the previous page.

Space Sciences

See Science, on the previous page.

Stealth

A character trained in the Stealth skill is adept at staying unseen and unheard. Stealth can be Opposed by Recon or Sensors skills but it is often simpler for the Referee to decide on a difficulty and the player to roll.

Sneaking past a guard: Dexterity, 10–60 seconds, Average (+0).

Avoiding detection by a security patrol: Dexterity, 1–6 minutes, Difficult (–2).

Steward

The Steward skill allows the character to serve and care for nobles and high-class passengers. It covers everything from proper address and behaviour to cooking and tailoring, as well as basic management skills. Each level, including level 0, of Steward skill allows a character to care for two high passage passengers or five middle passage passengers. See Passengers, page 160.

Cooking a fine meal: Education, 1–6 hours, Average (+0).

Calming down an angry Duke who has just been told that you won't be jumping to his destination on time: Social Standing, 1–6 minutes, Difficult (–2).

Streetwise

A character with the Streetwise skill understands the urban environment and the power structures in society. On his homeworld

and in related systems, he knows criminal contacts and fixers. On other worlds, he can quickly intuit power structures and can fit into local underworlds.

Finding a dealer in illegal materials or technologies: Intelligence, 10–60 hours, Average (+0).

Evading a police search: Intelligence, 10–60 minutes, Difficult (–2).

Survival

The Survival skill is the wilderness counterpart of the urban Streetwise skill – the character is trained to survive in the wild, build shelters, hunt or trap animals, avoid exposure and so forth. He can recognise plants and animals of his homeworld and related planets, and can pick up on common clues and traits even on unfamiliar worlds.

Gathering supplies in the wilderness to survive for a week: Education or Strength, 1–6 days, Average (+0).

Identifying a poisonous plant: Education or Intelligence, 10–60 seconds, Average (+0).

Tactics

This skill covers tactical planning and decision making, from board games to squad level combat to fleet engagements. In combat, the Tactics skill level of a unit's commander gives a boost to the initiative scores of everyone in his unit. See Combat, starting on page 60, for more details.

Specialities:

- **Military Tactics:** Coordinating the attacks of foot troops or vehicles on the ground.
- **Naval Tactics:** Coordinating the attacks of a spacecraft or fleet.

Developing a strategy for attacking an enemy base: Intelligence, 10–60 hours, Average (+0).

Trade

A character with a Trade skill is trained in producing some useful goods or services. There are many different Trade specialities, but each one works the same way – the character can make a Trade check to earn money on a planet that supports that profession. The amount of money raised is 100 Credits × the Effect of the check per month. Unlike other skills with specialties, levels in the Trade skill do not grant the ability to use other specialties at skill level 0. Each specialty must be learned individually. Someone with a Trade skill of 0 has a general grasp of working for a living but little experience beyond the most menial jobs.

Example Trades include:

- **Biologicals:** Engineering and managing artificial organisms.
- **Civil Engineering:** Designing structures and buildings.
- **Space Construction:** Building orbital habitats and megastructures.
- **Hydroponics:** Growing crops in hostile environments.
- **Polymers:** Designing and using polymers.

On some worlds other skills, such as Animals or Computers, may be used to earn a living in the same manner as Trade skills.

Vacc Suit

The Vacc Suit skill allows a character to wear and operate spacesuits and environmental suits. A character will rarely need to make Vacc Suit skill checks – merely possessing the skill is enough. If the character does not have the requisite Vacc Suit skill for the suit he is wearing, he suffers a –2 DM to all skill checks made while wearing a suit for each missing level.

Zero-G

Having the Zero-G skill means the character is adept at moving around in micro-gravity environments and freefall. A character without the Zero-G skill suffers a –2 DM to all checks made in free-fall. The skill can also be used to move around in a zero-gravity environment by pushing off other objects or using thruster packs.

The Zero-G skill is also used for operating grav-belts (see page 103).

Righting yourself when artificial gravity suddenly fails on board a ship: Dexterity, 1–6 seconds, Average (+0)
Complex manoeuvres with a grav-belt: Dexterity, 10–60 seconds, Difficult (–2)

LEARNING NEW SKILLS

The more skills a character possesses, the longer it takes him to learn a new skill. A character's Skill Total is calculated by summing the levels of each skill (level zero skills count as zero). A character with Mechanic 1 and Gun Combat (slug pistols) 2 would have a Skill Total of 3.

To increase a skill, a character must train for a number of weeks equal to his current Skill Total plus the desired level of the skill. So, to advance from Pilot 2 to Pilot 3 with a current Skill Total of 3 would take (three, plus three) six weeks. A character may only train one skill in a given week.

The Jack of all Trades skill cannot be learned in play.

Belt Mining

The process of extracting useful minerals and other substances from asteroids. Asteroids fall into three basic categories, each of which is different in nature and value.

Nickel-iron asteroids are reasonably dense, high-grade sources of metal of most value to the manufacturing industry; large asteroids can be sold to local shipbuilding concerns as planetoid starship hulls.

Carbonaceous asteroids are the most common planetoids and have the lowest value of all asteroids in most marketplaces. These stony chunks have the most value in systems where space colonies and large stations can make use of the variety of the useful elements: carbon, hydrogen, oxygen, and so on-that can be extracted from them.

Ice chunks are made up of various frozen volatiles, including methane, water, and the like. These 'dirty snowballs' are a source of hydrogen fuel and hence support an entire specialty of 'ice miners' who seek them out. In systems where gas giants cannot be used for one reason or another, a starport or space station may pay reasonably good money for ice chunks, though they will never make a belter rich.

None of these three categories of asteroid is particularly valuable, and few belters ever made a fortune strictly from discovering and mining any of these. In point of fact, there are other things to be found. Many asteroids, most particularly nickel-iron rocks, contain varying amounts of the valuable minerals, platinum, iridium, and so forth, and sometimes other radioactive materials. Occasionally an asteroid will be discovered with an unusual configuration that makes it valuable for scientific or even aesthetic purposes. And, finally, there are artefacts, which take in the entire gamut from the flotsam of a week-old wreck to a trove left by the Ancients, and which vary in value accordingly.

Combat

As adventurers journey through the cities and wilds of the worlds they visit, they will encounter both men and beasts. At times, the only way such encounters can be dealt with is by force. Combat in *Traveller* is designed to be deadly, especially if there is a gap in technology between combatants.

The combat system is based on the skill system. Firing a gun, swinging a sword or ordering troops into battle are all skill checks; respectively, that's Gun Combat, Melee, and Leadership checks. The main difference between combat and a regular skill check is that timing and situational awareness play a much bigger part in combat. Characters will have to move between cover and avoid being hit by the lethal weaponry common on the battlefields of the Third Imperium.

Firing a gun, swinging a sword or throwing a grenade are all combat actions, but a combat action need not be an attack – jamming communications, giving orders, or applying first aid are also combat actions.

Setup

If the combatants are all unprepared for combat, then each person rolls 2d6 and adds their Dexterity DM to determine starting Initiative. Initiative measures a character's speed, but also his understanding and control of the battlefield. Initiative determines the order that characters act in, but it can also be spent to react to events. If some of the combatants are ready for combat and some are not, such as in an ambush, the prepared characters are considered to get an automatic 12 on their roll, giving them an Initiative of 12 + Dexterity DM.

Characters who have the Tactics skill may make a Tactics check and add the Effect of this check to the Initiative of everyone in their unit. (Only the highest Tactics Effect in the unit may be used.)

The Referee may prepare detailed maps or even models of battlefields and encounter areas, or just use sketch maps or descriptions. *Traveller* uses a scale of 1.5 metres per square for personal combat.

In most combats, the combatants begin at Medium range. See page 64 for more details about range.

The Combat Round

Each combat round lasts around six seconds of game time. In a combat round each character gets a minor action and a significant action. Actions are taken in descending order of Initiative. If two characters have the same Initiative, the character with the highest Dexterity goes first. If they are still tied, then characters act simultaneously. When a character acts, he takes all his actions at once.

Action Summary

In every round a character may make:
- One significant action.
- One minor action.
- As many reactions as he likes.
- As many free actions as he likes, within reason.

The significant action may be broken down into two minor actions instead, allowing for three minor actions instead of one significant and one minor.

Once everyone has acted a combat round is over and a new round begins. Initiative is not re-rolled but is dynamic, and may be adjusted up and down by actions taken during a round.

DYNAMIC INITIATIVE

During the course of a round a character's Initiative score may be changed by reactions, recoil and hastening. Any changes affect your Initiative for one round only – either the current round if you have yet to act or the following round if you have acted already. Reactions reduce your Initiative in order to allow you to defend yourself from attacks. Recoil slows you down if you are using a weapon heavier than you can handle. Hastening your action lets you act sooner but at a penalty to your roll.

HASTEN

At the start of each combat round a character may declare that he is acting hastily. This gives him a +2 bonus to his Initiative for that round only but all his actions receive a –1 DM. A character can only hasten once.

MINOR ACTIONS

Movement

The character moves up to six metres. Difficult terrain, such as rubble, mud or thick underbrush can halve a character's movement, allowing him to move only three metres per movement action. Crouching also halves movement. Some alien species may have different methods and speeds of movement which will be detailed in their description.

Changing Stance

A character can change to any one of the three stances – prone, crouched or standing – as a minor action.

Drawing and Reloading

The time taken to draw a weapon depends on its size and ease of use. The number of minor actions to ready or reload a weapon is

---

listed in the description of each weapon. Most weapons take one minor action to draw and another minor action to reload, but some weapons are especially fast or slow.

Aiming

A character who spends a minor action aiming at a target gets a +1 DM to his next attack on the target, as long as the character does nothing except aim until he makes his attack. A character may spend multiple actions on aiming, gaining a maximum aiming DM of +6 if he spends six minor actions on aiming.

Miscellaneous

The Referee may permit a character to perform a skill check or other action as a minor action if the use of the skill does not require the character's full attention or complex physical actions. Such minor actions include:

• Using Recon to spot a good sniping position.
• Keeping control of a vehicle using a vehicle control skill.
• Identifying the type of gun being used by an enemy using Gun Combat.
• Picking something up off the ground or a nearby surface.

SIGNIFICANT ACTIONS

Minor Actions

A character can take two minor actions instead of a significant action.

Miscellaneous

A character may make a skill check or do something else as a significant action when such an action requires the character's full attention, concentration, complicated physical actions or some combination thereof. Such checks include:

• Applying first aid to a wounded comrade using the Medic skill (see page 56).
• Trying to bypass the security system on a hatch using the Mechanic skill.
• Using a psychic power (see page 152).
• Issuing orders with the Leadership skill (See page 56).
• Calling in an ortillery strike.
• Performing hazardous manoeuvres with a vehicle.

The Referee will adjudicate which skill checks are significant and which are minor.

Attack

The most common significant action is an attack. The basic attack action is trying to injure a foe with a melee attack or a ranged weapon. The attacker declares his target, and the foe may choose to react (see Reactions, right). The attacker then makes a skill check, and if successful, deals damage to his target (see Damage, page 65). As with any other skill check, the standard roll for success is 8+.

The standard skill checks used in making an attack are:

Melee Attack = 2d6 + Melee (appropriate specialty) + Strength or Dexterity DM (attacker's choice)

Shooting Attack = 2d6 + Gun Combat (appropriate specialty) or Heavy Weapons (appropriate specialty) + Dexterity DM

Thrown Attack = 2d6 + Athletics (co-ordination) + Dexterity DM

COMMON MODIFIERS TO ATTACKS

Bonuses		Penalties	
Aiming	+1 per Aim action	Cover	−0 to −6 See page 63.
Laser Sight	+1 if aiming	Movement	−1 for every 10 full metres of target movement
Intelligent Weapon	+1 if total DM is within the program's tolerance – see page 93	Target Dodges (Reaction)	−1
		Environmental Effects	−1 to −2
		Range	−0 to −6 See page 64.
		Target Stance	−2 if attacking a prone target at Medium or greater range +2 if attacking a prone target at Personal range
		Target Parries (Reaction)	-Defender's Melee skill

RECOIL AND HEFT

When you make an attack, compare your Strength DM to the Recoil rating of the weapon you are using. If your Strength DM is higher, no further effects apply. If your Strength DM is lower then the difference is applied to your initiative next round. Melee weapons have a rating called Heft which works in exactly the same way.

When firing automatic weapons in burst mode, increase Recoil by 1. When firing them on full auto increase Recoil by half the Auto score.

REACTIONS

A character who is about to be attacked can react, dodging or ducking out of the way. This means that the more time a character spends reacting, the longer it will be until he acts himself. Each

reaction lowers Initiative by 2 and applies a –1 DM to all skill checks until the following round. There is no limit to how many times a character can react in a round but a character can only react once to each attack and the penalties from reacting are cumulative.

A character can only react to attacks that he is aware of.

Dodging

A character who is being attacked may dodge, giving his attacker a –1 DM and giving himself a –1 DM on all skill checks until the next round. If the character is in cover or has an obstruction to duck or dodge behind, the DM to hit him is increased to –2.

Parrying

A character who is being attacked in melee can parry, applying his Melee skill as a negative DM equal to the attack roll. A parrying character also has a –1 DM on all skill checks until the next round.

OTHER ACTIONS

This section covers actions with unusual timing, such as performing a long skill check or interrupting someone else's action.

Free Actions

Some actions are so fast they do not even qualify as a minor action – shouting a warning, pushing a button, checking your watch, and so on. A character can perform as many of these free actions

as he likes in a turn, although if he performs several the Referee may require him to spend a minor or even a significant action on his various tasks.

Extended Actions

Some skill checks will take longer than a single combat round to complete. Make a Timing roll for the task (see page 50) and then work out how many six second combat rounds it will take to complete. A character engaging in an extended action cannot do anything else but can abandon their action at any time and return to the normal Initiative order. A character who is hit by an attack while undertaking an extended action must make an 8+ roll using the skill in question with a negative DM equal to the amount of damage the attack causes (after armour). Failure indicates that this round's work does not count towards the completion of the task. Failure by six or more (an Exceptional Failure) ruins the task and the character must start again.

Delay

A character does not have to act when his turn comes up in the Initiative order. He may act at any later point during the round, even interrupting another's actions to do so. When he acts, his Initiative is set to the count on which he acted. If the character has not acted by the end of the round he may choose to act first in the next round, effectively giving up his actions in the previous round in exchange for an Initiative advantage. His new Initiative is set to one higher than that of the current first person in the order. When multiple characters are delaying and all wish to act first in the following round, their Initiatives are all set to the same score and they act in Dexterity order as normal.

SPECIAL CONSIDERATIONS

These rules cover unusual situations that will not occur in every firefight.

Automatic Weapons

Automatic weapons – any with a number listed in the Auto column (see page 97) are capable of three fire modes: single-shot, burst, and auto-fire.

- When using single shots, make attacks as normal.
- When using burst fire, add the Auto value to the damage. Burst fire uses a number of rounds equal to the Auto rating.
- When using auto-fire, roll a number of dice equal to the Auto rating of the weapon and sort them into pairs as you wish. Each pair is an attack. Auto-fire attacks can be allocated to as many different targets as you have attacks provided all the targets are within six metres of each other. Auto-fire attacks cannot benefit from a skill any higher than level 1. Weapon skills of 2 or higher only count as 1 when making auto-fire attacks. Auto-fire uses a number of rounds equal to 3 × the Auto rating.

Battlefield Comms

Communications technology is a vital part of the battlefield. If a character is not in communication with the rest of his unit and his

commander, then he cannot benefit from Tactics or Leadership. Characters who benefitted from Tactics at the start of combat and are later cut off from their commander have their Initiative lowered by the same amount it was boosted at the start of combat. Unlike other Initiative modifications, this lasts until combat ends or communication is re-established. There are several methods of communication:

- **Direct:** This covers hand signals and verbal communications. Characters must be within sight or earshot of each other to use direct communications.
- **Hardlinks:** Hardlinks are wires or other physical connections, and cannot be jammed. They can, however, be broken.
- **Radio:** Radio communications allow communications as long as the radio signal can get through – they can be jammed or blocked by local conditions.
- **Laser:** Two characters with tight beam lasers are in communication as long as line of sight exists between a character and another friendly laser-comm equipped character. Lasers can be jammed by other laser comms systems in direct line of sight, but it is exceedingly difficult. They can also be blocked by smoke, aerosols or other obstacles.
- **Masers:** These work just like lasers, but can cut through smoke and aerosols. Masers can be jammed by other maser comms systems.
- **Meson:** Meson communicators cannot be jammed or blocked, but cannot be used while a character is moving. Re-establishing a meson link requires a Comms check.

If several characters are in communication and are working together, then they can be considered a single unit, and benefit from Tactics and Leadership.

Battlefield Sensors

There are several types of sensors used on the battlefields of *Traveller*. (See Sensors on page 96.)

- **Bioscanner:** Bioscanner 'sniffers' detect airborne pathogens and hazardous chemicals.
- **Infra-Red (Heat):** Infra-red sensors detect warm bodies, and negate concealment from smoke and soft cover, but can be jammed by strong heat sources.
- **Densitometer:** An outgrowth of gravitic technology, a densitometer can scan an area and plot variable densities, effectively creating a three-dimensional map of all objects. A densitometric scan can uncover subterranean structures and even detect hidden enemies, but the scan takes several minutes to perform and cannot be used in real-time. Densitometers can be fooled by multiple objects with similar density (a scan can tell an armoured soldier from an unarmored civilian, but cannot distinguish between a living person and a corpse).
- **Electromagnetic Detectors:** These sensors can detect unshielded high-power electrical devices, such as gauss weapons or transmitters.

- **Laser-Assisted Targeting:** A low-powered laser is reflected off the target, giving targeting data to the firer. Laser-Assisted Targeting systems give no bonus against foes wearing Reflec. See Laser Sight, page 102.
- **Light Intensification:** Light intensification technology magnifies visible light, negating the penalties for darkness or low light.
- **Motion Sensors:** Can detect motion within range.
- **Neural Activity Sensor:** A combination of highly sensitive EM-detectors and psionic theory, NAS detectors pick up on the brain activity of living beings and classifies them according to amount and complexity, giving a rough idea of the intelligence of subjects.

A character need only make a Sensors check when using a bioscanner, densitometer, EM-detector or NAS detector. Infra-red scanners and motion scanners need Sensors checks to interpret confusing data, such as trying to distinguish human thermal signatures in the midst of a burning building, or when trying to pick up on extremely faint traces like residual heat from a footprint.

Conditions

Certain battlefield conditions affect ranged attacks:

- **Darkness:** Low light gives a −1 DM to ranged attacks. Complete darkness gives a −4 DM. Light penalties can be avoided by using sensors to target instead of the naked eye.
- **Smoke or Fog:** Smoke gives a −1 DM to ranged attacks by obscuring the target; especially thick and impenetrable smoke gives a −2 DM. These penalties are doubled for laser weapons.
- **Extreme Weather:** Driving wind, rain, snowstorms and so forth give a −1 DM to ranged attacks from poor visibility and a −1 DM to ranged attacks from environmental interference. Sensors can be used to avoid the visibility penalty.

Cover

Any sort of low wall, undergrowth, convenient rocks or other objects can serve as cover. Attacks made on characters who are behind cover suffer the negative cover DM on the table below. Crouching or prone targets (see overleaf) can claim cover one step higher on the table. If a character in full cover is crouching or prone they are impossible to hit but cannot return fire – if they expose themselves enough to shoot then they are exposed enough to be shot.

Cover	Cover DM
1/4 (undergrowth, small rock, corner of a building)	−0
1/2 (thick forest, low wall, crate)	−1
3/4 (jungle, trench, reinforced position)	−2
Full (pillbox)	−4

Cover can be hard or soft. Soft cover such as undergrowth works by concealing the character using the cover and does not protect against attacks from enemies who can see through the concealment, such as those using thermal sensors. Hard cover is a physical barrier and will protect against all attacks.

Explosions

Grenades, rockets and other explosives affect an area. A character caught in an explosion may dodge at the usual Initiative cost (or, if the explosion happens outside combat, if the character is in position to dodge). A character who dodges an explosion may reduce the damage by 1d6 if he just dodges or by half if he dives for cover. A character who dives for cover ends up prone and loses his next significant action (he may take minor actions as normal).

Firing into Combat

If a character is firing a weapon at a target who is at Personal range to another combatant, then the attack suffers a –2 DM. If the attack misses, roll 1d6. On a 4+, the attack hits the nearest other combatant to the original target.

Grappling

A character can attempt to wrestle or grab another person instead of hitting him. The attacker must move to Personal range and beat his target in an opposed Melee (unarmed) check. If he wins, he may do any one of the following:

* Knock his opponent prone.
* Disarm his opponent. If he succeeds by 6+ he can take the weapon away; otherwise it ends up on the floor.
* Throw his opponent up to three metres for 1d6 damage.
* Inflict damage equal to 2 + the Effect.
* Escape the grapple and move away (as if with a normal movement action).
* Continue the grapple with no other effects.
* Drag his opponent up to three metres.

Throwing an opponent always ends the grapple. With any other option the winner can choose to end or continue the grapple as he sees fit. A character in a grapple cannot move or do anything other than make opposed Melee checks. Each time an opposed check is made the winner can choose an option from the above list.

Getting Personal

Characters in Personal range of one another tend to get in each others' way:

* A character may move into Personal range as part of a normal movement action but must stop there. They can move away again with another movement action.
* A character has a –1 DM to all non-combat skill checks for every person within Personal range.
* Many attacks suffer negative DMs when at Personal range; see the table opposite.

The exception is when characters co-operate. Two characters who are co-operating do not give each other penalties to skill checks and can freely move into and out of each others' Personal range as part of one movement action. However, third and additional characters start applying penalties as normal: two people can work on an access panel in a narrow corridor, but someone trying to sprint past them is going to make life difficult for everyone.

Range

Personal combat is divided into a series of range bands:

Range	Distance to Target	Squares to Target (for use with maps and miniatures)
Personal	Less than 1.5 metres	0 (combatants are in the same square)
Close	1.5 to 3 metres	1 to 2 squares
Short	3 to 12 metres	3 to 8 squares
Medium	12 to 50 metres	9 to 34 squares
Long	51 metres to 250 metres	35 to 166 squares
Very Long	251 metres to 500 metres	167 to 334 squares
Distant	501 metres+	334 squares+

Each attack form has an optimum range (or spread of ranges). Attacks within this range have a +0 DM. Attacks outside the optimum range suffer a negative DM. Melee attacks can only be made at Close or Personal range.

Stance

A character can be standing, crouched or prone.

A standing character uses the normal rules. A crouching character moves at half speed but can make better use of cover. If a crouching character is in cover, consider it one row lower on the Cover Table (see previous page) – 1/4 cover counts as 1/2 cover, 1/2 cover as 3/4 cover, and so on.

A prone character cannot make melee attacks or dodge. He may make improved use of cover like a crouching character and he may still parry melee attacks. All ranged attacks targeting him suffer a –2 DM penalty. At Close range, the penalty is reduced to +0; a prone character being attacked at Personal range grants a +2 DM to attacks against him.

Tactics and Leadership

These two skills can affect a character's Initiative.

The Tactics skill can be used to give an Initiative bonus to a whole unit at the start of combat. The unit commander may make a Tactics check, and everyone in the unit may increase their Initiative by the Effect of the check.

The Leadership skill can be used to increase another character's Initiative. The character with Leadership makes a Leadership check, and the target character's Initiative is increased by the Effect of the check. Making a Leadership skill check is a significant action.

Amber Zone
Part of a system used by the Imperial Interstellar Scout Service and the Traveller's Aid Society classification for a nation, world, or system which presents a need for caution in dealings and activity. The amber code may indicate chaos, upheaval, or xenophobia in local business, politics, society, or culture, or may be applied for other reasons. Travellers should exercise caution.

Weapon Ranges							
Weapon	**Personal**	**Close**	**Short**	**Medium**	**Long**	**Very Long**	**Distant**
Melee Attacks							
Unarmed	+0	−1	Out of range	Out of range	Out of range	Out of range	Out of range
Small Blade	+0	−1	Out of range	Out of range	Out of range	Out of range	Out of range
Large Blade	−1	+0	Out of range	Out of range	Out of range	Out of range	Out of range
Bludgeon	−1	+0	Out of range	Out of range	Out of range	Out of range	Out of range
Ranged Attacks							
Thrown	Not possible	+0	−1	−2	Out of range	Out of range	Out of range
Pistol	−1	+0	+0	−2	−4	Out of range	Out of range
Rifle	−3	−1	+0	+0	+0	−2	−4
Shotgun	−2	+0	−1	−2	−3	Out of range	Out of range
Assault Weapon	−1	+0	+0	+0	−2	−4	−6
Rocket	−4	−2	−1	+0	+0	−2	−4
Natural Attacks							
Claw	+0	−1	Out of range	Out of range	Out of range	Out of range	Out of range
Teeth	+0	−1	Out of range	Out of range	Out of range	Out of range	Out of range
Horns	+0	−1	Out of range	Out of range	Out of range	Out of range	Out of range
Hooves	−1	+0	Out of range	Out of range	Out of range	Out of range	Out of range
Stinger	−1	+0	Out of range	Out of range	Out of range	Out of range	Out of range
Thrasher	+0	−1	Out of range	Out of range	Out of range	Out of range	Out of range

Thrown Weapons

There are two kinds of thrown weapons: the first kind strike a single target and do damage from the force of their impact, such as throwing knives or a thrown rock. These use the normal rules for ranged combat. The other kind of thrown weapon is a grenade or other explosive projectile that inflicts no damage from impact but typically delivers a harmful payload. The first kind of thrown weapon adds the Effect of the Athletics (co-ordination) check to its damage. The second kind does not.

If the attack fails the projectile scatters in a random direction for (6 + Effect) metres. This is usually only important if the projectile explodes on or after impact.

DAMAGE

Each weapon lists the damage it inflicts as a number of d6. Add the Effect of the attack roll to this damage.

Damage is applied initially to the target's Endurance. If a target is reduced to Endurance 0, then further damage is subtracted from the target's Strength or Dexterity (target's choice, but all the damage from a single attack must be subtracted from a single statistic). If either Strength or Dexterity is reduced to 0, the character is unconscious and any further damage is subtracted from the remaining physical characteristic. If all three physical characteristics are reduced to 0, the character is killed.

Armour

Armour reduces damage by the value of the armour. A hit with Effect 6+ always inflicts at least one point of damage, regardless of the target's armour.

Kathya shoots a foe for 10 damage. If the target was wearing a flak jacket (armour 2), then the damage would be reduced by 2 to 8. If the target was wearing battle dress (armour 18), she would inflict no damage at all.

VEHICLES

Combat in and on vehicles is much the same as ordinary combat. The differences are as follows:

- Unlike people, who are mobile and manoeuvrable, careful track must be kept of which way a vehicle is facing. Vehicle-mounted weapons – and armed passengers, to a lesser extent – are restricted to certain fire arcs.
- Vehicles are considered to move on the driver's Initiative. The driver must spend a minor action every round to keep control of the vehicle under normal circumstances – a straight road or simple manoeuvres – or a significant action to navigate obstacles, conduct evasion or pursuit, or dodge incoming fire.
- Attackers gain a +1 DM to hit most vehicles because of their size.

Types of Vehicles

There are two main types of vehicles: open and closed. Closed vehicles include typical cars, g/carriers, tanks and other vehicles with an enclosed hull. Open vehicles include motorbikes, air/rafts and other vehicles where the occupants are exposed.

CLOSED VEHICLES

- Closed vehicles grant cover to the occupants – unless the description mentions otherwise civilian vehicles grant soft cover and military vehicles full hard cover.
- Only a few people in a closed vehicle can shoot out, depending on the number of windows or other firing ports and the internal space available. Unless the description mentions otherwise up to two people can fire into each arc from a civilian vehicle and one person in each arc in a military one.

OPEN VEHICLES

- Open vehicles grant no cover to the passengers.
- Any passenger in an open vehicle can shoot (or otherwise attack) in any direction.

Vehicle-Mounted Weapons

Weapons mounted on vehicles follow all the rules for normal weapons with one addition: fire arcs. Weapons mounted on vehicles are limited in what directions they can fire. A weapon mounted in the front arc, for example, can only fire into a 90° area in front of the vehicle. Weapons in turrets can fire in any direction.

Firing a vehicle-mounted weapon is based on the skill for the weapon in question – Gun Combat (energy rifle) for a laser turret, Heavy Weapons (man-portable artillery) for a fusion gun, and so on.
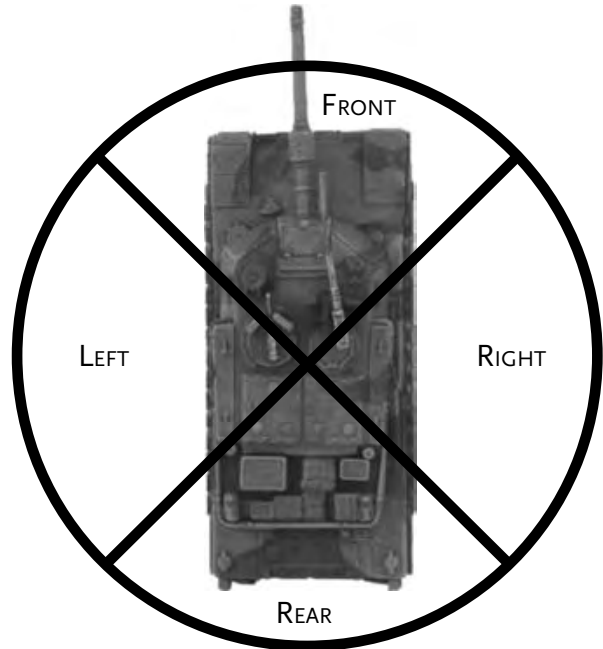
What weapons a vehicle has in what arcs are listed in its description.

Collisions

When a vehicle collides with something else – a pedestrian, another vehicle, or obstacle – everything takes damage. Roll 1d6 for every 10 km/h of the vehicle's speed (round up). This is applied as damage directly to anything hit and, if the thing struck is solid enough, also to the ramming vehicle. Any unsecured passengers in a vehicle damaged in a collision take the same damage and, if possible, are thrown three metres for every 10 km/h of speed. Secured passengers (those wearing seatbelts or something similar) are not thrown anywhere and take one quarter damage.

Vehicular Actions

These are all significant actions that the driver of a vehicle can take when his turn in the initiative order arrives.

EVASIVE ACTION

Vehicles are not typically manoeuvrable enough to dodge as a reaction. Instead, the driver may declare that he is taking evasive action when his turn arrives. He makes a skill check (skill determined by vehicle) and the Effect acts as a –DM to all attacks against the vehicle or its passengers. The Effect also acts as a –DM to any attacks made *from* the vehicle as well. This lasts until the driver's next action.

MANOEUVRING

A driver or pilot can manoeuvre his vehicle without making a skill check. This allows the vehicle to avoid large or obvious obstacles, to get where it is going, to move out of one fire arc of an enemy vehicle and into a different one, or to change the fire arc that a single target is in. More extreme manoeuvres are covered by 'stunt', below.

RAM

Deliberately driving a vehicle into someone or something requires a significant action and a successful skill check (skill determined by vehicle). Rams are affected by dodging and evasive action as normal. The Referee may grant bonuses to a ram attempt or declare it automatically successful if the target is particularly large.

STUNT

With a significant action and a successful vehicle control check the driver or pilot of a vehicle can do pretty much anything it is possible to do in his vehicle – stand a car up on two wheels, perform stunning aerobatics in a jet plane, or skim a speedboat over a low sandbar. A stunt can be used to put a single target into one additional fire arc for one round (putting an enemy vehicle into both your front and rear arcs by spinning the car, for example), to set up some other skill check (often allowing passengers to line up weapons) using the rules for task chains on page 51, to achieve something that would normally be difficult or impossible in your vehicle (driving down an alley too narrow for your car by flipping it onto two wheels), to achieve up to three manoeuvre actions in one go, just to show off, or anything else you can imagine.

WEAVE

In an environment with many obstacles, such as an inner city or tight underground caverns, a driver or pilot may choose to weave his vehicle in and around the obstacles at high speed in order to evade pursuit. The driver chooses a weaving number, as low as one or as high as one per 20 km/h of speed (round up), and must then make a skill check (skill determined by vehicle) with the weaving number as a penalty on his roll. If he fails, he has woven into an obstacle and crashed. See Collisions. If he succeeds, any pursuers must choose a weave action when their initiative count comes up and make their skill test at the same penalty with the same consequence for failure. Alternatively, they can choose to break off pursuit and either give up or try to reacquire the target later.

Vehicle Damage

Vehicles do not have Characteristics like living characters. Instead, they have a Hull value and a Structure value, which measure the vehicle's structural integrity. When Hull is reduced to 0, the vehicle starts taking damage to its internal systems. When Structure is reduced to 0, the vehicle is reduced to scrap. Vehicles also suffer damage to onboard systems as they take damage.

To determine the effects of an attack on a vehicle, first determine how much damage the vehicle suffers as normal. Many vehicles will have one or more points of armour that reduces the damage. Consult the Vehicle Damage table to determine how many 'hits' the vehicle suffers.

Vehicle Damage Table

Damage	Effect
0 or less	No damage
1–3	Single Hit
4–6	Two Single Hits
7–9	Double Hit
10–12	Three Single Hits
13–15	Two Single Hits, Double Hit
16–18	Two Double Hits
19–21	Triple Hit
22–24	Triple Hit, Single Hit
25–27	Triple Hit, Double Hit
28–30	Triple Hit, Double Hit, Single Hit
31–33	Two Triple Hits
For every extra three points	+1 Single Hit
For every extra six points	+1 Double Hit

Each hit is then applied to a particular location on the vehicle. Double or Triple hits count as two or three hits on the same location.

LOCATION TABLE

2d6	External Hit (Vehicle)	Internal Hit (Vehicle)	Robot or Drone
2	Hull	Structure	Hull
3	Sensors	Power Plant	Power Plant
4	Drive	Power Plant	Sensors
5	Weapon	Cargo	Weapon or Limb
6	Hull	Structure	Hull
7	Armour	Passengers	Armour
8	Hull	Structure	Hull
9	Weapon	Cargo	Weapon or Limb
10	Drive	Computers	Drive
11	Sensors	Cockpit	Sensors
12	Hull	Cockpit	Computer

+++All ships be advised: This system is under Imperial interdiction. Make no attempt to land on the fourth planet. Jump from this system as soon as possible. If you require fuel, follow this beacon to the automated refinery. No other course of action will be tolerated. This system is under Imperial interdiction.+++

Hull

Reduce the vehicle or drone's Hull by one. If a vehicle runs out of Hull, further Hull hits become hits on the same row of the Internal Damage table (if a vehicle) or Structure hits (if a robot or drone).

Structure

Reduce the vehicle or drone's Structure by one. If a vehicle runs out of Structure, it is destroyed. If the vehicle is destroyed by an attack that reduces it to a negative Structure score it explodes, doing 4d6 damage to everyone within six metres (including the occupants) and 2d6 damage to everyone within twelve metres. The occupants of a closed vehicle cannot dodge or dive for cover from this explosion but the occupants of an open vehicle can.

Armour

Reduce the vehicle or drone's armour by one.

Drive

First Hit: Reduce movement by 10% and apply a −1 DM to all vehicle control skill checks.
Second Hit: Reduce movement by 25% and apply a −2 DM to all vehicle control skill checks.
Third Hit: Drive disabled.
Further drive hits count as Hull hits.

Weapon

Choose a weapon or device randomly for each hit.
First Hit: The weapon or device suffers a −2 DM to all checks related to its operation.
Second Hit: The weapon or device is destroyed.
If no weapons remain to be destroyed, further hits on this location become Hull hits.

Sensors

First Hit: The vehicle or drone suffers a −2 DM to all Sensors checks. For drones and robots, this also applies to Recon checks.
Second Hit: The sensors are destroyed, blinding the vehicle or drone.
Further Sensor hits count as Hull hits.

Power Plant

First Hit: The vehicle or drone loses one round's worth of actions.
Second Hit: The vehicle or drone's movement is reduced by 50%.
Third Hit: The power plant is destroyed, disabling the vehicle and inflicting 1d6 Hull hits on it.

Limb

Choose a limb randomly for each limb hit.
First Hit: The limb suffers a −2 DM to all checks related to its operation.
Second Hit: The limb is destroyed.
Further Limb hits count as Hull hits.

Passengers

Choose a passenger randomly for any passenger hit. The passenger takes damage equal to the damage inflicted on the vehicle. If all the passengers are dead, further passenger hits become Structure hits.

Cargo

Any cargo present is hit and may be destroyed. If no cargo remains, further cargo hits become Structure hits.

Cockpit

The pilot of the vehicle is hit, and takes damage equal to the damage inflicted on the vehicle. If the pilot is dead, further pilot hits become Structure hits.

Computer

First Hit: The vehicle's computer system is disabled. A drone or robot with a disabled computer system shuts down for 1d6 rounds.
Second Hit: The vehicle's computer system is destroyed. A drone or robot with no computer system is completely disabled.
Further Computer hits count as Structure hits.

Repairs

Damage to a vehicle or drone falls into three categories – System Damage, Hull Damage, and Structure Damage.

System Damage: A damaged system can be jury-rigged back to functioning, but it will stop functioning again after 1d6 hours. Repairing a damaged system requires not only an Average skill check (Mechanic, Engineer (appropriate speciality) or Science (appropriate speciality)) taking 1–6 hours but also a source of spare parts. The spare parts can come from a scrap yard, a workshop, systems on another vehicle, or can be taken from other systems on the same vehicle. When taking spare parts from other vehicle systems, each 'hit' of damage provides enough spare parts to make a single repair check.

The Passengers and Cockpit systems cannot take hits to provide spare parts, although cybernetic parts might be able to provide enough spare material to repair minor damage.

A destroyed system costs 2d6 × 10% of its original cost to repair, and cannot be repaired using spare parts. It requires a full workshop and specialist materials.

Hull Damage: Hull damage can be repaired with a Mechanic check taking 1–6 hours and consumes one 'hit' of spare parts.

Structure Damage: Structure damage can only be repaired in a workshop and requires 10–60 hours per point of damage. It costs 20% of the base cost of the vehicle per point repaired. No skill check is required.

ENCOUNTERS AND DANGERS

This chapter covers planet-side encounters. For encounters and dangers in space, see page 139.

The topics covered in this chapter are: **Animals, Environmental Dangers (Disease, Poison, Weather, Extremes of Temperature, Falling), Healing, Non-Player Characters & Random Planet Encounters.**

ANIMALS

Many worlds in the galaxy are capable of bearing life. While a sizeable proportion of these worlds were seeded with Earth-life by the Ancients or by human colonists, there are many worlds where evolution (or engineering) has produced bizarre creatures. Regardless of their world of origin or biochemistry, the majority of creatures fall into a few categories – herbivores, omnivores, carnivores and scavengers. These categories are further broken down into behaviours, such as grazer or filter. A carnivore that hunts by ambushing its prey will be a very different encounter to one that hunts as part of a pack.

The terrain of a planet also helps determine what sorts of creatures are encountered there.

Animals have a similar range of characteristics to humans, but there are several differences:

Instinct: Instinct is the animal equivalent of Education. Animals apply their Instinct DM to tasks such as sensing prey or solving problems. A cunning or highly successful creature would have a high Instinct score.

Pack: Pack is the animal equivalent of Social Standing. The higher a creature's Pack score, the larger the group that it is associated with, and the more standing the creature has in that group. A lone scavenger would have a low Pack score; a member of a herd would have a medium Pack, while the alpha of a hunting pack would have a high Pack score.

Planetary Quirks

For each world, the Referee should decide on a theme or style to unite the denizens of that world. Just as all mammals or all lizards on Earth share certain traits, so too do alien creatures of different types. Are the dominant creatures hot-blooded or cold-blooded, or do they have some other method of circulation entirely? Perhaps creatures on this world are hive organisms made up of thousands of smaller creatures; maybe psionics takes the place of vision, or perhaps creatures spit acid instead of attacking with claws and teeth. For some quick quirks, choose one or more columns from the table below and roll on them to see what unusual features are common on a given world.

Rural Encounters and Terrains

Worlds are divided into several terrain types, where different species hold sway. The Referee can roll randomly to determine what the characters encounter, or build up a whole ecology in advance.

The terrain type affects the nature of the creatures found there. Animals can be amphibious (A), swimmers (S), flyers (F) or walkers (W). If a number is listed in the movement section, it is a DM to the creature's Size roll.

The Rural Encounter table gives the sort of creature encountered. If the characters are going to be spending a lot of time on a world, the Referee should fill in a Rural Encounter table for each terrain type they will be travelling through, replacing the generic creature types with specific species.

PLANETARY QUIRKS TABLE

Roll	Sensory Quirk	Defence Quirk	Nesting Quirk	Locomotion Quirk	Reproduction Quirk	Attack Quirk
1	Sees in infrared	Armoured shell	Digs burrows	Six limbs	Lays eggs	Acid spit
2	Multiple eyes	Screeches for aid	Nests in trees	Gasbags	Lays thousands of spawn	Strangling tentacles
3	Sensitive cilia or hairs	Reacts to attack with attack	Hides stocks of food	Crawls on webbing	Males gestate young	Primitive tools
4	Echolocation	Camouflage	Steals nests	Slime	Multiple sexes	Spiked tail or bill
5	Symbiosis with a hunter or pilot animal	Avoids or mitigates attacks	Builds nests from organic material	Hijacks the bodies of other creatures	Young grow inside adult, released on death	Electricity
6	Sensitive sense of smell	Inflates	Fortifies nests	A prehensile body part which is not normally prehensile	Can change gender	Poison

TERRAIN DM CHART

Terrain	Type DM	Size DM	Roll for Creature Movement					
			1	2	3	4	5	6
Clear	+3	-	W	W	W	W	W +2	F −6
Plain or Prairie	+4	-	W	W	W	W +2	W +4	F −6
Desert (hot or cold)	+3	−3	W	W	W	W	F −4	F −6
Hills, Foothills	-	-	W	W	W	W +2	F −4	F −6
Mountain	-	-	W	W	W	F −2	F −4	F −6
Forest	−4	−4	W	W	W	W	F −4	F −6
Woods	−2	−1	W	W	W	W	W	F −6
Jungle	−4	−3	W	W	W	W	W +2	F −6
Rainforest	−2	−2	W	W	W	W +2	W +4	F −6
Rough, Broken	−3	−3	W	W	W	W +2	F −4	F −6
Swamp, Marsh	−2	+4	S −6	A +2	W	W	F −4	F −6
Beach, Shore	+3	+2	S +1	A +2	W	W	F −4	F −6
Riverbank	+1	+1	S −4	A	W	W	W	F −6
Ocean shallows	+4	+1	S +4	S +2	S	S	F −4	F −6
Open ocean	+4	−4	S +6	S +4	S +2	S	F −4	F −6
Deep ocean	+4	+2	S +8	S +6	S +4	S +2	S	S −2

RURAL ENCOUNTER TABLE

2d6	Creature Type
2	Scavenger
3	Omnivore
4	Scavenger
5	Omnivore
6	Herbivore
7	Herbivore
8	Herbivore
9	Carnivore
10	Unusual Event or Natural Feature
11	Carnivore
12	Carnivore

ANIMAL TYPES

2d6	Herbivore	Omnivore	Carnivore	Scavenger
1 or less	Filter	Gatherer	Pouncer	Carrion-Eater
2	Filter	Eater	Siren	Reducer
3	Intermittent	Gatherer	Pouncer	Hijacker
4	Intermittent	Eater	Killer	Carrion-Eater
5	Intermittent	Gatherer	Trapper	Intimidator
6	Intermittent	Hunter	Pouncer	Reducer
7	Grazer	Hunter	Chaser	Carrion-Eater
8	Grazer	Hunter	Chaser	Reducer
9	Grazer	Gatherer	Chaser	Hijacker
10	Grazer	Eater	Killer	Intimidator
11	Grazer	Hunter	Chaser	Reducer
12	Grazer	Gatherer	Siren	Hijacker
13 or more	Grazer	Gatherer	Chaser	Intimidator

Disease

Alien diseases can sometimes cross over and infect humans, but most diseases are of Terran origin. The Ancients scattered humans all over the galaxy tens of thousands of years ago, and they brought bacteria and viruses with them. Over time, these have mutated into new forms. In the unlikely event that a highly virulent plague is discovered, the infected world is placed under interdiction until a cure can be found. Disease outbreaks are especially dangerous on new colony worlds, which lack the medical expertise and facilities to treat all the patients.

The disease...

1. ... has an incubation period of several days, so symptoms only appear when the characters are in jumpspace.
2. ... is a mutated version of an extinct Terran plague, like the Black Death.
3. ... stimulates the latent psychic powers of the brain, giving telepathic powers while killing the subject.
4. ... can only be cured by an expensive drug, which the characters must import from a high-tech world.
5. ... is lethal only to one alien species, causing massive social upheaval on a world jointly settled by humanity and that race.
6. ... was deliberately released by hostile forces.

Creature Creation Example, Part 1

The player characters are making their way through a thick rainforest en route to a crashed starship they want to salvage. The Referee decides to generate a local wildlife encounter to make things more interesting. First of all he consults the Terrain DM Chart and looks at the row corresponding to the terrain the characters are in – rainforest. Rolling a die for creature movement he gets a 4, which gives a W for walking movement and a +2 size DM which negates the −2 DM for being in a rainforest. Next, he checks the Rural Encounter Table and rolls 2d6. He rolls a 5. His creature is an omnivore. Rolling 2d6 on the Animal Types table and applying a −2 Type DM from the rainforest terrain he gets a 9, −2 is 7. Checking the omnivore column reveals that his creature is a hunter that stalks and kills easy prey. He notes down that it has Survival and Instinct +2.

For each entry in the Rural Encounter Table, roll on the appropriate column of the Animal types table, modified by the Terrain Type DM from the Terrain DM Chart.

Behaviours

Terran creatures that exemplify these behaviours are noted in brackets after the name. Characteristic modifiers and skills are noted after the description – the exact level of skills varies depending on the particular creature.

- **Carrion-Eater (vulture):** Scavengers which wait for all other threats to disperse before beginning. Carrion-eaters have Recon. Instinct +2.
- **Chaser (wolf):** Animals which kill their prey by attacking and exhausting it after a chase. Chasers have Athletics (co-ordination and/or endurance). Dexterity +4, Instinct +2, Pack +2.
- **Eater (army ant):** Eaters will eat anything they encounter, including characters. Endurance +4. Pack +2.
- **Filter (earthworm):** Herbivores which pass their environment through their bodies are termed filters. Unlike grazers, which move to food, filters move a flow of matter through themselves and filter out the food. Endurance +4.
- **Gatherer (raccoon, chimpanzee):** Gatherers are omnivores that collect and store food. Gatherers have Stealth. Pack +2.
- **Grazer (antelope):** Grazers move from food source to food source, often in large packs. Their primary form of defence tends to be fleeing danger. Instinct +2, Pack +4.
- **Hunter (baboon):** Opportunistic predators that stalk easy prey. Hunters have Survival. Instinct +2.
- **Hijacker (lion):** Scavengers which steal the kills of others through brute force or weight of numbers are hijackers. Strength +2, Pack +2.
- **Intimidator (coyote):** Scavengers which establish their claim to food by frightening or intimidating other creatures. Intimidators have Persuade.
- **Killer (shark):** Carnivores that possess a raw killing instinct, attacking in a frenzied manner. Killers have Melee and either Strength or Dexterity +4, Instinct +4, Pack −2.
- **Intermittent (elephant):** Herbivores that do not devote their entire time to searching for food. Intermittents have Pack +4.
- **Pouncer (cat):** Pouncers kill by stalking and ambushing their prey. Pouncers have Stealth, Recon and Athletics. Dexterity +4, Instinct +4.
- **Reducer (vermin):** Reducers are scavengers that act constantly on all available food, devouring even the remains left by other scavengers. Pack +4
- **Siren (venus fly-trap):** Sirens create a lure to attract prey. Usually, this lure will be specific to the species the siren preys on, but some rare lures are universal. Sirens have Deception. Pack −4
- **Trapper (spider):** An animal which allows its prey to enter a trap. Generally, any creature surprised by a trapper is caught in its trap. Pack −2.

Creature Sizes and Characteristics

For each creature, roll 2d6 for its Size and apply any Dice Modifiers from its Terrain or Movement category. The creature's Size determines its Weight, Strength, Dexterity and Endurance – for example, a roll of 7 means that the creature has a Strength of 3d6, an Dexterity of 3d6 and an Endurance of 3d6.

Roll 2d6 separately for the animal's Weapons and Armour. Add a +8 DM when rolling for weapons if the animal is a Carnivore, and a +4 if it is an Omnivore; subtract a −6 DM if the animal is a Herbivore. Scavengers automatically have Teeth in addition to any other weapons. If a number is present after the Weapons type, then add that number to the number of damage dice the creature rolls.

SIZE TABLE

2d6	Weight (kg)	Strength	Dexterity	Endurance
1 or less	1	1	1d6	1
2	3	2	1d6	2
3	6	1d6	2d6	1d6
4	12	1d6	2d6	1d6
5	25	2d6	3d6	2d6
6	50	2d6	4d6	2d6
7	100	3d6	3d6	3d6
8	200	3d6	3d6	3d6
9	400	4d6	2d6	4d6
10	800	4d6	2d6	4d6
11	1600	5d6	2d6	5d6
12	3200	6d6	1d6	6d6
13	5000	7d6	1d6	7d6

WEAPONS TABLE

2d6	Weapons
1 or less	None
2	Teeth
3	Horns
4	Hooves
5	Hooves and Teeth
6	Teeth
7	Claws +1
8	Stinger +1
9	Thrasher +1
10	Claws and Teeth +2
11	Claws +2
12	Teeth +2
13+	Thrasher +2

ARMOUR TABLE

2d6	Armour
1 or less	0
2	0
3	0
4	1
5	1
6	2
7	2
8	3
9	3
10	4
11	4
12	5
13+	5

Roll 2d6+DMs for the animal's Instinct and Pack. Intelligence for most animals is 0 or 1; the Referee can include more intelligent creatures if he wishes, but creatures with an Intelligence of 2 or more are potentially sophonts.

All animals have at least Survival 0, Athletics 0 and Recon 0, and most will have 1d6 ranks split among these skills, Melee (natural weapons), and any skills listed in their behaviour.

Damage from attacks depends on the creature's Strength score.

Strength	Damage
1–10	1d6
11–20	2d6
21–30	3d6
31–40	4d6
41–50	5d6
51–60	6d6

Number Encountered

The number of creatures encountered depends on its Pack score.

Pack	Number Encountered
0	1
1–2	1d3
3–5	1d6
6–8	2d6
9–11	3d6
12–14	4d6
15+	5d6

Wilderness Encounter Checklist
1. Determine and terrain types appearing on world in question.
2. For each terrain type, generate an encounter table.
3. Generate specific animals for encounter tables:
    Note terrain related DMs, and creature movement descriptor
    Determine diet classification
    Generate Type description
    Note type related behavioral modifiers and DMs.
    Determine size, characteristics, weapons and armor
    Determine Attack damage
    Determine Number encountered
    Note typical reactions
    Apply Planetary Quirks as needed
4. Apply common sense as required.

Animal Reactions

Non-domesticated animals usually react to threats or provocation by either fighting or fleeing. When characters disturb an animal or otherwise draw attention to themselves while within its territory roll 2d6 and consult the following table. If the result is high enough to indicate an attack, the creature attacks. If the result is low enough to indicate flight, it flees, although it may return later. If the result on the table is neither attack nor flee, then the animal stands still until provoked again, in which case roll again.

Type	Attack	Flee
Herbivore		
Filter	10+ if possible	5-
Intermittent	10+	4-
Grazer	8+	6-
Omnivore		
Gatherer	9+	7-
Hunter	If the hunter is bigger than at least one character, then it attacks on a 6+. Otherwise, it attacks on a 10+	5-
Eater	5+	4-
Carnivore		
Pouncer	If the pouncer has surprise, it attacks.	If the pouncer is surprised, it flees.
Chaser	If the chasers outnumber the characters, they attack.	5-
Trapper	If the trapper has surprise, it attacks.	5-
Siren	If the siren has surprise, it attacks.	4-
Killer	6+	3-
Scavenger		
Hijacker	7+	6-
Intimidator	8+	7-
Carrion-eater	11+	7-
Reducer	10+	7-

Creature Creation Example, Part 2

The Referee rolls on the Size Table, applying the –2 DM from rainforest terrain and the +2 DM he rolled when checking for locomotion. He rolls an 8, meaning the hunter weighs 200 kg. After rolling its characteristics it comes out Strength 12, Dexterity 11 and Endurance 7. A powerful creature but with little stamina for a prolonged chase. Rolling on the weapons and armour table the Referee scores 8 and 10 (including a +4 DM on each because the creature is an omnivore). That gives it a stinger with +1 dice of damage (so its final damage is 2d6 (from Strength) + 1d6 (from the sting) = 3d6) and three points of armour. The roll for Pack is low, only a 4, meaning the characters will only encounter 1d6 of the creatures at a time. The roll for Instinct is a 12! Plus two from the creature's hunter behaviour gives it an overwhelming Instinct of 14, about as cunning as an animal can get.

After distributing a handful of points among the creature's Survival, Recon and Melee skills the Referee is ready to have his player characters encounter a nest of them. With an Instinct of 14 the hunters are nearing sophont levels of intelligence, so clearing them out of the wreckage of the crashed starship is going to be a nerve-wracking endeavour...

Sample Animals

Type	Habitat	Strength	Dexterity	Endurance	Intelligence	Instinct	Pack
Jungle Howler							
Pouncer (Carnivore)	Jungle Walker	8	15	14	1	7	8

Recon 1, Athletics (co-ordination) 2, Stealth 2, Melee (claw) 2, Survival 1

Claws and Teeth (3d6), Furry Hide (3). Number encountered: 2d6

Monkey-like predators with sharp claws, who attack by leaping from the treetops onto prey.

Type	Habitat	Strength	Dexterity	Endurance	Intelligence	Instinct	Pack
Skitterers							
Grazer (Herbivore)	Woods Walker	5	6	5	1	11	14

Stealth 2, Survival 2, Athletics (co-ordination) 1, Recon 0, Melee (teeth) 0

Teeth (1d6), Scales (3). Number encountered: 4d6

Small, nervous lizard-like creatures that feed on leaves.

Type	Habitat	Strength	Dexterity	Endurance	Intelligence	Instinct	Pack
Living Net							
Grazer (Herbivore)	Shallow Ocean Swimmer	24	7	12	1	10	12

Survival 3, Athletics (co-ordination) 1, Recon 2.

No attacks, no armour

Slow-drifting, diffuse nets that capture microorganisms. Hive entity. Number encountered: 4d6.

Type	Habitat	Strength	Dexterity	Endurance	Intelligence	Instinct	Pack
Scourges							
Hunter (Omnivore)	Mountain Flyer	1	3	1	0	9	3

Recon 1, Melee (claws) 1

Claws (3d6), Hide (1). Number encountered: 1d6.

Vicious flyers with razor-sharp claws. They soar on mountain thermals, looking for prey.

Type	Habitat	Strength	Dexterity	Endurance	Intelligence	Instinct	Pack
Thunderers							
Intimidator (Scavenger)	Plains Walker	30	2	22	1	7	10

Survival 2, Athletics 0, Persuade 2, Melee (teeth) 1

Teeth (3d6), Hide (2). Number encountered: 3d6.

Slow, ponderous tripeds who use their great bulk to drive off competitors.

ENVIRONMENTAL DANGERS

Most life-bearing alien worlds have completely incompatible biologies, so humans are utterly unaffected by their native pathogens. The exceptions are typically planets where *everything* is inimical to human life. Alien diseases that can affect humans are comparatively rare, most of which are mutations or engineered variants of diseases from Earth. Panacea drugs can aid the immune system resist infection on unfamiliar worlds. Poisons are rarer, but more dangerous – injecting an unfamiliar chemical into your bloodstream or tissue is never a good idea.

Medical treatment can help a character's ability to resist and recover from environmental dangers, aiding the character's Endurance check.

Diseases

Diseases reduce a character's Characteristics, usually Endurance. The character must make an Endurance check with the listed DM to resist the effects of the disease. If the character fails the Endurance check then he takes the listed damage and must make another Endurance check a few hours or days later, depending on the interval of the disease. Once an Endurance check has been passed, the character has fought off the disease. Some more tenacious diseases may require multiple successful checks to shake off.

Disease	DM	Damage	Interval
Pneumonia	+0	1d6+4	1d6 weeks
Anthrax	−3	1d6+2	1d6 days
Regina Flu	+1	1d6−2	1d6 days
Biological Weapon	−6	1d6+8	1d6 hours

Poisons

Poisons operate in the same way as diseases, but generally work much faster and often have a wider range of effects. Most poisons do not have an interval but apply their damage immediately.

Poison	DM	Damage
Arsenic	−2	2d6
Tranq Gas	−1d6	Unconsciousness if Endurance check is failed
Neurotoxin	−4	1d6 Intelligence

Extremes of Temperature

Unusually hot or cold worlds can cause damage unless the characters are suitably protected. Temperatures are in Celsius.

Heat	Effect
50° (Very hot desert)	1d6/hour
200° (~Mercury)	1d6/round
500° (~Venus)	2d6/round
Burning Torch	1d6/round
Welding Torch	2d6/round
Inferno	3d6/round

Cold	Effect
−25° (Arctic)	1d6/hour
−50° (~Mars)	2d6/hour
−200° (~Pluto)	1d6/round
Freezer Berth	1d6/round
Liquid Nitrogen	2d6/round

Weather

High winds and torrential rain can inflict a negative Dice Modifier of −1 to −4 to all skill checks made in the teeth of the weather, depending on the intensity of conditions. Unusual weather effects include flammable methane clouds, rain of sulphuric acid, mists of poisonous gas, flash floods, carbon dioxide glaciers subliming to gas in the heat of the characters' footsteps…

Falling

A character who falls on a 1-gravity world suffers 1d6 damage per two metres fallen. High- or low-gravity worlds will increase or decrease the damage. Look up the size code for the world and the gravity level associated with it on page 170 and multiply the falling damage by the gravity number. For a simpler method, round gravity to the nearest 0.5 before multiplying.

A character who makes a successful Athletics check can reduce the effective distance fallen for the purposes of calculating damage by a number of metres equal to the Effect of his check.

FATIGUE

A character can become fatigued in several ways:
- After staying awake for a number of hours greater than his Endurance + 18.
- After performing heavy labour for a number of hours greater than his Endurance.
- After making a number of melee attacks greater than his Endurance in a single combat.
- Many other ways as mentioned in the text.

A fatigued character suffers a −2 DM to all checks until he rests. The amount of rest needed varies but is usually 3 – the character's Endurance DM hours (characters with an Endurance DM of +3 can recover from fatigue in just 2d6 minutes). If a character suffers fatigue while already fatigued they fall unconscious.

UNCONSCIOUSNESS

An unconscious character may make an Endurance check after every minute of unconsciousness – if successful, he regains consciousness. If he fails he must wait another minute and can then try again with a +1 DM on the check for every check previously failed.

INJURY AND RECOVERY

Injured characters are either wounded or seriously wounded. A character is considered seriously wounded if he has lost at least one point from all three of his physical characteristics. As soon as one of his physical characteristics is restored, no matter how, he is no longer seriously wounded.

Seriously wounded characters who have somehow avoided unconsciousness cannot move except to hobble or crawl along at 1.5 metres per combat round. They also lose their minor action in combat.

Wounded characters heal naturally and can also benefit from medical care. When characteristic points return from healing, players may choose which characteristic regains the points and may split healing between characteristics if they wish.

Natural Healing

An injured character regains a number of characteristic points equal to his 1d6 + Endurance DM per day of full rest. If the character insists on continuing an active lifestyle he only heals a number of characteristic points equal to 1 + Endurance DM per day. Characters with a low Endurance DM (quite possibly from injury) may degrade (lose more characteristic points) over time if they are unlucky or cannot (or will not) rest.

A seriously wounded character only regains characteristic points equal to his Endurance DM per day of rest, which means that the character may never heal naturally and will even get worse if his Endurance DM is currently negative.

Medical Treatment

First Aid: Applying first aid restores a number of characteristic points equal to twice the Effect of the Medic check. Points restored by first aid are divided as desired among all damaged physical characteristics. First aid must be applied within five minutes of the injuries being received to be fully effective. A character can still benefit from first aid up to an hour after their injury but they only receive a number of characteristic points equal to the Effect of the Medic check. Performing first aid on yourself is a Difficult (−2) task.

Surgery: A character who is seriously wounded (after first aid has been applied) requires surgery. Surgery restores characteristic points just like first aid but if the check is failed the patient loses characteristic points equal to the Effect. Surgery requires a hospital or sickbay. Once one characteristic is back to its maximum level the patient can benefit from medical care. Surgery does not benefit characters who are not seriously wounded. Performing surgery on yourself is a Very Difficult (−4) task.

Medical Care: Medical care restores 2 + the character's Endurance DM + the doctor's Medic skill in characteristic points per day, divided evenly among all damaged characteristics. Medical care requires a hospital or sickbay and for the patient to undergo full bed rest.

Standard procedure in most cases is to use medicinal slow (see page 94) to hasten healing.

For example, Morn is mauled by an alien predator while exploring a strange moon. He is able to drive the predator off with his pistol, wounding it. Morn has suffered damage to all three of his characteristics – he has lost 10 Endurance, 5 Dexterity and 3 Strength. Kathya applies first aid, bringing Morn's Strength back up to its maximum level. With only two characteristics now wounded, Morn qualifies for medical care and is quickly restored to health.

Augmentation and Medical Care: Cybernetic or genetic augments can interfere with medical treatment. All medical care or surgery Medic rolls treating a character suffer a negative DM equal to the difference in Technology Level between the medical facility and the highest relevant implant. For example, a character with TL 15 Endurance implants being treated in a TL 10 hospital would give a −5 DM to the surgeon's Medic skill checks.

Healing and Mental Characteristics

Other than Psionic Strength, which has its own rules (see page 152) characters may also suffer damage to their Intelligence or even their Education (representing loss of memory). Unless otherwise specified, each mental characteristic heals at the rate of one point per day.

NON-PLAYER CHARACTERS

During the course of the player characters' adventures, the Referee will play a huge variety of non-player characters – starport staff and guards, traders, Imperial bureaucrats and nobles, dangerous criminals, archaeologists and scientists, naval officers, alien diplomats, untrustworthy brokers, primitive tribesmen, deranged artificial intelligences, alien hive-minds and whatever else the characters encounter. Most of these characters will appear only for a single scene, so there is no need to lavish detail on a trader or guard. Just come up with a personality trait or two and a name and jot them down. If a non-player character is to appear multiple times in the game, then the Referee should determine game statistics and a fuller personality. While the focus of the game is always on the player characters, important non-player characters do not exist solely to serve as allies or antagonists. Non-player characters have their own agendas and desires, and will pursue their own goals. Sometimes, their schemes might enmesh the player characters!

For example, Erik has a Contact named Tarel Paragi, an Imperial diplomat. Erik can call on Paragi when dealing with imperial bureaucracies. What Erik does not know is that Tarel is secretly a Zhodani spy, and that every favour that Erik asks of his friend is putting him deeper in debt to a foreign power.

Random Character Traits

If the Referee is stuck for a motivation or quirk for a non-player character, roll 2d6 on this chart, treating one die as tens and the other as units.

Generating Non-Player Characters

While non-player characters can be generated using the normal character generation rules, it is generally faster just to note down characteristics and a few appropriate skills. A skilled professional has two or three levels in skills related to his occupation, and zero or one levels in a half-dozen other skills.

Random Traits

d66	Trait	d66	Trait
11	Loyal	41	Rumour-monger
12	Distracted by other worries	42	Unusually provincial
13	In debt to criminals	43	Drunkard or drug addict
14	Makes very bad jokes	44	Government informant
15	Will betray characters	45	Mistakes a player character for someone else
16	Aggressive	46	Possesses unusually advanced technology
21	Has secret allies	51	Unusually handsome or beautiful
22	Secret anagathic user	52	Spying on the characters
23	Looking for something	53	Possesses TAS membership
24	Helpful	54	Is secretly hostile towards the characters
25	Forgetful	55	Wants to borrow money
26	Wants to hire the chracters	56	Is convinced the characters are dangerous
31	Has useful contacts	61	Involved in political intrigue
32	Artistic	62	Has a dangerous secret
33	Easily confused	63	Wants to get offplanet as soon as possible
34	Unusually ugly	64	Attracted to a player character
35	Worried about current situation	65	From offworld
36	Shows pictures of his children	66	Possesses telepathy or other unusual quality

Contacts, Allies, Rivals and Enemies

d66	Personage	d66	Personage
11	Naval Officer	41	Bored Noble
12	Imperial Diplomat	42	Planetary Governor
13	Crooked Trader	43	Inveterate Gambler
14	Medical Doctor	44	Crusading Journalist
15	Eccentric Scientist	45	Doomsday Cultist
16	Mercenary	46	Corporate Agent
21	Famous Performer	51	Criminal Syndicate
22	Alien Thief	52	Military Governor
23	Free Trader	53	Army Quartermaster
24	Explorer	54	Private Investigator
25	Marine Captain	55	Starport Administrator
26	Corporate Executive	56	Retired Admiral
31	Researcher	61	Alien Ambassador
32	Cultural Attaché	62	Smuggler
33	Religious Leader	63	Weapons Inspector
34	Conspirator	64	Elder Statesman
35	Rich Noble	65	Planetary Warlord
36	Artificial Intelligence	66	Imperial Agent

There are five types of non-player characters who will show up throughout a *Traveller* campaign: allies, contacts, enemies, rivals and patrons.

Allies are NPCs who are willing to go out of their way to help the characters. An ally is willing to risk his reputation, his status and even his life for his friends, but will expect equal consideration from the characters. Allies are actively looking to further the careers of the characters, passing on useful information and rumours. In general, characters can call on an ally's aid once per year without penalty, but expecting any more aid will overstress the ally's resources. (The ally will still give help if asked, but this may result in the ally losing his position or influence).

Erik's ally is his old Naval commander, Jan Halos, who mustered out of the Navy around the same time as Erik. Halos is now a wandering free trader with his own starship. In the past, Halos has flown in to rescue Erik's ship from attack and aided Erik in a dangerous smuggling mission. If Erik asked, Halos would risk anything for him.

Contacts are willing to help the character when they can, but only in a limited fashion. An ally would give the characters a weapon, but a contact would only tell the characters where they can purchase it.

Erik's contact is Tarel Paragi, a diplomat. Tarel will pass on useful information to Erik, in exchange for other rumours and bits of data. Tarel will advise Erik when dealing with the Imperial bureaucracy, but will not endanger himself. Theirs is an alliance of convenience as far as the diplomat is concerned.

Remember, there is no faster-than-light communication in the *Traveller* setting. Allies and contacts can only be contacted when in the same system, and there will be a delay in communications traffic of several seconds or even minutes if the characters are on different worlds.

Rivals and **enemies** are both adversaries of the player characters – enemies are just willing to go further. While scenarios can revolve around the efforts of a rival to discredit or kill the characters, the Referee should also drop rivals and enemies into other plots. For example, if the characters are trying to find a starport willing to repair their damaged ship, a rival might show up in the system and poach passengers.

Enemies and especially rivals should be mobile. If the characters are going to spend their time jumping from system to system, then their rivals should have starships of their own so the characters

encounter them again and again. Enemies can be stationary, but should have a long enough reach to affect the characters. Totalitarian governments, evil conspiracies or interstellar corporations make great enemies.

Erik's rival is Manfred Greel, a notorious corsair and thief. Greel has a grudge against Erik, and takes great pleasure in tormenting or sabotaging anything Erik does. Greel has come to enjoy their little contests, though, and greatly prefers to humiliate and provoke Erik instead of trying to kill him.

Patrons and Missions

Patrons are non-player characters in positions of power, authority, influence or dire need who employ the characters and give them missions. Sometimes, the reward from a mission will be purely financial – the characters might be hired as bodyguards, mercenaries, couriers, thieves or scouts for a few hundred credits. Other missions will have less tangible rewards, such as being owed a favour by the patron, acquisition of status or influence, or just the knowledge of having done the right thing.

SAMPLE PATRONS

Patrons are employers, contacts, adventure hooks or headaches for the player characters. The patron needs something done, and is prepared to pay the player characters very well for them to do it – but things have a habit of going wrong. Each patron encounter lists:

- The patron's name and role.
- The skills and resources required to complete the mission
- The suggested reward for the mission
- The mission as described to the characters
- What's really going on. Several possible variants will be presented – either pick or roll for which is the real situation.

When integrating patrons into your campaign, if you have established a character with that role already, then you can tie patron encounters with that role to that character. For example, if the player characters have a contact in the Imperial Navy, then you can reuse that patron

---

Payment for Missions

The scale of payment for missions varies depending on how difficult the mission is, but also on the characters' circumstances. A band of penniless travellers who make their way from star system to system in low berths might be happy to be paid 5,000 Credits each for two weeks' work but the crew of a free trader can make hundreds of thousands of credits by spending that time shipping cargo. In fact, characters with huge ship mortgages to maintain will have to turn down unprofitable missions.

A wise patron, therefore, should always offer the characters more than they can get by trading. As a rule of thumb, this comes to about 1,000 to 2,000 Credits per ton of cargo space available to them on a ship, per two weeks of work.

for other Naval missions. It is better to have a few long-running non-player characters than a constant parade of disposable patrons.

Jefri haut-Oschem, Planetologist

Required: Life Sciences, Survival; Spacecraft
Reward: Cr. 2,000/day plus expenses.

Players' Information

His Excellency haut-Oschem is a respected Imperial Planetologist, specialising in worlds that are *nearly* habitable. A planet might be a little too cold, or too dry, or be infested with a lethal native species. Haut-Oschem's genius is in making tiny changes to a planet's ecosystem or climate. All too often, a change can ripple out through the complex balances of a planetary environment and have unforeseen consequences.

Haut-Oschem requires a spacecraft and a crew trained in the sciences for a brief period of research – no more than a few weeks, possibly a month or two. While haut-Oschem has worked with the Imperial Scout Service in the past, this mission is entirely under the aegis of private research. The ship will be visiting worlds outside settled space.

Referee's Information

Any character with contacts in the Scout service can find out that haut-Oschem has quarrelled with the Survey section, and that his once-stellar career has dark clouds hanging over it. Something has gone wrong...

1. Haut-Oschem has been replaced in the eyes of the Scout service by a younger researcher, Harad Leish. Old haut-Oschem wants to prove that his theories and methodologies are still valid. Leish and a laboratory ship from the Scout Service are currently surveying a jungle world inhabited by numerous hostile species. To prove his worth, haut-Oschem needs to find a way for humans to live safely on the world before the Scout service do.
2. As above, but haut-Oschem is bitter, and his real plan is to sabotage Leish's survey team.
3. Haut-Oschem has discovered that he made a terrible mistake at the start of his career. He approved the settlement of a world before he fully understood the ecosystem. Every few centuries, a species of carnivorous locusts hatches in vast swarms and devours everything in their path. The characters need to find a way to stop the insects from hatching.
4. As above, but haut-Oschem wants to preserve his reputation above all else. The characters need to stop the insects without revealing what they're doing to the settlers.
5. Haut-Oschem discovered something very valuable on his most recent survey, such as a massive deposit of precious metals or alien technology. He wants the characters to help him recover it.
6. As above, but haut-Oschem is in a race with the Scout service. He's not the only one to have read between the lines in his latest survey.

Astor Kemble, Spy

Required: Deception, Mechanic/Engineer/Pilot/Comms
Reward: Cr. 5,000 and a new contact

Players' Information

Astor Kemble is a 'freelance researcher' – a spy for hire. Her current mission is to investigate links between a shipping corporation, Jump Transit, and Ine Givar terrorist cells. Jump Transit may be shipping weapons past Imperial patrols. She suspects that the Ine Givar leaders in the area know she is on their trail, so she needs to use unfamiliar faces to finish her mission.

The mission is to infiltrate the shipping company, confirm that the weapons are being smuggled by Jump Transit, and if so, follow the weapons to their destination.

Referee's Information

Kemble approaches the characters after observing them for some time, to learn the best way to win their confidence and trust. If they are patriots, then she poses as an Imperial agent; if they get into trouble, she shows up to rescue them or help them; if they are mercenaries, she shows up with a big wad of credits. The mission is a lot more dangerous than Kemble initially suggests.

She has already infiltrated Jump Transit's office on a hub world, and can arrange for the characters to get jobs with the company. Following the shipments is up to them.

1. Kemble is on the wrong trail – Jump Transit is almost entirely innocent. The weapons shipments are being transported by a band of illegal smugglers, who are using old Jump Transit cargo containers stolen from starports. The characters need to be on watch at the end of their journey.
2. Jump Transit is indeed smuggling weapons, but en route, the cargo ship is attacked by pirates. The characters will need to either defeat the pirates or retrieve the stolen goods to complete their mission.
3. Kemble is discovered and killed by the Ine Givar after the characters begin their time undercover. Fortunately, the cargo ship jumps away before the other terrorists are informed that the PCs are spies. They need to complete their mission before the word reaches the cargo ship's destination.
4. The Ine Givar are aware the Imperium are on their trail. The 'weapon' they are smuggling is actually a bomb, designed to go off when the cargo ship is in jump space, killing any Imperial investigators.
5. The weapons aren't destined for the Ine Givar – they are for a group of rebels on an oppressed planet. The characters may find themselves sympathetic to their cause.
6. Kemble is actually working for the Ine Givar – the characters are actually protecting her cargo of weapons through pirate attacks and Imperial customs inspections.

The Margrave of Vilmaer, Eccentric Noble

Required: Carouse, Steward, Perform, Deception or Survival
Reward: Cr. 10,000

Players' Information

Vilmaer is an obscure rock in a distant solar system in the heart of the Imperium. The lords of Vilmaer invested wisely centuries ago and became obscenely wealthy. The family has become very eccentric over the years. The current Margrave of Vilmaer departed on a 'short tour' some forty years ago and has wandered the galaxy since on cruise liners and casino ships. His entourage waxes and wanes, but the Margrave is always at the centre of a cloud of hangers-on and sycophants.

The Margrave is a man of strange tastes, who sometimes employs adventurers for various whimsical or impossible tasks, often for the entertainment of his friends. Those who can amuse the Margrave of Vilmaer are showered with wealth.

Referee's Information

While the general public sees the Margrave as either an amusingly eccentric buffoon or a shameful noble who squanders millions of credits on fripperies, there is another side to Vilmaer. The Margrave is rumoured to be involved with Imperial Naval Intelligence, or a roving spy for the Moot, or for one of a dozen factions. Where Vilmaer goes, intrigue follows.

1. Vilmaer wants the characters to entertain his entourage of nobles. They must come up with a plan to entertain a dozen jaded, self-obsessed boors.
2. As above, but Vilmaer suspects an assassin is about to strike, and wants the characters by his side to protect him.
3. Vilmaer wants the characters to help him lose a group of particularly annoying reporters. The characters need to spirit the Margrave away and get him at least six parsecs distant from his cruise ship before they discover he's gone.
4. Vilmaer wants the characters to organise a hunting expedition for him and his guests.
5. As above, but the hunting expedition is actually cover for a diplomatic mission. The characters must cover for the Margrave in his absence.
6. As 4, but the Margrave has gone insane, and will sabotage the hunting mission to endanger his followers.

First Lander Thu, Miner

Required: Pilot, Gunnery, Sensors, Melee or Gun Combat, possibly a ship
Reward: Cr. 20,000/Cr. 2,000,000

Players' Information

The miners of Dar Al'khubat went to space many generations ago. They hollowed out asteroids to build their cities and refineries; they lived as close to their ships as a nomad to his horse. They engineered their children to tolerate microgravity and high background radiation, and turned their back on the wider cosmos.

Their only regular contacts with the outside world were the oreships that hauled metals from the belt to the mainworld every few weeks. When the resources of one belt are exhausted or the markets shift, the miners jump to another system and begin again.

Now, one of the Dar Al'khubat miners has come to the starport, seeking aid. First Lander Thu is a small man, bowed by the unfamiliar weight of gravity. The miners have come under attack, and he needs help resolving the situation. Thu explains that the nomadic miners have a contract with the rulers of the local system to deliver a certain quantity of ore every month, and that these attacks are threatening their ability to reach this quota. Calling for outside aid is an unpopular move among his people, but the First Lander believes it is better than breaking contract and having to flee the system.

If the characters have their own ship, then they are paid more to cover damage and expenses. If they do not, then Thu offers them the use of a Seeker (see page 114) while they investigate.

Referee's Information

The attacks are being aided by a faction within the miners who believe that Thu has tied them to an unfair contract. They intend to force a breach of contract so they can destroy Thu's political standing. This faction is led by Thu's estranged daughter, Saj dam-Thu.

1. The attacks have been on the ships that carry the ore. The attackers should not have been able to damage the massive ore-ships, and in fact the damage came from bombs hidden in the ore.
2. The attacks happen when the miner ships are refuelling at the system's gas giant. The attacking vessels are lurking in the upper atmosphere.
3. Thu is more interested in payments from the mainworld's corporations than in his people. The attacks have been protests, nothing more. The characters are on the wrong side.
4. The attacks are nothing to do with the miners' contract – there's something hidden in the asteroid belt that someone wants to protect.
5. The attacks have been at ships working at asteroids. The characters will need to set a trap for the attackers.
6. The rebel faction within the miners is in league with a foreign power that is manipulating events to use the Dar al'Khubat miners as a spy network.

Raynal Galm, Merchant

Required: Broker, Streetwise
Reward: Cr. 10,000

Players' Information

Mr. Galm has a number of unusual cargoes that he needs transported... discretely. None of these cargoes are illegal, per se, but they all require special handling and attention. Galm offers standard freight costs, plus a bonus to cover unusual expenses. Apply to Mr. Galm's office in the DownPort if you have a ship or are willing to personally escort these delicate cargos.

Referee's Information

Galm is skirting the edge of legality by dealing in alien artefacts and hazardous creatures. The only reason his goods are not illegal is because the law has not caught up with them. He has contacts in the Scout service and among alien governments providing him with a constant stream of unusual items, which he routes to various collectors and buyers.

1. The first item is a crate of alien machinery. When taken into jumpspace, it activates and displays a holographic starmap. The device is an alien navigational device. Galm's supplier brought it to him in the hold of a massive freighter, and no-one saw the holographic map. Do the characters follow the map? What will Galm's buyer do with it?
2. As above, but it's actually a warning beacon. The map leads to the location of an ancient automated defence system.
3. The second item is a savage alien predator in a cage, which is being shipped to a zoo. The predator is actually about to spawn, and the larvae are small enough to escape the confines of the cage.
4. As above, but the predator is sentient. During the later stages of pregnancy, the species becomes incapable of higher thought and communication as it conserves energy for spawning.
5. The third item has been stolen from an Aslan museum, and is a piece of artwork of great significance to them. An Aslan hunting party is on the item's trail, and know the characters have it. However, the buyer is also an Aslan, who will be… displeased if they fail to deliver it.
6. As above, but the item is the deed to a vast tract of territory that can be politically destabilising to a whole clan.

Helma Tharrius, Starport Administrator

Required: Investigate, Deception, Gun Combat
Reward: Cr. 20,000

Players' Information

Under Tharrius' firm hand, the small Class C starport has thrived for years in the midst of political turmoil. This world is heavily balkanised and all the different factions want control of the starport. The port is Imperial territory and Tharrius is avowedly neutral, but she has to play the different factions off against each other and avoid any appearance of bias.

Now, she needs help. The head of station security, Ruthven, has been murdered. The evidence points to Tharrius having carried out the murder – her snub pistol was stolen from her quarters and used to kill Ruthven. She claims to have been framed. She cannot trust any of her staff, as almost everyone in the starport favours one or other of the planetary factions. The PCs' ship arrived just after the murder, so they are the only people in the port that she knows were not responsible.

Referee's Information

This is effectively a locked-room mystery. The characters need to solve the murder quickly, before the starport reopens and the killer flees.

1. The killer was a professional assassin who arrived recently. He was hired offworld to remove Tharrius from her position as starport administrator. He will attempt to steal a spacecraft and flee the planet.
2. The killer was one of the cleaning staff, who has having an affair with Ruthven. It was a crime of passion, using a weapon stolen from Tharrius' quarters.
3. Ruthven killed himself using a weapon he stole from Tharrius' quarters. He was suffering from an incurable disease, and decided to use his inevitable death to advance the cause of one of the planetary factions.
4. The killer is a deranged serial killer, who is going to eliminate one member of each of the planetary factions, each time using a weapon stolen from the previous victim. He will close the circle with Tharrius, the only apolitical personage at the port. He's also a member of the security team.
5. The killer is a member of a pirate gang, who want to use the port as a base of operations. Both Tharrius and Ruthven were obstacles to their plans.
6. Tharrius is the killer. She was manipulated by a psion to murder Ruthven.

Abber Koja, Desperate Peasant

Required: Tactics, Leadership, Gun Combat
Reward: Cr. 50,000

Players' Information

Koja is the headman of a village on a backwater planet, far from the arteries of galactic commerce. Life is quiet, peaceful and slow there – until a few years ago. The previous planetary ruler died and his heir is cruel and greedy. He is oppressing the peasants and they have no choice but to rebel. They have no idea how to fight a modern war – they want to hire mercenaries to train them and help them.

Referee's Information

Koja is being mostly honest. He does indeed need mercenaries to train and lead a peasant uprising, but things are not quite as simple as they seem.

1. Koja's planet is a hellhole of jungle and swamps. Just surviving there is a hazardous ordeal. Fighting a war there will be a nightmare.
2. There is a primitive indigenous species on the planet who Koja's peasants have been using as servants – or slaves, depending on who you ask. The new ruler issued an edict freeing all the indentured servants.
3. As above, but the ruler never freed the servants. He promised he would but he has reneged. Koja is a member of the enslaved species and is trying to hold the ruler to his word.
4. The new ruler is a puppet of the corporations and the peasant army will be going up against corporate troops equipped with the best equipment. Fortunately, the corporations only control the capital city and the starport at the moment.
5. The planet was an agricultural backwater until the discovery of significant mineral resources. The peasants are paying the characters out of this sudden wealth.
6. As above, but the peasants do not control these resources. The characters will have to fight to get paid.

RANDOM PATRON TABLE

d66	Patron	d66	Patron
	Criminal		**Commercial**
11	Assassin	41	Merchant
12	Smuggler	42	Free Trader
13	Terrorist	43	Broker
14	Embezzler	44	Corporate Executive
15	Thief	45	Corporate Agent
16	Revolutionary	46	Financier
	Local Leader		**Spacer**
21	Clerk	51	Belter
22	Administrator	52	Researcher
23	Mayor	53	Naval Officer
24	Minor Noble	54	Pilot
25	Physician	55	Starport Administrator
26	Tribal Leader	56	Scout
	High Society		**Unusual**
31	Diplomat	61	Alien
32	Courier	62	Playboy
33	Spy	63	Stowaway
34	Ambassador	64	Family Relative
35	Noble	65	Agent of a Foreign Power
36	Police Officer	66	Imperial Agent

RANDOM PATRON MISSION TABLE

d66	Mission	d66	Mission
11	Assassinate a target	41	Investigate a crime
12	Frame a target	42	Investigate a theft
13	Destroy a target	43	Investigate a murder
14	Steal from a target	44	Investigate a mystery
15	Aid in a burglary	45	Investigate a target
16	Stop a burglary	46	Investigate an event
21	Retrieve data or an object from a secure facility	51	Join an expedition
22	Discredit a target	52	Survey a planet
23	Find a lost cargo	53	Explore a new system
24	Find a lost person	54	Explore a ruin
25	Deceive a target	55	Salvage a ship
26	Sabotage a target	56	Capture a creature
31	Transport goods	61	Hijack a ship
32	Transport a person	62	Entertain a noble
33	Transport data	63	Protect a target
34	Transport goods secretly	64	Save a target
35	Transport goods quickly	65	Aid a target
36	Transport dangerous goods	66	It's a trap – the patron intends to betray the characters

While the Referee should normally design missions in detail, tailoring events to the skills and personalities of the characters, random missions can be generated in a hurry by using these tables.

RANDOM MISSION TARGETS

d66	Target	d66	Target
	Trade Goods		**NPCs**
11	Common Trade Goods	41	Roll on the Patron Table
12	Common Trade Goods	42	Roll on the Patron Table
13	Random Trade Goods	43	Roll on the Patron Table
14	Random Trade Goods	44	Roll on the Random Opposition table
15	Illegal Trade Goods	45	Roll on the Random Opposition table
16	Illegal Trade Goods	46	Roll on the Random Opposition table
	Objects		**Organisations**
21	Computer Data	51	Local Government
22	Alien Artefact	52	Planetary Government
23	Personal Effects	53	Corporation
24	Work of Art	54	Imperial Intelligence
25	Historical Artefact	55	Criminal Syndicate
26	Weapon	56	Criminal Gang
	Places		**Vessels**
31	Starport	61	Free Trader
32	Asteroid Base	62	Yacht
33	City	63	Cargo Hauler
34	Research station	64	Police Cutter
35	Bar or Nightclub	65	Space Station
36	Medical Facility	66	Warship

RANDOM OPPOSITION

d66	Opposition	d66	Opposition
	Low Tech		**Environmental**
11	Animals	41	Target is in deep space
12	Large animal	42	Target is in orbit
13	Bandits and thieves	43	Hostile weather conditions
14	Fearful peasants	44	Dangerous organisms or radiation
15	Local authorities	45	Target is in a dangerous region
16	Local lord	46	Target is in a restricted area
	Average Tech		**Technology**
21	Criminals – thugs or corsairs	51	Target is under electronic observation
22	Criminals – thieves or saboteurs	52	Hostile guard robots or ships
23	Police – ordinary security forces	53	Biometric identification required
24	Police – inspectors and detectives	54	Mechanical failure or computer hacking
25	Corporate – agents	55	Characters are under surveillance
26	Corporate – legal	56	Out of fuel or ammunition
	High Tech		**Social**
31	Starport security	61	Police investigation
32	Imperial marines	62	Legal barriers
33	Interstellar corporation	63	Nobility
34	Alien – private citizen or corporation	64	Government officials
35	Alien – government	65	Target is protected by a third party
36	Space travellers or rival ship	66	Hostages

RANDOM ENCOUNTERS

These three random encounter tables for settled planets cover a wide cross-section of Imperial society. Encounters should be adjusted based on the culture and technology of the planet. The Referee should roll for a new encounter every six hours on average (more often if the characters are travelling or attracting attention).

STARPORT ENCOUNTERS

d66	Encounter	d66	Encounter
11	Maintenance robot at work	41	Traders offer spare parts and supplies at cut-price rates
12	Trade ship arrives or departs	42	Repair yard catches fire
13	Captain argues about fuel prices	43	Passenger liner arrives or departs
14	News report about pirate activity on a starport screen draws a crowd	44	Servant robot offers to guide characters around the spaceport
15	Bored clerk makes life difficult for the characters	45	Trader from a distant system selling strange curios
16	Local merchant with cargo to transport seeks a ship	46	Old crippled belter asks for spare change and complains about drones taking his job
21	Dissident tries to claim sanctuary from planetary authorities	51	Patron offers the characters a job
22	Traders from offworld argue with local brokers	52	Passenger looking for a ship
23	Technician repairing starport computer system	53	Religious pilgrims try to convert the characters
24	Reporter asks for news from offworld	54	Cargo hauler arrives or departs
25	Bizarre cultural performance	55	Scout ship arrives or departs
26	Patron argues with another group of travellers	56	Illegal or dangerous goods are impounded
31	Military vessel arrives or departs	61	Pickpocket tries to steal from the characters
32	Demonstration outside starport	62	Drunken crew pick a fight
33	Escaped prisoners begs for passage offworld	63	Government officials investigate the characters
34	Impromptu bazaar of bizarre items	64	Random security sweep scans characters & baggage
35	Security patrol	65	Starport is temporarily shut down for security reasons
36	Unusual alien	66	Damaged ship makes emergency docking

RURAL ENCOUNTERS

d66	Encounter		d66	Encounter
11	Wild Animal		41	Wild Animal
12	Agricultural robots		42	Small community – quiet place to live
13	Crop sprayer drone flies overhead		43	Small community – on a trade route
14	Damaged agricultural robot being repaired		44	Small community – festival in progress
15	Small, isolationist community		45	Small community – in danger
16	Noble hunting party		46	Small community – not what it seems
21	Wild Animal		51	Wild Animal
22	Local landing field		52	Unusual weather
23	Lost child		53	Difficult terrain
24	Travelling merchant caravan		54	Unusual creature
25	Cargo convoy		55	Isolated homestead – welcoming
26	Police chase		56	Isolated homestead – unfriendly
31	Wild Animal		61	Wild Animal
32	Telecommunications black spot		62	Private villa
33	Security patrol		63	Monastery or retreat
34	Military facility		64	Experimental farm
35	Bar or waystation		65	Ruined structure
36	Grounded spacecraft		66	Research facility

URBAN ENCOUNTERS

d66	Encounter		d66	Encounter
11	Street riot in progress		41	Security Patrol
12	Characters pass a charming restaurant		42	Ancient building or archive
13	Trader in illegal goods		43	Festival
14	Public argument		44	Someone is following the characters
15	Sudden change of weather		45	Unusual cultural group or event
16	NPC asks for the character's help		46	Planetary official
21	Characters pass a bar or pub		51	Characters spot someone they recognise
22	Characters pass a theatre or other entertainment venue		52	Public demonstration
23	Curiosity Shop		53	Robot or other servant passes characters
24	Street market stall tries to sell the characters something		54	Prospective patron
25	Fire, dome breach or other emergency in progress		55	Crime such as robbery or attack in progress
26	Attempted robbery of characters		56	Street preacher rants at the characters
31	Vehicle accident involving characters		61	News broadcast on public screens
32	Low-flying spacecraft flies overhead		62	Sudden curfew or other restriction on movement
33	Alien or other offworlder		63	Unusually empty or quiet street
34	Random NPC bumps into character		64	Public announcement
35	Pickpocket		65	Sports event
36	Media team or journalist		66	Imperial Dignitary

Rivals

Enemies of the player characters can cause trouble in a variety of ways. In most of these cases, the interference is technically legal, so these problems cannot be solved with firepower. Throw these complications in when a rival shows up and you want to make the player characters' lives more interesting!

The rival…

1. … floods the market with goods, rendering the cargo brought by the player characters worthless.
2. … attempts to undercut the player characters, taking whatever job or mercenary ticket they are on away from them.
3. … spreads rumours about the characters, turning allies against them.
4. … informs the characters' enemies about their resources and skills.
5. … sabotages the characters' ship or equipment.
6. … spies on the characters and waits for them to do something illegal or embarrassing that he can capitalise on.

SAMPLE NON PLAYER CHARACTERS 1

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Petty Thug 1	Rogue (enforcer) 2	9	8	7	7	6	5

Stealth 2, Melee (unarmed) 1, Gun Combat (slug pistol) 1, Athletics (co-ordination) 1

Body Pistol (3d6–3), Cosh (1d6), Mesh Armour (2)

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Petty Thug 2	Rogue (enforcer) 3	8	7	9	5	6	7

Athletics (co-ordination) 1, Gun Combat (slug pistol) 2, Recon 1, Drive 1, Melee (blade) 1, Streetwise 1

Autopistol (3d6–3), Dagger (1d6+2), Flak Jacket (4), Ground Car

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Dangerous Thug	Rogue (enforcer) 2 Rogue (thief) 2	8	8	10	8	8	6

Streetwise 2, Persuade 1, Deception 1, Stealth 1, Gun Combat (slug pistol) 2, Leadership 1

Autopistol (3d6–3), Cloth Armour (5).

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Average Guard 1	Army (infantry) 2	8	6	9	8	8	7

Drive 1, Melee (bludgeon) 1, Athletics (co-ordination) 1, Gun Combat (slug pistol) 1, Recon 1

Stunner (2d6+3 stun), Stunstick (1d6 + 2d6 stun), Autopistol (3d6–3), Cloth Armour (5)

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Average Guard 2	Army (infantry) 3	9	8	7	7	6	5

Melee (unarmed) 2, Gun Combat (slug pistol) 2, Gun Combat (slug rifle) 1, Athletics (co-ordination) 1, Stealth 1

Stunner (2d6+3 stun), Autopistol (3d6–3), Assault Rifle (3d6), Cloth Armour (5)

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Experienced Guard	Army (infantry) 5	7	7	10	9	9	7

Athletics (endurance) 1, Athletics (co-ordination) 1, Gun Combat (slug pistol) 2, Melee (unarmed) 1, Leadership 2, Recon 2, Comms 1, Sensors 1

Stunner (2d6+3 stun), Autopistol (3d6–3), Assault Rifle (3d6), Combat Armour (12)

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Security Officer 1	Agent (Law) 2	7	7	7	8	8	7

Gun Combat (slug pistol) 1, Gun Combat (energy pistol) 0, Recon 1, Investigate 1, Comms 0

Stunner (2d6+3 stun), Autopistol (3d6–3), Cloth Armour (5), Comm

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Security Officer 2	Agent (Law) 3	7	9	7	8	8	7

Gun Combat (slug pistol) 2, Recon 1, Investigate 2, Comms 0, Streetwise 0, Persuade 0

Stunner (2d6+3 stun), Autopistol (3d6–3), Cloth Armour (5), Comm

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Detective	Agent (law) 4	6	8	8	10	12	8

Gun Combat (slug pistol) 2, Recon 2, Investigate 3, Streetwise 3, Persuade 2, Melee (unarmed) 2, Computers 1, Comms 1, Advocate 1

Stunner (2d6+3 stun), Revolver (3d6–3), Cloth Armour (5), Comm

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Technician	Navy (engineer) 2	6	8	6	9	10	7

Mechanic 1, Vacc Suit 1, Engineer (electronics) 1, Comms 0

Toolkit, Comm

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Experienced Tech	Navy (engineer) 3	6	9	7	10	11	8

Mechanic 1, Vacc Suit 2, Engineer (electronics) 2, Engineer (M-drive) 1, Comms 1, Computers 1

Toolkit, Comm, Hand Computer, Geiger Counter

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Crewman	Naval (Crew) 1	7	7	7	7	7	7

Pilot (spacecraft) 1, Mechanic 1, Vacc Suit 1, Comms 0, Sensors 0

Toolkit, Snub Pistol (3d6–3)

SAMPLE NON PLAYER CHARACTERS 2

Character	Career Path	Strength	Dexterity	Endurance	Intelligence	Education	Social Standing
Old Spacehand	Naval (Crew) 4	6	8	8	10	10	7
Pilot (spacecraft) 3, Mechanic 2, Vacc Suit 2, Zero-G 2, Comms 1, Sensors 1, Gunnery (turret) 2, Engineer (P-plant) 2, Engineer (life support) 1, Melee (unarmed) 1							
Toolkit, Snub Pistol (3d6–3)							
Naval Officer	Naval (flight) 3	7	9	7	8	10	10
Pilot (spacecraft) 2, Vacc Suit 1, Comms 1, Sensors 2, Gunner (turret) 2, Tactics (naval) 2, Leadership 2, Gun Combat (slug pistol) 2							
Tailored Vacc Suit (6), Snub Pistol (3d6–3), Hand Computer							
Belter	Drifter (scavenger) 2	6	8	5	7	7	4
Pilot (small craft) 1, Remote Operations 1, Vacc Suit 0, Zero-G 0, Gun Combat 0, Sensors 1							
Vacc Suit (4), Snub Pistol (3d6–3)							
Young Noble	Noble (dilettante) 1	5	7	7	7	9	13
Carouse 2, Persuade 1, Comms 0, Admin 0, Melee (blade) 1							
Cloth Armour (5), Rapier (1d6+4), Comm, Servitor Robot							
Diplomat	Noble (diplomat) 3	5	7	5	10	13	14
Admin 1, Advocate 2, Diplomat 4, Comms 1, Computers 2, Investigate 3, Persuade 2							
Cloth Armour (5), Comm							
Journalist	Entertainer (journalist) 2	6	8	7	9	10	8
Art (writing) 1, Comms 0, Computer 1, Investigate 1, Persuade 1, Streetwise 1							
Hand Computer, Comm, Body Pistol (3d6–3)							
Scientist	Scholar (scientist) 3	5	7	7	12	13	7
Admin 0, Computers 2, Engineer (electronics) 1, Medic 1, Science (any) 3, Science (any) 1							
Hand Computer, Comm							
Bodyguard	Marine (ground) 2	10	8	10	6	8	6
Athletics 1, Gun Combat (slug rifle) 2, Medic 1, Recon 1, Leadership 1, Melee (unarmed) 1							
Advanced Combat Rifle (3d6), Combat Armour (12), Comm, IR/LI googles, Medikit							
Entertainer	Entertainer (performer) 1	9	9	9	7	7	7
Athletics 1, Art (any performing art) 2, Deception 1, Melee 0							
Comm							
Informant	Drifter (wanderer) 2	5	6	7	8	8	3
Deception 2, Streetwise 2, Persuade 1, Gun Combat (slug pistol) 0, Stealth 1							
Autopistol (3d6–3)							
Trader	Merchant (trader) 2	6	7	7	8	9	7
Admin 0, Advocate 0, Broker 2, Pilot (spacecraft) 1, Persuade 1, Streetwise 1.							
Comm, Free Trader							
Native Guide	Drifter (barbarian) 1	8	8	10	7	5	3
Recon 1, Survival 1, Stealth 1, Melee (blade) 1, Leadership 0							
Blade (2d6), Jack (1)							

Equipment

The vast number of tools and devices in the universe and the variation in their potential costs and values defy classification; it is impossible to note and define them all. The objects in this chapter are presented as common examples. Different worlds in the Imperium use different manufacturing techniques, different design styles, and even different physical principles to achieve the same effect. A pistol on one world might resemble a conventional firearm; on another, the same type of gun would be elaborately decorated and coloured to reflect its importance in that world's martial culture; elsewhere, it might be heavily integrated with computers to aid targeting, or use bullets formed from ice mixed with plastic polymers, or be constructed from sensor-baffling materials and treated woods to avoid detection by security sensors.

Each item is listed with the Technology Level needed to manufacture it, its mass (in kg) and its cost. If an item's mass or cost is not listed, then its mass or cost is negligible. Items are available for several Technology Levels after they become possible, but it is often quite hard to find a low-tech item on a high-tech world (few TL 13 spacefaring civilisations are going to produce a lot of crossbows or backpack radios). The prices do assume, though, that the planet is in regular trade contact with the rest of the Imperium. Isolated worlds may charge vastly higher prices for some items, especially cutting-edge technology. A simple computer system might sell for a few hundred credits on most worlds, but on a backward TL 6 world where that computer has just been developed, then purchasing it might require the equivalent of millions of credits.

Credits

The Imperial Credit (Cr.) is the standard unit of currency in the Imperium. Larger denominations include the KiloCredit (KCr; 1,000 Credits) and the MegaCredit (MCr; 1,000,000 Credits). The physical credit is minted by the Imperium and is virtually impossible to falsify.

Citizens of high-technology (TL 8+) planets often use electronic Credits. Transactions are authenticated and managed using computers or personal comms. While electronic credits work perfectly well in-system, the lack of FTL communications across the Imperium means that it is possible for a traveller to outrun his credits – having a million credits in one's bank account on Sylea is all well and good, but if you are twenty parsecs away and the data has not caught up with you, then that money is inaccessible to you. Large banks, corporations and other financial institutions use the X-boat network to synchronise important financial records, but private citizens must make arrangements to keep credits available.

It is possible to notify one's bank and have a line of credit sent ahead (or at least sent at the same time) if you know your destination but wandering travellers must often use physical cash or trade goods. In addition to physical credits, precious metals, gemstones, radioactive elements or technological wonders are sometimes used as barter on many worlds.

Living

A standard meal costs 5 credits to 50 credits or more per person, depending on the level of quality and service. A burger of unidentifiable meat-like substances eaten standing up in a fast-food joint costs 2–3 credits; a fine meal at the Traveller's Aid Hostel costs 20 credits, while a sybaritic feast of a dozen courses and entertainments costs 500 credits or more.

Accommodation for a night in a cheap hotel costs 10 credits; a good hotel can be found for 50–100 credits. Luxury hotels cost 100 credits or more. The Traveller's Aid Hostel is available to members and their guests for 20 credits/night.

A character living on board ship is assumed to have his food and lodging taken care of. A character living on a planet or orbital for a long period must spend money on their living costs – the amount depends on the quality of life desired. A character who does not live at the standard listed for his Social Standing risks being embarrassed and even losing his standing.

Options

After many of the equipment sections is a subsection under the 'options' heading. Options can be added to other equipment at additional cost and provide extra, specialised benefits.

Standard of Living	Cost/Month	Suitable For
Very Poor	Cr 400	Social Standing 2
Poor	Cr 800	Social Standing 4
Low	Cr 1,000	Social Standing 5
Average	Cr 1,200	Social Standing 6
Good	Cr 1,500	Social Standing 7
High	Cr 2,000	Social Standing 8
Very High	Cr 2,500	Social Standing 10
Rich	Cr 5,000	Social Standing 12
Very Rich	Cr 12,000	Social Standing 14
Ludicrously Rich	Cr 20,000+	Social Standing 16

ARMOUR

Unless otherwise noted, only one type of armour can be worn at a time. Resolve damage from the outside in – damage that gets through the outer layer of armour is next applied to the inner layer.

Some armours have a required skill. A character suffers a –2 DM to all actions taken in the armour per missing skill level, including level 0. For example, a character with no Vacc Suit skill who is in a suit that needs Vacc Suit 1 would have a –4 DM to all his rolls.

Jack (TL 1): A natural or synthetic leather jacket or body suit covering the torso and upper arms and legs. Jack is better than ordinary clothing or bare skin when defending against blades but bullets will punch through it easily.

Mesh (TL 6): A jacket or body suit lined with a flexible metal or plastic mesh that gives it added protection against bullets.

Cloth (TL 7): A heavy duty body suit tailored from ballistic cloth. The fabric absorbs impact energy and spreads it over the body, which can result in bruising. However, cloth armour is highly useful and versatile – it can be effectively concealed under normal clothing although observers making an Investigate or Recon check at 8+ will notice something unusual. TL 10 cloth armour is lighter and more flexible, and is indistinguishable from ordinary clothing to the naked eye.

Flak Jacket (TL 7): A less expensive version of ballistic cloth, the bulky flak jacket is an unmistakably military garment. The TL 8 flak jacket incorporates advanced polymers which allow for greater protection without noticeably increasing bulk.

Vacc Suit (TL 8): The vacc suit or space suit is the spacer's best friend, providing life support and protection when in space. Early vacc suits are unwieldy and uncomfortable, but they quickly shrink as technology advances. A vacc suit provides a breathable atmosphere and protection from the extremes of temperature, low pressure and radiation typically found in a hard vacuum, for six hours. At TL 14, 'tailored' vacc suits feel like ordinary clothing with a flexible hood and face mask.

Hostile Environment Vacc Suit (TL 8): Hostile environment suits are designed for conditions where a normal vacc suit would be

Armour Type	Protection	Required Skill	Cost (Cr)	Mass (kg)
Jack (TL 1)	1	None	50	1
Mesh (TL 6)	2	None	150	2
Cloth (TL 7)	3	None	250	2
Cloth (TL 10)	5		500	1
Flak Jacket (TL 7)	4	None	100	2
Flak Jacket (TL 8)	6		300	2
Vacc Suit (TL 8)	4	Vacc Suit 1	7,000	24
Vacc Suit (TL 12)	6	Vacc Suit 0	10,000	12
Vacc Suit (TL 14)	8	Vacc Suit 0	13,000	4
Hostile Enviroment Vacc Suit (TL 8)	6	Vacc Suit 2	12,000	36
Hostile Enviroment Vacc Suit (TL 9)	7	Vacc Suit 2	16,000	27
Hostile Enviroment Vacc Suit (TL 12)	8	Vacc Suit 1	18,000	18
Hostile Enviroment Vacc Suit (TL 13)	9	Vacc Suit 1	20,000	12
Hostile Enviroment Vacc Suit (TL 14)	10	Vacc Suit 1	150,000	6
Ablat (TL 9)	1 (6 against lasers)	None	75	2
Reflec (TL 10)	0 (10 against lasers)	None	1,500	1
Combat Armour (TL 11)	12	Vacc Suit 0	200,000	18
Combat Armour (TL 12)	14	Vacc Suit 0	300,000	10
Combat Armour (TL 14)	16	Vacc Suit 0	600,000	6
Battle Dress (TL 13)	16	Battle Dress 1	2,000,000	26 (6.5)*
Battle Dress (TL 14)	18	Battle Dress 1	3,500,000	12 (3)*

*As powered armour, battle dress largely supports its own weight. The mass in brackets is the effective mass to the wearer while the suit is powered up and turned on. The actual mass of the suit is the normal value.

insufficient, such as deep underwater, worlds shrouded in toxic or corrosive gases, extremes of radiation or temperature, or other locales that offer serious physical danger as well as the lack of a breathable atmosphere. HEV suits provide all the life support offered by a normal vacc suit (for six hours) but are also impervious to flames, intense radiation such as that found at nuclear blast sites, and high pressure environments like undersea trenches. The amount of protection increases with the Technology Level – as a rule of thumb, apply the HEV suit's armour rating against any damage done by a hostile environment.

Breach!

Vacc and HEV suits are armoured and self-repairing on a small scale. Typical punctures from bullets, lasers, and even melee weapons will cause small tears that seal themselves so quickly as to have no game effect. Serious breaches, whether caused by high-powered energy weapons, sabotage, or the jaws of a giant space monster, expose the wearer of the suit to the environment – assuming they survive whatever caused the breach in the first place. The Referee will explain what that entails depending on the environment the characters are in, but in many cases it will lead to instant and unavoidable death. You have been warned.

Ablat (TL 9): A cheap alternative to Reflec, ablat armour is made from a material that ablates (vaporises) when hit by laser fire. Each laser hit on ablat reduces its armour value (versus lasers) by one, but the armour is cheap and easily replaceable.

Reflec (TL 10): Reflec armour is a flexible plastic suit with layers of reflective material and heat-dispersing gel. It is highly effective against lasers, but provides no protection against other attacks. Reflec can be worn with other armour but is hard to obtain and quite expensive.

Combat Armour (TL 11): This full-body suit is used by the military and not generally available on the open market, although those with military or criminal contacts can obtain it without much difficulty. It is issued to troop units and mercenary battalions. Combat armour protects from hard vacuum in the same way as a vacc suit and provides life support for six hours. TL 12 combat armour is considerably lighter, substituting carbon-tube weave for the smart plastic of the previous generation. TL 14 combat armour offers vastly improved protection without impairing movement.

Battle Dress (TL 13): The ultimate personal armour, battle dress is a powered form of combat armour. The servomotors vastly increase the user's speed and strength, boosting his Strength and Dexterity by +4 while wearing the armour. Damage to the wearer's characteristics is calculated as normal, but the values from the armour are used for all other purposes such as hand to hand damage or skill checks. The suit has a built-in computer/2 running an Expert Tactics (military)/2 program (see page 92) to give tactical advice and updates and is commonly outfitted with numerous upgrades. The suit is fully enclosed, with a six-hour air supply and gives full protection against environmental hazards – including NBC shielding – as if it was an HEV suit. TL 14 battle dress is considerably stronger, giving Strength +6 instead of +4, and upgrades its internal systems to Computer/3 (although still running Tactics 2).
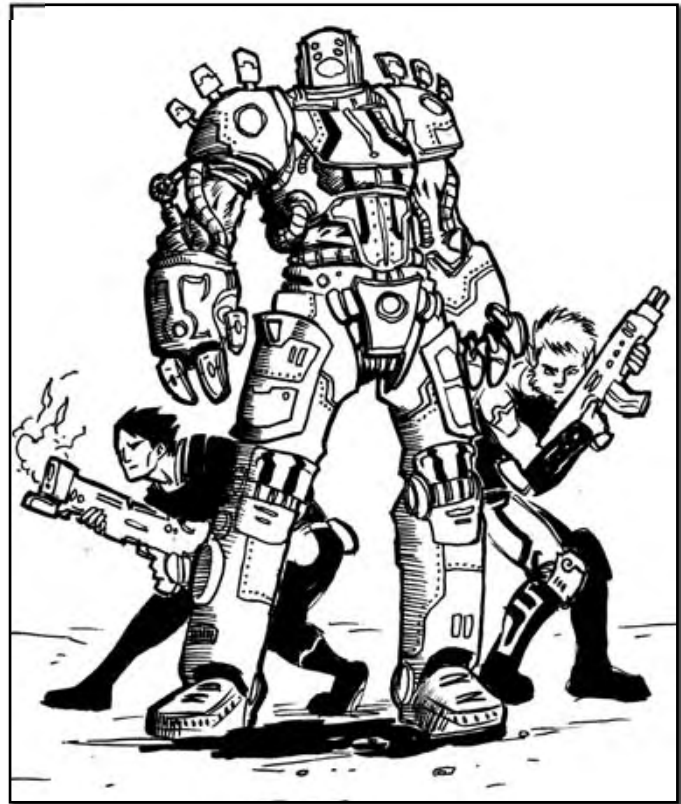
Options

Most of the options listed here can also be applied to normal clothing at the same cost. The exceptions are extended life support and grav assist.

Eye Protection (TL 6): Many armours include eye protection such as visors or goggles to guard against flying debris but such protection becomes absolutely vital at TL 9 to guard against the blinding effects of lasers. Eye protection can be added to any armour and is included for free in any TL 9+ armour. Cr 50.

Magnetic Grapples (TL 8): Magnetic plates in the boots of the armour allow the user to walk normally on a spacecraft without artificial gravity. Cr. 100.

Computer Weave (TL 10): Computer weave can be added to any armour that does not already have a computer system, and gives Computer/0 to that armour. Cr 500.
TL 11: Improved computer weave gives Computer/1. Cr. 1,000.
TL 13: Advanced computer weave gives Computer/2. Cr 5,000.

Extended Life Support (TL 10): This upgrade can be added to any suit that provides life support (vacc suit, HEV suit, combat

armour, battle dress). By adding high-pressure oxygen tanks and recycling systems, the suit now provides eighteen hours of oxygen. Cr. 10,000.

Medikit (TL 10): An internal medical scanner and drug injector, the medikit can be installed in combat armour, battle dress or a vacc suit. It automatically applies first aid if the wearer is reduced to Endurance 0 (treat the Medikit as having Medic 3). It can also administer Fast Drug on command, or if life support systems are failing (turning remaining minutes of life support into hours). Cr 5,000. A TL 11 medikit can also inject Combat or Slow drugs and the Slow Drug antidote on command. Cr 10,000.

Smart Fabric (TL 10): Smart fabric resists stains and dirt, cleaning itself automatically. Smart fabric armour sloughs off dirt, dust and mud automatically (but this function can be suspended for the purposes of camouflage). Cr. 1,000.

IR Chameleon (TL 12): IR (infra-red) chameleon technology can be added to any full-body suit of clothing or armour. It selectively bleeds heat to match background IR levels and effectively renders the wearer invisible to IR (Very Difficult (−4) to detect with sensors). IR Chameleon costs Cr. 5,000.

Grav Assist (TL 12): This upgrade can be added to combat armour or battle dress only, and adds the functionality of a grav belt to the armour at the cost of Cr. 110,000. The TL 15 version lasts longer. Costs Cr 120,000. See grav belt, page 103.

Vislight Chameleon (TL 13): A more advanced form of IR Chameleon, Vislight Chameleon covers the surface of the armour with light-bending technology, making the wearer nearly invisible to the naked eye (+4 DM to Stealth rolls). Vislight Chameleon costs Cr. 50,000.

AUGMENTS

While technology is capable of significantly altering and improving the human form, obvious cybernetic, genetic or surgical alteration of the human form is frowned upon in the Imperium. While humans can be altered to survive on hostile worlds – denizens of a waterworld might be given gills and finger-webbing, while those living on a world with dangerous native micro-organisms might have their immune and digestive systems altered to compensate – unnecessary augmentation is seen as unpleasant and even perverse in many cultures. Despite this, there are some worlds where genetic alteration or cybernetics are widespread or even mandatory, just as there are worlds where they are strictly forbidden.

Most of the items in this category can be cybernetic (mechanical or electronic implants and prostheses), biological (genetic engineering and surgical alternation) or both (a more common solution), but the general term 'augment' is used for all of them.

Augmentation can bring characteristics above the normal maximum for a race.

Augments can interfere with medical treatment. All long-term care or surgery Medic rolls (see page 75) treating an augmented character suffer a negative DM equal to the difference in Technology Level between the medical facility and the highest relevant implant. For example, a character with TL 15 Endurance implants being treated in a TL 10 hospital would give a −5 DM to the surgeon's Medic skill checks.

Neural Comm (TL 10): A neural comm has identical capacities to a standard comm (see page 90), but the cost is much higher and the TL is increased by 2. For example, an audio-only comm costs 250 Credits and is TL 10. A character can access the capabilities of a neural comm by thought alone but must still make any relevant skill checks and must still speak aloud to send audio messages.

TL 10	Audio only	Cr. 1,000
TL 12	Audio and visual, Computer/0	Cr. 5,000
TL 14	Multiple forms of data, Computer/1	Cr. 20,000

Subdermal Armour (TL 10): Adds a mesh of ballistic fibres to the skin and reinforces the bones, giving the character extra armour. Subdermal armour stacks with other protection. Subdermal armour can be as obvious or subtle as the recipient desires.

TL 10	Armour 1	Cr. 50,000
TL 11	Armour 3	Cr. 100,000

Physical Characteristic Augmentation (TL 11): A character's Endurance, Strength or Dexterity can be increased in various ways, from replacing motor neurons with faster synthetic cells, to reinforcing bones and replacing organs with tougher vat-grown clones. Augmentations must be purchased for each characteristic separately.

TL 11	Characteristic +1	Cr. 500,000
TL 12	Characteristic +2	Cr. 1,000,000
TL 15	Characteristic +3	Cr. 5,000,000

Intelligence Augmentation (TL 12): Replacing slow nerve cells with faster synthetic substrates and implanting optoelectronic boosters can increase the speed at which a character thinks, effectively boosting his Intelligence.

TL 12	Intelligence +1	Cr. 500,000
TL 14	Intelligence +2	Cr. 1,000,000
TL 16	Intelligence +3	Cr. 5,000,000

Skill Augmentation (TL 12): The character's nervous system is rewired to be more suited to a particular task. A pilot might have his reflexes and sense of balance improved; a broker might be made capable of controlling his pupil responses and smelling the pheromones and skin salinity of the other party. A skill augmentation gives the character a +1 DM when using that skill. Cr. 50,000. A character can only have one skill augmentation and must possess that skill at level 0 to benefit from the augmentation.

Wafer Jack (TL 12): A wafer jack is a computer system implanted into the base of the skull that consists of an external data socket and a processor running an interface program. A character with a wafer jack can use expert programs for tasks relying on Intelligence or Education only. The main benefit of the jack is that it is much smaller and more discrete than a hand computer, and the user can access the expert program by thought alone. A wafer jack is a Computer/2 (Computer/4 at TL 13) and can only run expert programs. It is always running Intelligent Interface at no cost. Cr. 10,000. (Cr. 15,000 at TL 13.)

Enhanced Vision (TL 13): A character can be implanted with cybernetic eyes giving him the abilities of a set of binoculars and IR/Light Intensifier goggles at the cost of Cr. 25,000.

COMMUNICATIONS

Communications technology rapidly merges with computer technology at higher technology levels. Above Technology Level 10 in most cultures, it is unthinkable to be out of touch except in the most remote areas.

Bug (TL 5): Surveillance devices such as hidden microphones and tiny cameras, bugs are available from TL 5 onwards. They rapidly miniaturise and become more intelligent. A TL 14 bug can be no bigger than a dust mote. The smaller a bug, though, the shorter its range – a bug that transmits data needs a much larger power supply than one that just records until it is collected.

TL 5	Audio	Cr. 50
TL 7	Audio or Visual	Cr. 100
TL 9	Audio or Visual or Data	Cr. 200
TL 11	Audio/Visual/Data	Cr. 300
TL 13	Audio/Visual/Data/Bioscan	Cr. 400
TL 15	Audio/Visual/Data/Bioscan/Computer/1	Cr. 500

Audio: The bug records anything it hears.
Visual: The bug records anything it sees.
Data: If attached to a computer system, the bug can search and copy data from the computer. The bug cannot breach computer security on its own, but if a user accesses the computer in the bug's presence, the bug can read his data.
Bioscan: The bug has a basic biological scanner, allowing it to sample the area for DNA traces, chemical taint and so forth.
Computer/1: The bug has an onboard computer system with Computer/1.

A bug can be active or passive. An active bug transmits data (either constantly, or when triggered). Passive bugs just record until activated.

Transceiver (TL 5): A transceiver is a stand-alone communications device. Unlike a comm, which relies on the presence of an established communications network, a transceiver can send and receive directly under its own power. Most transceivers are radio or laser-based. Meson communicators are possible, but are generally not easily portable or available.

To reach orbit reliably, a transceiver needs a range of 500 kilometres.

Radio Transceivers	Mass (kg)	Range	Cost (Cr.)
TL 5	20	Distant (5 km)	50
TL 8	2	Distant (5 km)	100
TL 9 (Computer/0)	1	Very Distant (50 km)	250
TL 12 (Computer/0)	1	Regional (500 km)	500
TL 13 (Computer/1)	1	Continental (5,000 km)	1,000

Laser Transceivers			
TL 9	1.5	Regional (500 km)	100
TL 11 (Computer/0)	0.5	Regional (500 km)	250
TL 13 (Computer/1)	-	Regional (500 km)	500

Comm (TL 6): A personal comm unit is a portable telecommunications device/computer/camera, ranging in size from a bulky handset to a slim watch or pen-like cylinder. Larger comms have physical controls and screens, while smaller units either project data and control displays onto nearby surfaces, have fold-out plastic screens, or connect to cybernetics. Comms have only short-range transmission and reception capabilities, but most technologically advanced worlds will have planet-wide comm networks allowing the user to send messages and access data anywhere.

TL 6	Audio only	Cr. 50
TL 8	Audio and visual, computer/0	Cr. 150
TL 10	Multiple forms of data, computer/1	Cr. 500

Commdot (TL 10): A commdot is a tiny microphone/speaker and transmitter, ranging in size between a few centimetres and a few millimetres across. A commdot is capable of interfacing with another communications device and relaying messages back and forth. Commdots have a range of only a few metres. They are usually used as hands-free communicators, but can also be used as improvised bugs or throat microphones. Cr. 10 each.

Holographic Projector (TL 11): A holographic projector is a toaster-sized box that, when activated, creates a three-dimensional image in the space around it or nearby – the range is approximately three metres in all directions. The image can be given pre-programmed animations within a limited range and the projector includes speakers for making sound. The projected holograms are obviously not real so this device is mostly used for communication. The TL 12 version can produce holograms real enough to fool anyone who fails an Intelligence check (made upon first seeing the hologram) and the TL 13 version can produce holograms that are true-to-life images.

TL 11	Cr. 1,000
TL 12	Cr. 2,000
TL 13	Cr. 10,000

COMPUTERS

The power of a computer is given by its rating (Computer/1, Computer/2 and so forth), which measures the complexity of the programs it can run. (Storage space is effectively unlimited at TL 9 and above.) Programs are rated by the computer rating they require. A system can run a number of programs up to its rating – for example, a Computer/2 could run two programs requiring Program/1 at a time, or one Program/2, or a Program/2 and any number of Program/0s. The one exception is that a Computer/0 can only run one Program/0 at a time.

The computers listed here are laptop size. Battery life is two hours at TL 7, eight hours at TL 8, and effectively unlimited at TL 9 and above. Desktop computers offer a slightly greater amount of processing power for the same cost but not enough to make a difference in-game. Desktops become obsolete during TL 8 although some retro-technology enthusiasts may create old-fashioned cases for their smaller, lighter computers.

Optimum TL	Computer Power	Mass (kg)	Cost (Cr.)
TL 7	Computer/0	10	50
TL 8	Computer/1	5	250
TL 9	Computer/1	5	100
TL 10	Computer/2	1	500
TL 11	Computer/2	1	350
TL 12	Computer/3	0.5	1,000
TL 13	Computer/4	0.5	1,500
TL 14	Computer/5	0.5	5,000

Computer Terminal (TL 7): This is a 'dumb terminal', with only limited processing power. It serves as an interface to a more powerful computer such as a ship's computer or planetary network. Terminals range in size depending on their control method – a holographic display terminal can be much smaller than one with a physical keyboard and screen. A computer terminal has Computer/0, and costs Cr. 200.

Computer Variants

A computer's optimum technology level is the level at which it reaches standard production and is no longer considered a prototype or experiment. Most Computing systems will be built at the optimal level or higher, to allow utilization of the most recent software programs. Computers may be built at lower than optimum tech levels (prototech) or reduced tech levels (retrotech) discussed below.

Prototech: A computer type may be produced at up to 2 levels below its optimum tech as a prototype (or reverse engineered experiment). The system has the normal rating but the cost and weight are multiplied by 10 for construction at one TL lower, and 100 for construction at 2 Technology Levels lower.

For example, the TL 10 Computer/2 salvaged from a mysterious alien wreck could be used to reverse engineer a Computer/2 by a TL 8 society. It would run as a TL 10 Computer/2, but would cost Cr. 35,000 and weigh 100 kg.

Retrotech: A higher TL society may produce a lower rated TL system for a reduced cost and weight. Any system may be built at any TL below the society's current level (but not below the optimum TL for the model). Each reduced level halves the cost and weight of the basic model.

For example, an advanced TL 10 society want to produce TL 7 Computer/0 models for sale to less advanced worlds. These computers could weigh as little as 1.25 kg and would cost 6 Credits each – although the TL 10 society would sell them for a much higher price, of course. The lightweight machines would function at a rating of Computer/0 but, if opened up, would have TL 10 technology inside.

Hand Computer (TL 7): A hand computer is a portable computer system with considerable processing power. It is more powerful than a computer terminal, and can be used without access to a network. A hand computer costs twice as much as a normal computer of the same TL but can he held in one hand and operated with the other.

Options

Data Display/Recorder (TL 13): This headpiece worn over one or both eyes provides a continuous heads-up display for the user, allowing him to view computer data from any linked system. Because of the transparent screen vision is not obscured while using a DD/R headset. DD/R headsets are commonly used by starship crews to access information without changing their primary console displays. DD/Rs can display data from any system, not just computers – they can display vacc suit oxygen reserves, grav belt status, neural activity scanner results and so forth. Cr. 5,000.

Data Wafer (TL 10): The principle medium of information storage in the Imperium is the standard data wafer, a rectangle of hardened

Jump Dimming
The transitions to and from jumpspace are momentous occasions during an interstellar trip. Following an old Vilani superstition, the pilot of a ship customarily dims the ship's interior and exterior lights before going into jump. Historically, this custom derived from the need for most of the ship's power to be diverted into the computer and jump drive systems, so that the jump drive could be guided into creating the jump field properly. Zhodani and Solomani pilots do not follow this tradition of 'jump dimming'. Lights on a ship are typically dimmed for a period of about two minutes; the lights are brought back up to full strength as soon as the ship is in jumpspace.

91

plastic about the size of a credit card. The interface for a data wafer is standardised but the internal workings vary. A TL 10 data wafer is memory diamond, with information encoded in structures of carbon atoms; more advanced wafers use more exotic means of data storage. Cr 5.

Specialised Computer: A computer can be designed for a specific purpose, which gives it a rating of 1 or 2 higher for that program only. The navigation computer on a starship might be only a Computer/1, but it could run the Expert Navigation/3 program because it is specially designed for that task. A specialised computer costs 25% more per added rating – so, a Computer/1 (Expert Navigation/3) machine costs 150% of the cost of a basic Computer/1. In addition, running the program a computer is specialised for does not use up rating when working out how many programs the computer can run simultaneously.

Software

A character can use any high-rating software at a lower rating, to a minimum of the lowest rating shown. For example, you can run Intrusion/3 on a Computer/1, but it functions only as Intrusion/1.

Programs above Rating/1 cannot be copied easily, as they require a non-trivial amount of bandwidth to transfer.

MEDICAL SUPPLIES

Most of these supplies require a character with the Medic skill to use properly. These items are, in the main, useful only in emergencies, such as when a character is injured on a distant planet far away from a hospital facility.

Cryoberth (TL 10): A cryoberth, or 'icebox', is a coffin-like machine similar to the low or frozen berths used on some spacecraft. The main difference is that a cryoberth works much faster than a low berth, freezing and preserving its occupant almost instantly. A cryoberth can therefore be used to place a severely injured character into stasis until he receives medical treatment. While in a cryoberth, a character's wounds neither heal nor degrade and all disease and poison activity is halted. In effect, all biological functions are suspended until the cryoberth is deactivated and the character thaws. A cryoberth's internal power system can function for up to one week on its own, but a berth is usually connected to a vehicle's power supply. Wt. 200 kg, Cr. 50,000.

COMPUTER SOFTWARE TABLE

Software	Rating	TL	Cost	Effect
Database	-	TL 7	Cr. 10 to Cr. 10,000	A database is a large store of information on a topic that can be searched with a Computer check or using an Agent.
Interface	0	TL 7	Included	Displays data. Using a computer without an interface is a Formidable (–6 DM) task.
Security	0	TL 7	Included	Security programs defend against intrusion. Rating 0 is Average (+0 DM).
	1	TL 9	Cr. 200	Difficult (–2 DM) difficulty
	2	TL 11	Cr. 1,000	Very Difficult (–4 DM) difficulty
	3	TL 12	Cr. 20,000	Formidable (–6 DM) difficulty
Translator	0	TL 9	Cr. 50	Translators are specialised Expert systems that only have Language skills. The TL 9
	1	TL 10	Cr. 500	version just provides a near-real-time translation. The TL 10 works in real-time and has a much better understanding of the nuances of language.
Intrusion	1	TL 10	Cr. 1,000	Intrusion programs aid hacking attempts, giving a bonus equal to their rating.
	2	TL 11	Cr. 10,000	Intrusion software is often illegal.
	3	TL 13	Cr. 100,000	
	4	TL 15	N/A	
Intelligent Interface	1	TL 11	Cr. 100	Artificial intelligence allows voice control and displays data intelligently. Required for using Expert programs.
Expert	1	TL 11	Cr. 1,000	Expert programs mimic skills. A character using an expert system may make a
	2	TL 12	Cr. 10,000	skill check as if he had the skill at the program's rating –1. Only Intelligence and
	3	TL 13	Cr. 100,000	Education-based checks can be attempted. If the character already has the skill at a higher level then an Expert program grants a +1 DM instead.
Agent	0	TL 11	Cr. 500	Agent programs have a Computer skill equal to their rating, and can carry out tasks
	1	TL 12	Cr. 2,000	assigned to them with a modicum of intelligence. For example, an agent program
	2	TL 13	Cr. 100,000	might be commanded to hack into an enemy computer system and steal a particular
	3	TL 14	Cr. 250,000	data file. They are effectively specialised combinations of Computer Expert and Intellect programs.
Intellect	1	TL 12	Cr. 2,000	Intellects are improved agents, who can use Expert systems. For example, a robot
	2	TL 13	Cr. 50,000	doctor might be running Intellect/1 and Expert Medic/3, giving it a Medic skill of 2.
	3+	TL 14	-	An Intellect program can use a number of skills simultaneously equal to its Rating.

Interfaces and Intellects

Choosing the right program to use your computer is important, and depends on what you are doing with the computer.

If you're just using the computer, then all you need is a basic Interface/0.
If you're using the computer to access an Expert program, then you need Intelligent Interface to get the benefit.
If you want the computer to do the work for you, then you need to run an Agent program.
If you want the computer to do the work for you with a human-like level of intelligence and adaptability, you want an Intellect program.

Expert Skill Software

Kathya is on her ship, attending to a patient. She has no Medic skill, but her hand computer (Computer/3) has the Medic Expert skill program at Rating 3. She therefore uses an Intelligent Interface/1 and Expert Medic/2. This gives Kathya an effective Medic skill of 1 for making this skill check.

Morn has a Wafer Jack. If he takes the Expert Medic program from the computer and inserts the data wafer into his jack, then he gains Medic 2 as long as the wafer is in his skull.

In either case, the Expert program only allows the character to make Intelligence or Education-based checks. Morn's artificial skill could allow him to diagnose an illness or apply first aid, but if the Referee called for a Dexterity-based check to perform surgery, the program would be of no help.

A character could, say, connect a neural comm (see page 89) to his hand computer, and use the hand computer to contact a distant computer that has an appropriate Expert skill – but if the signal was jammed or interrupted, the effects on the character could be disastrous. Slaving your nervous system to your ship in orbit is generally not a good idea.

Expert Skills and Aiding Characters

Having a tool or weapon with the appropriate Expert program and an Intelligent Interface can give a character a +1 DM to his checks if he also has the skill in question. However, the program can only help if the difficulty of the task is less than a certain value.

Expert Program	Helps if the difficulty is...
Rating/1	Difficult (−2 DM) or easier
Rating/2	Very Difficult (−4 DM) or easier
Rating/3	Formidable (−6 DM) or easier

In combat, add up all the negative DMs to determine the effective difficulty of the attack or action.

Medikit (TL 8+): There are different types of medikit available at different Technology Levels. All medikits contain diagnostic devices and scanners, surgical tools and a panoply of drugs and antibiotics, allowing a medic to practise his art in the field. Higher-technology medikits do not give a bonus to basic treatment, but can help with more exotic problems or when treating augmented individuals. For example, a TL 8 medikit can test blood pressure and temperature (amongst other things); a TL 14 kit has a medical densitometer to create a three-dimensional view of the patient's body and can scan brain activity on the quantum level. All medikits weigh 8 kg.

TL 8: Cr, 1,000.
TL 10: Cr. 1,500.
TL 12: Cr. 5,000.
TL 14: Cr. 10,000.

Drugs

There are several drugs (or 'meds') in standard use across the Imperium.

Medicinal Drugs (TL 5+) include vaccines, antitoxins and antibiotics. They range in cost from five credits to several thousand credits, depending on the rarity and complexity of the drug. Medicinal drugs require the Medic skill to use properly – using the wrong drug can be worse than doing nothing. There are too many individual drugs and the effects vary too widely with Technology Level for rules for each of them, but as a rule of thumb with a successful Medic check the correct drug can counteract most poisons or diseases, or at the very least give a positive DM towards resisting them. If the wrong drug is administered, treat it as a Difficult (−2 DM) poison with a damage of 1d6. (See page 74 for more on poisons.)

Panaceas (TL 8+) are wide-spectrum medicinal drugs that are specifically designed not to interact harmfully. They can therefore

be used on any wound or illness and are guaranteed not to make things worse. A character using panaceas may make a Medic check as if he had Medic 0 when treating an infection or disease. Panaceas cost 200 credits per dose.

Anti-rad drugs (TL 8) must be administered before or immediately after (within ten minutes) radiation exposure. They absorb up to 100 rads per dose (see page 141 for more on radiation). A character may only use anti-rad drugs once per day – taking any more causes permanent Endurance damage of 1d6 per dose. Cr. 1,000 per dose.

Stim drugs (TL 8) remove fatigue, at a cost. A character who uses stim may remove the effects of fatigue (see page 74) but suffers one point of damage. If stims are used to remove fatigue again without an intervening period of sleep, the character suffers two points of damage the second time, three points the third time, and so on. Stims cost 50 credits per dose.

Metabolic accelerator ('Slow Drug', TL 10) boosts the user's reaction time to superhuman levels. To the user, everyone else appears to be moving much slower. A character using slow drug in combat adds +8 to his initiative total at the start of combat (or whenever the drug takes effect). He may also dodge up to twice each round with no effect on his initiative score. The drug kicks in 45 seconds (eight rounds) after ingestion or injection and lasts for around ten minutes. When the drug wears off, the user's system crashes. He suffers 2d6 points of damage and is exhausted. Metabolic accelerator costs 500 credits per dose.

Combat Drug (TL 10): This drug increases reaction time and improves the body's ability to cope with trauma, aiding the user in combat. A character using a combat drug adds +4 to his initiative total at the start of combat (or whenever the drug takes effect). He may also dodge once each round with no effect on his initiative score and reduces all damage suffered by two points. The drug kicks in twenty seconds (four rounds) after injection, and lasts around ten minutes. When the drug wears off, the user is fatigued (see page 74). Combat drugs cost 1,000 credits per dose.

Medicinal Slow (TL 11) is a variant of the slow drug. It can only be applied safely in a medical facility where life-support and cryo technology is available as it increases the metabolism to around thirty times normal, allowing a patient to undergo a month of healing in a single day. (Using medicinal slow outside of a hospital or sickbay is a messy and painful way to commit suicide, as the user will rapidly cook his internal organs and suffer massive brain damage.) Medicinal slow costs 500 credits per dose.

Fast Drug (TL 10) or 'Hibernation' puts the user into a state akin to suspended animation, slowing his metabolic rate down to a ratio of 60 to 1 – a subjective day for the user is actually two months. Fast drug is normally used to prolong life support reserves or as a cheap substitute for a cryoberth. Fast drug costs 200 credits per dose.

Anagathics (TL 15) slow the user's aging process. Synthetic anagathics become possible at TL 15, but there are natural spices and other rare compounds that have comparable effects at all Technology Levels. Anagathics are illegal or heavily controlled on many worlds. They cost 2,000 Credits per dose. One dose must be taken each month to maintain the anti-aging effect – if the character taking anagathics misses a dose they must make an immediate roll on the aging table (see page 36) as their body reacts badly to the interrupted supply.

Medical Care

Healing: An injured character who needs hospital care for a prolonged period (see Injury and Recovery on page 74) will pay approximately 100 credits per month per Technology Level. (At TL 11+ the doctors will just use medicinal slow in most cases and charge for that instead.) Surgery costs 1d6 × 50 × Technology Level in Credits.

Replacements: A character whose injuries require cloning limbs or cybernetic replacement must pay 5,000 credits per Characteristic point.

ROBOTS AND DRONES

The legal status of robots varies across the Imperium. Some worlds embrace automation and machine intelligence, giving even comparatively simple artificial minds legal protection or even citizenship. Others are so restrictive that cyborgs can find themselves classified as property instead of people. The only difference between a robot and a drone is that the robot has an Intellect program running, allowing it to make decisions independently, while drones are remote-controlled by a character with the Remote Operations skill.

Robots and drones operate in combat like characters but take damage as if they were vehicles. They have Hull and Structure characteristics instead of an Endurance characteristic, and an Endurance DM of 0. Any robot running an Intellect program has an Intelligence and Education score. Drones have neither. A robot's Education characteristic is representative of the information programmed into it and even low-end robots can have high Education scores. Most robots have Social Standing characteristics of 0 as they are not social creations but there are some exceptions, usually high-end models running advanced Intellect programs. Drones do not have Social Standing but in cases where they are used to engage in diplomacy or other social intercourse the operator can use his own Social Standing score.

Cargo Robot (TL 11): These simple, heavy-duty robots are found in starport docks and on board cargo ships. They have enough intelligence to unload crates but are easily confused by unexpected situations. When confused they shut down unless given direct commands, to ensure they don't accidentally damage anything with their massive strength. Cargo *drones* can be constructed as low as Technology Level 9 but their utility is extremely limited until the invention of Intellect programs.

+++Stand down and prepare to be boarded! We're after your cargo – hand it over and ye'll not be harmed. Resist, and we'll blow you to smithereens!+++

Strength 30 (+8), Dexterity 9 (+1), Hull 2, Structure 2
Intelligence 3 (−1), Education 5 (−1), Social Standing 0 (−3)
Traits: Armour 8, Huge, Specialised Computer/1 (running Intellect/1 and Expert Trade (any physical)/1)
Weapons: Crushing Strength (Melee (unarmed), 3d6 damage)
Price: 75,000 Credits

Repair Robot (TL 11): Shipboard repair robots are small crab-shaped machines that carry a variety of welding and cutting tools. They scuttle around tiny access tunnels but also crawl over the exterior hull to conduct repairs and maintenance. Specialised repair robots may run Expert Engineer (any) rather than Expert Mechanic.

Strength 6 (+0), Dexterity 7 (+0), Hull 1, Structure 1
Intelligence 5 (−1), Education 6 (+0), Social Standing 0 (−3)
Traits: Integral System (mechanical toolkit), Specialised Computer/1 (running Intellect/1 and Expert Mechanic/2)
Weapons: Tools (Melee (unarmed), 1d6 damage)
Price: 10,000 Credits

Personal Drone (TL 11): This is a small floating globe about thirty centimetres in diameter. It is equipped with holographic projectors which can display the image of a person, allowing a character to have a virtual presence over a great distance.

Strength 2 (−2), Dexterity 7 (+0), Hull 1, Structure 1
Traits: Tiny, Integral System (comm, audio/visual), Integral System (grav floater), Integral System (TL 11 holographic projector)
Price: 2,000 Credits

Probe Drone (TL 11): A probe drone is a hardened version of a personal remote, armoured and carrying more sensor packages. They have an operating range of five hundred kilometres, and can fly at a speed of 300 kph.

Strength 3 (−1), Dexterity 7 (+0), Hull 3, Structure 3
Traits: Armour 5, Integral System (comm, audio/visual), Integral System (grav belt), Integral System (TL 11 holographic projector), Integral System (every sensor available at TL 11 and below, see overleaf)
Price: 15,000 Credits

Autodoc (TL 12): An autodoc is a specialised, immobile medical robot, which is often installed inside vehicles or spacecraft. Autodocs are traditionally exempt from laws against robotics because of their superior utility.

Strength 6 (+0), Dexterity 15 (+3), Hull 1, Structure 1
Intelligence 9 (+1), Education 12 (+2), Social Standing 0 (−3)
Traits: Integral System (TL 12 medikit), Specialised Computer/1 (running Intellect/1 and Medic/2)
Weapons: Surgical Tools (Melee (small blade), 1d6 damage)
Price: 40,000 Credits

Combat Drone (TL 12): Combat drones are little more than flying guns mated to a grav floater and a computer system. The most common combat drone mounts a PGMP or assault rifle but any weapon can be mounted and many makes of combat drone feature a modular arrangement that makes changing the gun a straightforward Intelligence check. The drones must be piloted with the Remote Operations skill but attacks are made using the appropriate weapon skill. Combat drones loaded with Intellect and combat Expert programs (making them autonomous combat robots) are illegal on many worlds.

Strength 12 (+2), Dexterity 10 (+1), Hull 4, Structure 4
Traits: Armour 9, Integral System (grav floater), Integral Weapon (any)
Weapons: Any gun
Price: 90,000 Credits plus the cost of the weapon (the Integral Weapon upgrade is included)

Servitor (TL 13): Servitor robots are expensive humanoid robots who are programmed to act as butlers or servants to the nobility. Many servitors are ostentatiously or whimsically decorated; others are secretly equipped with hidden weapons and combat programs. Some servitor owners reprogram their robots with Expert Carouse or Expert Gambler to better suit their lifestyle.

Strength 7 (+0), Dexterity 9 (+1), Hull 2, Structure 2
Intelligence 9 (+1), Education 12 (+2), Social Standing 7 (+0)
Traits: Computer/3 (running Intellect/1 and Expert Steward/2 – servitors also have Expert Diplomacy/2 and Translator/1 available should they be necessary)
Weapons: Robot Punch (Melee (unarmed), 1d6 damage)
Price: 120,000 Credits

Options
Armour: Armour can be increased by 5, which increases the drone or robot's cost by 25%.

Integral System: Certain devices can be built into drones or robots by increasing the cost of the device by +50%. Popular choices include toolkits of different kinds (see opposite), various sensors, or mobility upgrades like thruster packs or grav floaters.

Integral Weapon: Any suitable weapon can be added to a drone or robot, at the cost of Cr. 10,000 + the cost of the weapon.

SENSORS

Most sensors are designed to be plugged into a computer system, but can display the data directly to the user on built-in screens or by feeding it to the user's suit display. At TL 11 sensors become notably more discriminating because they can be hooked up to a system running Intellect/1 that can dynamically filter information based on pre-set parameters – not sounding the alarm if the motion sensor picks up anything too small to be an intruder, for example.

Generally speaking, sensor equipment does not offer a bonus to skill checks but allows the user to find things that they would otherwise not be able to.

Binoculars (TL 3): Allows the user to see further. 1 kg, Cr. 75. At TL 8 electronic enhancement allows images to be captured; light-intensification allows them to be used in the dark. Cr 750. At TL 12 PRIS (Portable Radiation Imaging System) allows the user to observe a large section of the EM-spectrum, from infrared to gamma rays. Cr 3,500.

Geiger Counter (TL 5): Detects radiation, both presence and approximate intensity. Cr. 250. The Sensors skill is not needed to detect the presence of radiation with a Geiger counter but anything more complex than that requires a check.

IR Goggles (TL 6): Permits the user to see exothermic (heat-emitting) sources in the dark. Cr. 500.

Light-Intensifying Goggles (TL 7): Permits the user to see normally in anything less than total darkness by electronically intensifying any available light. Cr. 500.

At TL 9, IR goggles and light-intensifying goggles can be combined into a single unit costing Cr. 1,250.

Motion Sensor (TL 7): A motion sensor simply detects any and all movement within the area assigned to it. It cannot differentiate between kinds of movement, it just reports whether there is movement or not in an area roughly six metres in diameter. Cr. 500. At TL 9 the motion detector can report the general qualities of motion – size, speed and duration – but no more. Cr. 1,000. The Sensors skill is not required to use a motion detector to detect motion. When trying to interpret data from a TL 9 motion sensor, the Sensors skill may need to be checked.

Electromagnetic Probe (TL 10): This handy device detects the electromagnetic emissions of technological devices, and can be used as a diagnostic tool when examining equipment (+1 DM to work out what's wrong with it) or when searching for hidden bugs or devices. Cr 1,000. The Sensors or Investigation skills can be used to sweep a room for bugs.

Densitometer (TL 14): The remote densitometer uses an object's natural gravity to measure its density, building up a three-dimensional image of the inside and outside of an object. 5 kg. Cr. 20,000.

Bioscanner (TL 15): The bioscanner 'sniffs' for organic molecules and tests chemical samples, analysing the make-up of whatever it is focussed on. It can be used to detect poisons or bacteria, analyse organic matter, search for life signs and classify unfamiliar organisms. 3.5 kg. Cr. 350,000. The data from a bioscanner can be interpreted using the Sensors or the Life Sciences (biology) skills.

NAS (TL 15): This device consists of a backpack and detachable handheld unit, and can detect neural activity up to 500 metres away. The device can also give a rough estimation of the intelligence level of organisms based on brainwave patterns. 10 kg. Cr 35,000. The data from a neural activity scanner can be interpreted using the Sensors, the Life Sciences (biology) or the Social Sciences (sophontology) skills.

SURVIVAL GEAR AND SUPPLIES

On worlds and places hostile to human life, characters must use environmental suits to protect themselves. If colonies are established on such worlds, then the Imperium usually begins a terraforming process to transform the planet and make it more Earth-like. Terraforming takes decades, even millennia, and is a ferociously expensive and intensive process. Sometimes, it is easier to remake the colonists to fit the world using genetic engineering and surgery.

See also Vacc Suits, page 87.

Tent (TL 3): A basic tent provides shelter for two people against the weather, reducing skill check penalties by 2 (see page 74). Cr. 200. The TL 7 tent can be pressurised. There is no airlock – the tent is depressurised when opened. Cr 2,000.

Rebreather (TL 6): The rebreather is a bulky backpack containing breathable atmosphere and a face mask that collects exhaled gasses and 'scrubs' them back into breathable gasses again. A rebreather provides six hours of breathable atmosphere and can be used to breathe in any environment that is not otherwise harmful, such as underwater. 10 kg, Cr. 250.

Respirator (TL 6): This device concentrates inhaled oxygen, allowing a character to breathe on worlds with a thin atmosphere (see page 171). Respirators take the form of a face mask or mouthpiece initially. Cr. 100. The more advanced TL 10 respirator is small enough to fit into the nose, or can even be a lung implant for 3 × cost. Cr. 2,000.

Filter (TL 7): Filters are breathing masks that strip out harmful elements from the air inhaled by the character, such as dangerous gases or dust particles. Cr 100. The TL 10 filter is small enough to fit into the nose, or can even be a lung implant for 3 × cost. Cr. 2,000.

Breather Mask (TL 8): Combines the filter and respirator into a single package. Cr. 150.

Artificial Gill (TL 8): Extracts oxygen from water allowing the wearer to breathe underwater. Only works on worlds with breathable atmospheres (type 4–9 – see page 171). 4 kg. Cr 4,000.

Environment Suit (TL 8): Designed to protect the wearer from extreme cold or heat, the environment suit has a hood, gloves and boots but leaves the face exposed in normal operations. A mask or rebreather can be attached, but truly hostile situations call for the heavy-duty HEV suit (see page 87). Costs Cr 500.

Habitat Module (TL 8): A modular, unpressurised quarters for six people, capable of withstanding anything less than hurricane-force winds. Includes survival rations and enough batteries to keep the lights on and the heaters (or air conditioning) running for a week. Requires 12 man-hours to assemble, and can be attached to other modules to form a base. Cr 10,000. The TL 10 module is pressurised, and includes life-support for six occupants for one week (1000 person/hours). Cr 20,000.

Rescue Bubble (TL 9): A large (2m diameter) pressurised plastic bubble. Piezoelectric layers in the bubble wall translate the user's movements into electricity to recharge the bubble's batteries and power its distress beacon, and a small oxygen tank both inflates the bubble and provides two person/hours of life support. A self-repairing plastic seal serves as an emergency airlock. Rescue bubbles are found on both space and sea vessels as emergency lifeboats. Cr. 600.

Thruster Pack (TL 9): A simple thruster pack gives the user the ability to manoeuvre in zero-gravity. A Zero-G check is required to use a thruster pack accurately. Thruster packs can only be used in microgravity environments and are only practical for journeys between spacecraft (or other objects) at Adjacent range (see page 146). Cr. 2,000.

At TL 12 the long-range thruster pack gives 0.1*g* acceleration for up to 48 hours, using standard starship fuel. This increases its practical range on the spacecraft scale to Short but gives it a weight of 10 kg. Cr. 14,000. The TL 14 version of the long-range pack is much smaller as it uses grav-thruster plates instead, but has the same performance profile as the TL 12 version. Cr. 20,000.

Portable Generator (TL 10): This is a heavy-duty portable fusion generator, capable of recharging weapons and other equipment for up to one month of use. Cr. 500,000.

Options
Self-Assembling (TL 11): The self-assembling upgrade can be given to tents, habitat modules and other basic structures. The structure is capable of expanding and assembling itself with only minimal aid, reducing the time needed to set up the shelter to a single man-hour. Cr. 5,000.

Self-Sealing (TL 13): Structures can be made self-repairing and self-sealing at TL 13 for Cr. 2,000. Small breaches and rips are automatically fixed in seconds.

TOOLKITS
Technical skills require specialist tools of various kinds. These kits contain diagnostic sensors, hand tools, computer analysis programs and spare parts. All kits cost Cr. 1,000 and weigh 12 kg.
Engineer (specific specialty): Required for performing repairs and installing new equipment.
Forensics: Required for investigating crime scenes and testing samples.
Mechanical: Required for repairs and construction.
Scientific: Required for scientific testing and analysis.
Surveying: Required for planetary surveys or mapping.

WEAPONS
With the advent of powered armour and portable fusion generators, the line between 'personal weapon' and 'heavy artillery' is blurred. The high-end weapons available in the Imperium are staggeringly powerful. Few private citizens can obtain such weapons legally but small brush wars can turn into alarming plasma-fired, city-razing conflagrations when mercenaries are involved.

Weapons are described with the following statistics:

TL: The lowest Technology Level at which the weapon is available.
Range: The range modifiers used for that weapon (see page 64).
Damage: The damage the weapon inflicts.
Auto: The Auto rating of the weapon if it is capable of automatic fire (see page 62).
Recoil: The Recoil rating of the weapon (see page 61).
Mass: The amount, in kilograms, that the weapon weighs on a world with Earth-like gravity.
Magazine: The number of shots the weapon can take before needing to be reloaded or connected to a new power pack. Unless specified otherwise in the weapon's description it takes only a single minor action to reload or two to switch to a new power pack.
Cost: The weapon's cost in credits.
Ammo Cost/Power Pack: The cost in credits to buy a spare magazine for a gun or a spare power pack for an energy weapon.

Melee Weapons

Melee weapons are a symbol of status among the Imperium's nobility, but they also serve a useful purpose in boarding actions. When attempting to capture an enemy vessel, a sword is much less likely to cause significant damage to vulnerable systems or cause a hull breach than a gun but is better at opening a self-sealing vacc suit to the airless cold of space.

Blade: A hybrid knife weapon, somewhere between a dagger and a cutlass, with a large basket hilt.

Broadsword: A heavy two-handed sword.

Cutlass: The standard shipboard blade weapon, often kept near airlocks to repel boarders.

Rapier: A duelling foil. A character using a rapier increases their effective Melee (large blade) skill by one level when parrying.

Club: Humanity's first weapon. Whether a handy length of metal piping or an extending riot baton made of advanced polymers, the club remains a popular and practical weapon wherever intelligent species gather.

Dagger: A small knife weapon, approximately 20 centimetres in length. Daggers are especially suited to close-quarters combat – while grappling (see page 64) someone armed with a dagger can do Effect + 4 damage if they choose to hurt their opponent.

Improvised Weapon: When there's no real weapon available and your bare hands just aren't enough, any snatched-up object can be used as an impromptu club.

Shield: A character using a shield increases their effective Melee (unarmed) skill by one level when parrying. A character with no Melee counts as having Melee 0 when using a shield to parry.

Staff: A length of wood or metal that can be used in a variety of combat styles, to aid walking, or to poke potentially dangerous things from a distance.

Stunstick: This melee weapon deals 2d6 stun damage in addition to its normal damage. A character struck by a stun stick must make an Endurance check with a negative DM equal to the stun damage (after armour is subtracted). If this Endurance check is failed, the character is knocked unconscious.

Slug Throwers

Despite advances in energy weapons and other offensive technologies, accelerating a small piece of metal to a high velocity is still one of the most efficient ways of killing someone. Chemically propelled firearms give way to gyrojet (rocket bullets) and gauss (electromagnetically launched bullets) as technology advances.

Accelerator Rifle: Also known as gyrojet weapons, accelerator rifles are designed for zero-gravity combat. They fire tiny missiles that leave the rifle with minimal velocity and thus minimal recoil, then accelerate to high speed.

Advanced Combat Rifle (ACR): The ultimate evolution of the conventional firearm, advanced combat rifles are the weapon of choice for many military units. Standard equipment includes an electronic battlefield sight, incorporating both light amplification and IR abilities (see page 96), visual magnification up to 5x zoom, and a laser rangefinder which may also be used as a target painting device (reveals exact distance to target). The weapon is also gyroscopically stabilised during firing (as a gyroscopic stabiliser, already included in the stats).

Antique Pistol: A flintlock or other primitive projectile weapon. Unless the weapon is especially well made, it will have a −1 DM to attacks. Antique pistols require three minor actions and a successful Gun Combat (slug pistol) check to reload. Failure means you have to start again.

MELEE WEAPONS						
Weapon	**TL**	**Range**	**Damage**	**Heft**	**Mass (kg)**	**Cost (Cr.)**
Unarmed Attack	-	Melee (unarmed)	1d6	-	-	-
Improvised Weapon	-	Melee (unarmed or appropriate to weapon)	2d6−2	1	2	-
Club	1	Melee (bludgeon)	2d6	0	1	-
Dagger	1	Melee (small blade) or Ranged (thrown)	1d6+2	-	-	10
Shield	1	Melee (unarmed)	1d6	-	3	50
Staff	1	Melee (bludgeon)	2d6	1	2	-
Blade	2	Melee (small blade)	2d6	-	0.5	50
Broadsword	2	Melee (large blade)	4d6	2	3	300
Cutlass	2	Melee (large blade)	2d6+4	−1	1	100
Rapier	3	Melee (large blade)	1d6+4	−2	0.5	100
Stunstick	8	Melee (bludgeon)	1d6	-	0.5	300

SLUG THROWERS

Weapon	TL	Range	Damage	Auto	Recoil	Mass (kg)	Magazine	Cost (Cr.)	Ammo Cost (Cr.)
Pistols									
Antique Pistol	3	Ranged (pistol)	3d6–6	No	–1	1	1	100	5
Revolver	5	Ranged (pistol)	3d6–3	No	0	1	6	150	5
Autopistol	6	Ranged (pistol)	3d6–3	No	0	0.5	15	200	10
Snub Pistol	8	Ranged (pistol)	3d6–3	No	-	-	6	150	10
Body Pistol	8	Ranged (pistol)	3d6–3	No	–1	-	6	500	20
Gauss Pistol	13	Ranged (pistol)	3d6	4	–1	0.5	40	500	20
Rifles									
Antique Rifle	3	Ranged (rifle)	3d6–3	No	–1	6	1	100	10
Rifle	5	Ranged (rifle)	3d6	No	0	5	20	200	10
Autorifle	6	Ranged (rifle)	3d6	4	1	5	20	1,000	10
Assault Rifle	7	Ranged (assault weapon)	3d6	4	1	4	30	500	15
Accelerator Rifle	9	Ranged (rifle)	3d6	No	-	2	15	900	30
ACR	10	Ranged (rifle)	3d6	6	0	3	40	1,000	15
Gauss Rifle	12	Ranged (rifle)	4d6	4	0	4	80	1,500	40
Shotguns									
Shotgun	4	Ranged (shotgun)	4d6	No	2	4	6	200	10

Antique Rifle: A musket or other primitive rifle. Unless the weapon is especially well made, it will have a –1 DM to attacks. Antique rifles require three minor actions and a successful Gun Combat (slug rifle) check to reload. Failure means you have to start again.

Assault Rifle: Assault rifles fire lighter projectiles than rifles, but are capable of a higher rate of fire and are more suitable to short-range encounters.

Autopistol: Variants of this semi-automatic pistol are the standard sidearm for law enforcement officers and criminals across the Imperium.

Autorifle: Automatic rifles have a higher muzzle velocity and are capable of automatic fire. Also termed battle rifles.

Body Pistol: Body pistols are manufactured from plastics and cultured bone, making them very difficult to detect using conventional weapons scanners. Body pistols increase the difficulty of Sensors checks to detect them to Very Difficult (–4).

Gauss Rifle: Gauss rifles replace conventional rifles at TL 13. Like the smaller gauss pistol, rifles fire high-velocity projectiles using electromagnetic rails.

Gauss Pistol: Gauss pistols use electromagnetic coils to accelerate metallic darts to hypersonic speeds. Gauss weapons are lightweight, efficient and deadly.

Revolver: A conventional six-shooter handgun. Revolvers take two minor actions to reload.
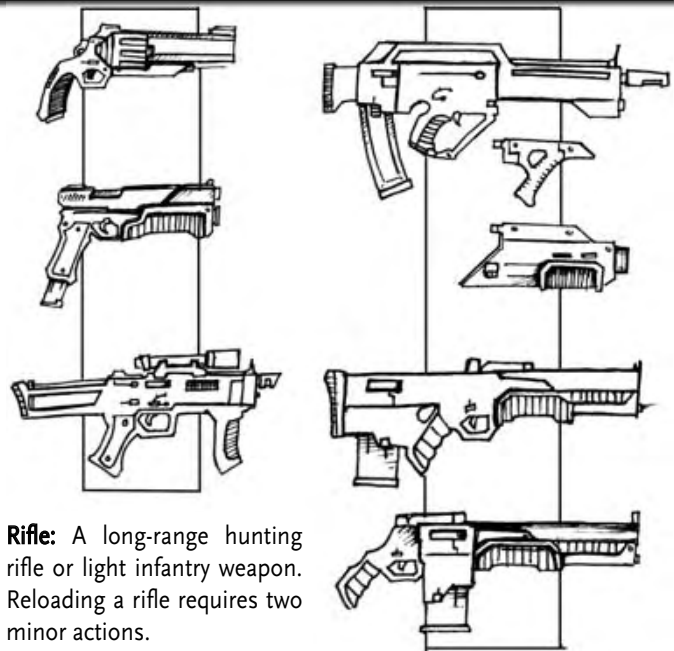
Rifle: A long-range hunting rifle or light infantry weapon. Reloading a rifle requires two minor actions.

Shotgun: Shotguns are smoothbore weapons that typically fire ammunition consisting of multiple small pellets. They are most effective at shorter ranges. A shotgun using pellet ammunition ignores Dodge dice modifiers, but Armour gives double protection against pellet attacks. A shotgun can also fire solid slugs, which follow all the normal rules for shooting.

Snub Pistol: These lightweight, low-recoil weapons were designed for use aboard spacecraft and in zero gravity.
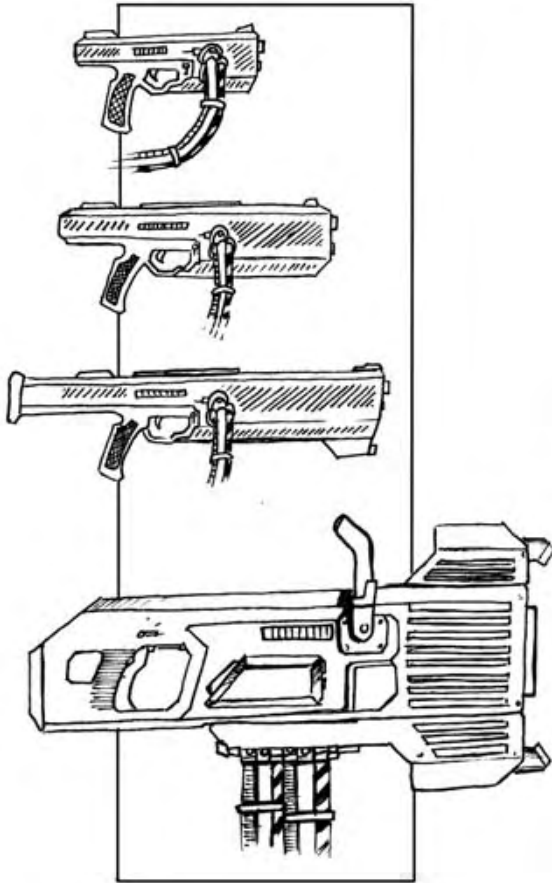
Energy Weapons

Directed-energy weapons first enter the battlefield as target designators and range-finders, but by TL 9 weapons capable of inflicting damage directly appear. Laser weapons require a power supply – pistols come with a belt- or wrist-mounted power pack, while rifles come with backpacks connected by a cable. In addition to their damage, a laser that hits with Effect 6+ will permanently blind its target unless they are wearing some sort of eye protection.

Laser Carbine: Laser carbines are shorter and lighter than laser rifles, and have a correspondingly shorter range.

Laser Pistol: The TL 9 pistol is bulky, but effective, with no recoil and a large magazine. At TL 11, advances in battery technology and miniaturisation mean that the pistol is no larger than a conventional firearm, but must still be connected to a battery pack for sustained use.

Laser Rifle: Laser rifles are highly accurate at long range. They are powered by heavy backpacks, although they have an internal battery that can store enough energy for six shots for mobile sniping.

Plasma Rifle: TL 16 technology allows the bulky reactor and plasma chamber of the PGMP to be made small enough to fit into a rifle frame. The plasma rifle is a high-power sniper weapon designed to crack Battle Dress. Because of its internal reactor it never runs out of ammunition.

Stunners: Stun weapons are non-lethal and do not inflict normal damage. A character struck by a stun weapon must make an Endurance check with a negative DM equal to the damage (after armour is subtracted). If this Endurance check is failed the character is knocked unconscious. If the Endurance check is successful, the character is unaffected by the weapon and the stun damage is ignored.

ENERGY WEAPONS

Weapon	TL	Range	Damage	Auto	Recoil	Mass (kg)	Magazine	Cost (Cr.)	Power Pack (Cr.)
Pistols									
Laser Pistol	9	Ranged (pistol)	3d6	No	-	3	100	2,000	1,000
	11		3d6+3					3,000	3,500
Stunner	8	Ranged (pistol)	2d6	No	-	0.5	100	500	200
	10	with a maximum	2d6+3					750	200
	12	range of Short	3d6					1,000	200
Rifles									
Laser Carbine	9	Ranged (assault	4d6	No	-	4	50	2,500	1,000
	11	weapon)	4d6+3			3		4,000	3,000
Laser Rifle	9	Ranged (rifle)	5d6	No	-	8	100	3,500	1,500
	11		5d6+3			5		8,000	3,500
Plasma Rifle	16	Ranged (rifle)	6d6	No	−1	6	-	100,000	-

Weapon	TL	Range	Damage	Mass (kg)	Blast Radius	Cost (Cr.)
Frag	6	Ranged (thrown)	5d6/3d6/1d6	0.5	3 metres/6 metres/9 metres	30
Smoke	6	Ranged (thrown)	None	0.5	6 metres	15
Stun	9	Ranged (thrown)	3d6	0.5	6 metres	30
Aerosol	9	Ranged (thrown)	None	0.5	6 metres	15

Grenades

Aerosol: Aerosol grenades create a fine mist six metres in radius that diffusess lasers but does not block normal vision. Any laser attack made through the mist has its damage reduced by 10. Laser communications through the mist are completely blocked. The mist dissipates in 1d6 × 3 rounds, although high winds and other extreme weather can sharply reduce this time.

Frag: The damage from fragmentation grenades decreases with distance from the blast:

Distance	Damage
3 metres	5d6
6 metres	3d6
9 metres	1d6

Smoke: Smoke grenades create a thick cloud of smoke six metres in radius, centred on the location of the grenade. This smoke imposes a –2 DM on all attacks within or through the cloud (doubled for laser weapons). Smoke dissipates in 1d6 × 3 rounds, although high winds and other extreme weather can sharply reduce this time.

Stun: Stun weapons are non-lethal and do not inflict normal damage. A character struck by a stun weapon must make an Endurance check with a negative DM equal to the damage (after armour is subtracted). If this Endurance check is failed the character is knocked unconscious. If the Endurance check is successful, the character is unaffected by the weapon and the stun damage is ignored.

Heavy Weapons

Grenade Launcher: Grenade launchers are used to fire grenades over long distances.

RAM Grenade Launcher: Rocket Assisted Multi-purpose grenade launchers have a longer range and are capable of firing up to three grenades with a single attack. This uses the rules for firing on full auto (see page 62); unlike other weapons with an Auto score, a RAM grenade launcher cannot fire in burst mode. It takes two minor actions to reload a RAM grenade launcher.

Rocket Launcher: The poor man's FGMP. To counteract the recoil of the weapon, a rocket launcher channels exhaust backwards in an explosive backblast. Anyone up to 1.5 metres behind a rocket launcher when it fires takes 3d6 damage from the burning gasses. Vehicle-mounted rocket launchers lose this side-effect as a vehicle is a more stable firing platform than a person. It takes three minor actions to reload a rocket launcher.

The rockets presented are high-explosive models. Do not add the Effect of the attack roll to their damage but apply that damage to everything within six metres of the impact point. A rocket that misses has a 50% chance (4+ on 1d6) of detonating upon impact

Weapon	TL	Range	Damage	Auto	Recoil	Mass (kg)	Magazine	Cost (Cr.)	Ammo Cost (Cr.)
Launchers									
Grenade Launcher	7	Ranged (shotgun)	By grenade	No	1	6	6	400	180
RAM	8	Ranged (assault weapon)	By grenade	Auto 6	1	2	6	800	180
Rocket Launcher	6	Ranged (rocket)	4d6	No	0	8	1	2,000	300
	7		4d6+3				1		400
	8		5d6				2		600
	9		5d6+5				2		800
Man-Portable Artillery									
PGMP	12	Ranged (rifle)	10d6	Auto 4	3	10	-	20,000	-
	13		12d6	Auto 4		10		65,000	
	14		12d6	Auto 6		10		100,000	
FGMP	14	Ranged (rifle)	16d6	Auto 4	2	12	-	100,000	-
	15		16d6	Auto 4		12		400,000	
	16		16d6	Auto 6		15		500,000	

with the ground (6 – Effect metres away in a random direction). Otherwise it will miss completely and leave the battlefield without striking anything or detonating. Of course, if used indoors or in a similarly enclosed space a rocket has to strike *something* – the Referee is free to determine how much collateral damage is inflicted and on what.

PGMP: The *P*lasma *G*un, *M*an *P*ortable is the standard heavy assault weapon of the marines. It is so heavy and bulky that it can only be used easily by a trooper with a Strength of 12 or more – usually attained by wearing battle dress. Every point by which a user's Strength falls short is a –1 DM on any attack rolls made with it. It is powered by a built-in micro-fusion generator and fires a high-energy plasma stream or a hail of plasma bolts. More advanced plasma guns adjust the weapon's optimum range and plasma temperature.

FGMP: The ultimate personal firearm, the *Fusion Gun, Man P*ortable is more like a piece of artillery. It includes a gravity suspension system to reduce its inertia, making it easier to use than the PGMP (minimum Strength 9) and fires what amounts to a directed nuclear explosion. Those without radiation protection who are nearby when a FGMP is fired will suffer a lethal dose of radiation – each firing of an FGMP emits 2d6 × 20 rads, which will affect everyone within the immediate vicinity. (See page 141 for the effect of rads.)

Explosives

The Explosives skill is used with explosives – the Effect of the Explosives skill check multiplies the damage, with a minimum of ×1 damage for an Effect of 0 or 1.

Plastic: This generic, multi-purpose plastic explosive is a favourite of military units, terrorists, demolition teams and adventurers across known space.

TDX: An advanced gravity-polarised explosive, TDX explodes only along the horizontal axis.

Pocket Nuke: Hideously illegal on many worlds, the pocket nuke is actually the size of a briefcase and so is too large to fit into a

grenade launcher.

EXPLOSIVES

Weapon	TL	Damage	Radius	Cost (Cr.)
Plastic	6	3d6	2d6 metres	200
TDX	12	4d6	4d6 metres	1,000
Pocket Nuke	12	2d6 × 20	15d6 metres	20,000

Options

Grenade Launcher (TL 8): An underslung RAM grenade launcher can be added to any rifle at the cost of 1,000 Cr. This grenade launcher has a magazine of one grenade, cannot fire on automatic and takes four minor actions to reload.

Laser Sight (TL 8): Integrated optics and laser sights give an extra +1 DM bonus to any attack that has been aimed (see page 61 for the aim action). Cr 100. At TL 10, x-ray lasers and improved display technology removes the tell-tale 'red dot' of a vislight laser. Cr 200.

Silencer (TL 8): A silencer can be added to any slug thrower with Auto 4 or less, masking the sound produced by firing. (–4 DM to detect.) Cr. 250.

Gyrostabiliser (TL 9): Stabilisers can be added to any weapon with recoil, reducing the recoil by one point at the cost of 300 credits.

Secure Weapon (TL 10): A secure weapon requires authentication in some fashion (scanning the user's DNA or iris patterns, entering a password, transmission of an unlocking code from a comm) before it can be fired. Cr. 100.

Intelligent Weapon (TL 11): This adds Computer/0 to any weapon. Cr 1,000. The TL 13 upgrade adds Computer/1 to any weapon. Cr 5,000.

VEHICLES

All vehicles have the following traits:

TL: The lowest Technology Level that the vehicle is available at.

Skill: What skill is used to drive or pilot the vehicle.

Agility: How easy the vehicle is to drive, expressed as a DM to the pilot's skill check.

Speed: The vehicle's maximum speed.

Crew and Passengers: How many people the vehicle can carry.

Open/Closed: If the vehicle is open or closed (see page 66).

Armour: How much armour the vehicle has. Damage sustained by a vehicle is reduced by its armour.

Hull/Structure: The number of hits the vehicle can sustain before being disabled. See Vehicle Combat, page 66.

Weapons: What weapons the vehicle has, if any, and what fire arcs they are in.
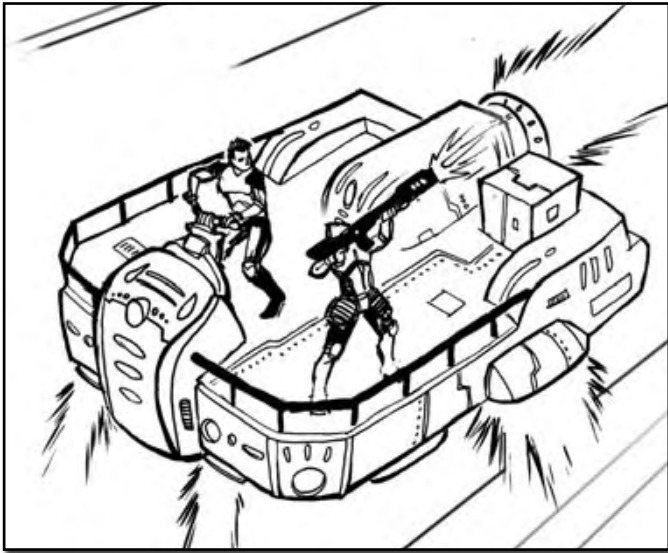
Air/Raft: An open-topped vehicle supported by anti-gravity technology. Air/rafts can even reach orbit but passengers at that altitude must wear vacc suits. They are ubiquitous, remarkably reliable and flexible vehicles.

Ground Car: A conventional wheeled automobile.

AFV: A heavily armoured ATV, known as an Armoured Fighting Vehicle, equipped with a triple laser turret. The lasers use the Gun Combat (energy rifle) skill, do 4d6 damage each using the Ranged (rifle) range modifiers, and one, two or three may be fired at the same target with one attack action.

ATV: An enclosed, pressurised all-terrain ground vehicle. The vehicle is capable of floating on calm water, and has a suite of built-in sensors and communications equipment (usually a laser transceiver) making it ideal for exploration. An ATV has a hardpoint for a turret, but does not come with a weapon normally.

G/Carrier: A grav carrier is effectively a flying tank, and is the standard fighting vehicle of many military forces across the Imperium. The turret-mounted fusion gun is a vehicle-mounted version of the TL 15 FGMP and uses the same 'serious firepower' rules (see opposite). Advanced containment systems mean that it does not leak radiation with each shot in the same way as the man-portable version.

Grav Belt: A grav belt resembles a parachute harness, and is fitted with artificial gravity modules allowing the wearer to fly. The internal battery can operate for a maximum of four hours before needing to be recharged. At TL 15, the battery can operate for 12 hours before charging. Options cannot be added to the grav belt.

VEHICLES

Vehicle	TL	Skill	Agility	Speed	Crew and Passengers	Open/ Closed	Armour	Hull	Structure	Weapons	Cost (Cr.)
Civilian											
Air/Raft	8	Flyer (grav)	+0	400 kph	1 pilot, 3 passengers	Open	6	2	2	None	275,000
Ground Car	5	Drive (wheeled)	+0	150 kph	1 driver, 3 passengers	Closed	6	3	2	None	6,000
Grav Belt	12	Zero-G	+2	300 kph	1 wearer	Open	-	-	-	None	100,000
Grav Floater	11	Flyer (grav)	−2	40 kph	1 rider	Open	-	-	1	None	500
Military											
AFV	12	Drive (tracked)	+0	80 kph	1 driver, 9 passengers	Closed	18	5	5	Triple Laser (turret)	65,000
ATV	12	Drive (tracked)	+0	100 kph	1 driver, 15 passengers	Closed	12	5	5	None	50,000
G/Carrier	15	Flyer (grav)	+0	620 kph	1 driver, 1 gunner, 14 passengers	Closed	25	8	8	Fusion Gun (turret)	MCr. 15

Grav Floater: A grav floater is a forerunner of the grav belt, a platform upon which a single person can stand and be carried along. It cannot achieve any great speed but can, like an air/raft, achieve any altitude up to orbit.

Options

With the exception of on-board computer, each of these options can only be taken once on a given vehicle.

Autopilot (TL 11): an autopilot has a Computer/1 specialised to run Intellect/1 and an Expert/1 in an appropriate skill and specialty. This will be in addition to any other computers installed. An autopilot is often mandatory on cheaper commercial models. In many areas (primarily urban) they are required to be in use. Higher Law Level polities (see page 173) may require a slave modification to the autopilot for centralized and/or emergency traffic control. Cr 3,000.

Enclosed: This modification turns an open vehicle into a closed one. It costs 10% of the base cost of the vehicle, reduces Agility by 1 and top speed by 10%.

Extended Life Support: A vehicle which is sealed can be equipped for extended life support, which increases the duration to 18 hours per person. Costs another 10% of the base cost of the vehicle.

Heavy Armour: Increasing the armour of a vehicle by 5 adds 25% to the cost of the vehicle.

High Performance: A vehicle can be made into a high-performance vehicle, increasing its top speed by 20%. The vehicle costs 50% more.

On-board Computer: Adding an on-board computer costs the same as a hand computer.

Sealed: This option can be added to any closed vehicle (it is included in the ATV, AFV and G/Carrier). The vehicle can be sealed and provides life support for its passengers and crew for two hours per person. This option adds 20% to the cost of the vehicle.

Style: Allows a vehicle to be customised to the buyer's wishes. Costs Cr 200 to Cr 2,000.

Encumbrance

Traveller characters sometimes have to carry everything they need to survive. A character can carry a number of kilograms equal to their Strength + Endurance scores before they have to worry about their load. They are lightly encumbered if they carry up to twice this value and heavily encumbered if they carry up to three times their Strength + Endurance. A character can lift more with an Athletics (strength) check – add the Effect to his effective Strength to work out his new maximum lift – but cannot do more than stagger around with his new load at 1.5 metres per round. He may lift it for a number of rounds equal to the Effect of an Athletics (endurance) check.

Lightly encumbered characters suffer a −1 DM to all actions that require free physical movement and become fatigued after a number of minutes equal to their Endurance score (plus the Effect of an Athletics (endurance) check if the character wishes to push himself).

Heavily encumbered characters suffer a −3 DM to all actions that require free physical movement and become fatigued after a number of *rounds* equal to their Endurance score (plus the Effect of an Athletics (endurance) check if the character wishes to push himself).

If a character makes an Athletics check to push his ability to bear a load in any way, he immediately becomes fatigued when the duration expires. For more on fatigue, see page 74.
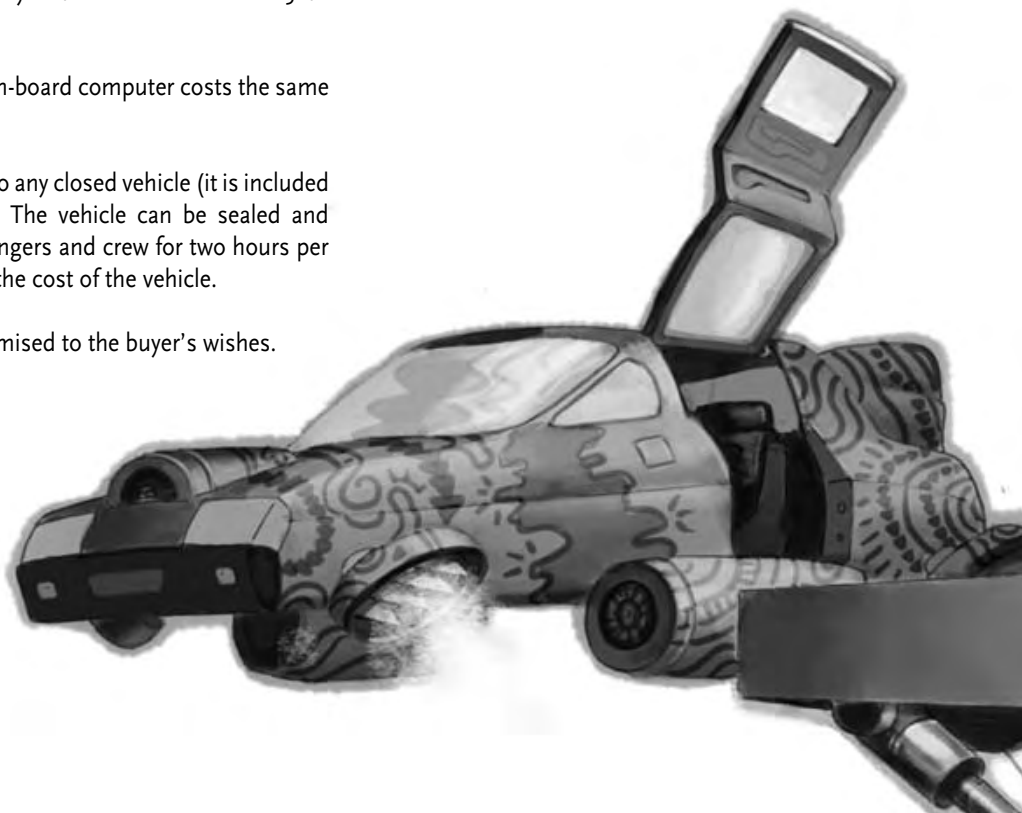
SPACECRAFT DESIGN

Spacecraft are constructed and sold at shipyards throughout the galaxy. Any class A starport has a shipyard which can build any kind of ship, including a starship with Jump drives; any class B starport can build small craft and ships which do not have Jump drives. The military procures spaceships through these yards, corporations buy their commercial craft from these shipyards, and private individuals can purchase ships that they have designed through them as well. The major restriction on the purchase of ships is money. Ships designed using the system presented here are constructed using off-the-shelf parts that are common throughout the Imperium. Rules for spacecraft using a restricted technology base or cutting-edge technology will be presented in future supplements.

DESIGN CHECKLIST

1. Choose a Hull.
   a. Choose Hull configuration.
   b. Optionally, install armour.
2a. Decide what the cruising acceleration for the ship should be, and cross-reference it with the ship's tonnage on the Performance by Hull Volume table to determine the Manoeuvre Drive required.
2b. Optionally, decide what the maximum Jump range for the ship should be, and cross-reference it with the ship's tonnage on the Performance by Hull Volume to determine the Jump Drive required.
3. Choose a Power Plant, ensuring that it can provide enough power for the Jump and Manoeuvre Drives.
4. Work out fuel requirements and allocate space to fuel.
5. Install a bridge.
6. Install a computer.
   a. Install computer software. If a Jump drive is installed, then the ship needs Jump Control software.
7. Install sensors.
8. Install staterooms and low berths.
9. Optionally, install other components like vehicles, fuel processors or drones.
10. Optionally, install turrets, bays or screens.
    a. Install one ton of fire control equipment per turret or bay.
11. Optionally, install weapons.
    a. Missile launchers and sandcasters require ammunition.
12. Any remaining space can be allocated to cargo.

Design Considerations

Spacecraft are constructed on the foundation of a hull, into which are fitted the jump and manoeuvre drives and power plant, the fuel tanks, staterooms for the crew, computers, controls and sensors. Optionally, other components such as armaments, defensive systems, and other fittings can be added to adapt the ship to its intended function. The total tonnage of the installed fittings cannot exceed the tonnage of the hull.

Definitions

A **spacecraft** is any interplanetary or interstellar vehicle – anything that can travel through space under its own power. A **ship** is any vessel of 100 tons or more. A **starship** is a ship which has Jump drives and can travel on interstellar voyages from star system to star system. A **system ship** is a ship without Jump drives, confined to a single star system. **Small craft** are any vessel under 100 tons; all small craft are incapable of Jump and are constructed using their own rules which will be presented in a future supplement. In the meantime, the statistics for common small craft can be found on page 132.

Size is measured in **'displacement tons'** or d-tons: a hundred-ton ship displaces a volume equal to one hundred tons of liquid hydrogen (one d-ton equals roughly 14 cubic metres).
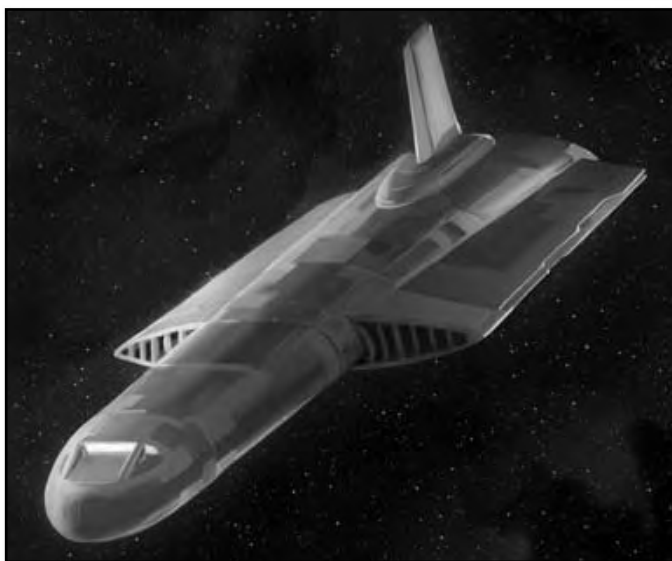
Standard Designs vs New Designs

Some ship designs have been used by the Imperium for centuries, and have become standards across the stars. Plans for such spacecraft are freely available and components can be purchased in bulk by shipyards reducing the cost of the ship's construction by 10%. This reduced cost does not include ammunition for weapons or fuel, which must be bought – at full price – separately of the ship. If a buyer needs a new type of ship, then he must employ a ship architect to design it. The architect's fees are usually 1% of the final cost of the ship.

Construction Times

Construction times vary wildly, depending on the size and complexity of the spacecraft and the capabilities of the shipyard. On average, assume that it takes one day per million credits to build a spacecraft at a small commercial shipyard.

THE HULL

Hulls are identified by their displacement, expressed in tons.

Hull	Hull Code	Price (MegaCredits)
100 tons	1	2
200 tons	2	8
300 tons	3	12
400 tons	4	16
500 tons	5	32
600 tons	6	48
700 tons	7	64
800 tons	8	80
900 tons	9	90
1,000 tons	A	100
1,200 tons	C	120
1,400 tons	E	140
1,600 tons	G	160
1,800 tons	J	180
2,000 tons	L	200

Configuration

A ship may have any of three configurations – standard (a wedge, cone, sphere or cylinder), streamlined (a wing, disc or other lifting body allowing it to enter the atmosphere easily) or distributed (made up of several sections, and incapable of entering an atmosphere or maintaining its shape under gravity).

Streamlining a ship increases the cost of the hull by 10%. This streamlining includes fuel scoops which allow the skimming of unrefined fuel from gas giants or the gathering of water from open lakes or oceans. Streamlining may not be retrofitted; it must be included at the time of construction.

A **distributed** ship reduces the cost of its hull by 10%. It is completely non-aerodynamic and if it enters an atmosphere or strong gravity it runs the risk of falling to the surface of the planet. It cannot mount fuel scoops.

A **standard**-hull ship may still enter atmosphere but is very ungainly and ponderous, capable only of making a controlled glide to the surface. Getting it back into space requires an elaborate launch setup and considerable expense. A standard-hull ship may have scoops for gathering fuel from a gas giant but the process will be much more difficult and less efficient. Larger ships of this type will often carry a specialized sub-craft (such as a modular cutter, see page 135) to perform the actual atmospheric skimming. See Atmospheric Operations on page 137.

Armour

The basic hull provides some protection from anti-ship weapons fire but it is possible to add heavier armours to the hull for added defence. Armour is added in 5% increments of the ship's tonnage.

Armour Type	TL	Protection	Cost
Titanium Steel	7	2 per 5%	5% of base hull
Crystaliron	10	4 per 5%	20% of base hull
Bonded Superdense	14	6 per 5%	50% of base hull

For example, a heavily armoured warship might take Bonded Superdense armour twice. This would take up 10% of the hull's volume and cost 100% of the base cost of the hull, but give 12 points of armour.

Options

Reflec (TL 10): Reflec coating on the hull increases the ship's armour against lasers by 3. Adding Reflec costs 0.1 Megacredits per ton of hull and can only be added once.

Self-Sealing (TL 9): A self-sealing hull automatically repairs minor breaches such as micrometeoroid impacts, and prevents hull hits from leading to explosive decompression. It costs 0.01 Megacredits per ton of hull.

Stealth (TL 11): A stealth coating absorbs radar and lidar beams, and also disguises heat emissions. This gives a –4 DM on any Sensors rolls to detect or lock onto the ship. Adding Stealth costs 0.1 Megacredits per ton of hull, and can only be added once.

Hull and Structure

In combat, damage to a ship is tracked using Hull and Structure Points. Initial damage is applied to the Hull; once the Hull is breached, further damage goes to the Structure. When all Structure Points have been lost, the ship has been smashed to pieces (but most spacecraft will surrender or be disabled or destroyed by secondary effects before their Structure is completely eliminated). A ship has one Hull Point and one Structure Point per 50 tons of displacement.

Redundant Systems

The same component can be installed multiple times – a ship can carry a backup computer, a backup power plant and so forth. Only one such system can be used at any time, with the exception of armaments. Backup systems come online automatically when the primary system is disabled. Once all backup systems have been disabled, further hits start destroying systems, starting with the primary system.

THE ENGINEERING SECTION

Drives and the Power Plant are installed in the engineering section.
- A non-starship must have a manoeuvre drive and a power plant.
- A starship must have a Jump drive and a power plant; a manoeuvre drive may also be installed, but is not required.

The prices and masses of drives and power plants are described on the drives and power plants table. It is important to note from the

drive potential table that some drives will not produce results in some tonnages of hulls, as indicated by a dash instead of a number on the table; the drives and power plants table also indicates that some drives will not fit into some hulls. During the design process, it may also turn out that after fitting a set of drives and power plant into a hull, there may be insufficient tonnage remaining for fuel or basic controls.

Drive Costs

Drive Code	J-Drive		M-Drive		P-Plant	
	Tons	MCr	Tons	MCr	Tons	MCr
A	10	10	2	4	4	8
B	15	20	3	8	7	16
C	20	30	5	12	10	24
D	25	40	7	16	13	32
E	30	50	9	20	16	40
F	35	60	11	24	19	48
G	40	70	13	28	22	56
H	45	80	15	32	25	64
J	50	90	17	36	28	72
K	55	100	19	40	31	80
L	60	110	21	44	34	88
M	65	120	23	48	37	96
N	70	130	25	52	40	104
P	75	140	27	56	43	112
Q	80	150	29	60	46	120
R	85	160	31	64	49	128
S	90	170	33	68	52	136
T	95	180	35	72	55	144
U	100	190	37	76	58	152
V	105	200	39	80	61	160
W	110	210	41	84	64	168
X	115	220	43	88	67	176
Y	120	230	45	92	70	182
Z	125	240	47	96	73	192

Hulls vary in their requirements for drives and power plants based on tonnage. Any specific drive will be less efficient as the tonnage it must drive increases. The drive potential table lists 24 standard drive types, identified by the letters A through Z (omitting I and O to avoid confusion). Also listed are various tonnage levels for hulls; any tonnage which exceeds a listed level should be read at the next higher level. Correlating hull size with drive letter indicates drive potential. If a – is listed, then that combination of drive and hull is not permitted.

- For manoeuvre drives, the potential is the Thrust number (Tn), which is the number of Gs acceleration available.
- For Jump drives, the potential is the Jump number (Jn), or Jump range in parsecs.

The power plant rating (A-Z) must be at least equal to either the manoeuvre drive or Jump drive rating, whichever is higher.

For example, a 500 ton ship outfitted with a Jump drive C and a manoeuvre Drive N would have a Thrust of 5 and a Jump of 1. It would require a power plant N to operate, equal to the higher rating of the two drives.

Fuel

Total fuel storage for a ship must be indicated in the design plans. There is no cost, but the capacity does influence how often the ship must refuel. Ships in *Traveller* use the same fuel – hydrogen – to power both the Jump drive and the power plant – the main difference is how much they use up.

Fuel needed for a Jump depends on the size of the ship and the length of the Jump and is calculated as $0.1 \times$ tonnage $\times$ Jump distance. A single Jump of that distance consumes that much fuel.

For example, a 200 ton ship with Jump–1 would require $0.1 \times 200 \times 1 = 20$ tons of fuel for a Jump.

The amount of fuel required by the power plant depends on the rating of the power plant. See the table at the bottom of this page. The fuel amounts listed will power the ship for two weeks, which is the bare minimum for a Jump-capable starship.

For more information on fuel, see page 140.

THE MAIN COMPARTMENT

The ship's main compartment contains all non-drive features of the ship, including the bridge, ship's computer, the staterooms, the low passage berths, the cargo hold and other items.

Bridge

All ships must have a bridge containing basic controls, communications equipment, avionics, scanners, detectors, sensors, and other equipment for proper operation of the ship. The size of the bridge varies depending on the size of the ship:

Ship Size	Bridge Size
200 tons or less	10 tons
300 tons – 1000 tons	20 tons
1,100 – 2000 tons	40 tons
More than 2,000 tons	60 tons

The cost for this bridge is MCr. 0.5 per 100 tons of ship.

Computer

The basic controls do not include the ship's computer, which is usually installed adjacent to the bridge. The computer is identified by its model number; the computer table indicates details of price, capacity, and tech level available. In general, larger computers are

Power Plant	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
Tons of fuel per 2 weeks	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48

Performance by Hull Volume

	100	200	300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
A	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–
B	4	2	1	1	–	–	–	–	–	–	–	–	–	–	–
C	6	3	2	1	1	1	–	–	–	–	–	–	–	–	–
D	–	4	2	2	1	1	1	1	–	–	–	–	–	–	–
E	–	5	3	2	2	1	1	1	1	1	–	–	–	–	–
F	–	6	4	3	2	2	1	1	1	1	1	–	–	–	–
G	–	–	4	3	2	2	2	2	1	1	1	1	–	–	–
H	–	–	5	4	3	2	2	2	2	2	1	1	1	–	–
J	–	–	6	4	3	3	2	2	2	2	2	1	1	1	–
K	–	–	–	5	4	3	3	3	2	2	2	2	1	1	1
L	–	–	–	5	4	3	3	3	3	3	2	2	2	1	1
M	–	–	–	6	4	4	3	3	3	3	3	2	2	2	1
N	–	–	–	6	5	4	4	4	3	3	3	3	2	2	2
P	–	–	–	–	5	4	4	4	4	4	3	3	3	2	2
Q	–	–	–	–	6	5	4	4	4	4	4	3	3	3	2
R	–	–	–	–	6	5	5	5	4	4	4	4	3	3	3
S	–	–	–	–	6	5	5	5	5	5	4	4	4	3	3
T	–	–	–	–	–	6	5	5	5	5	5	4	4	4	3
U	–	–	–	–	–	6	6	5	5	5	5	4	4	4	4
V	–	–	–	–	–	6	6	6	5	5	5	5	4	4	4
W	–	–	–	–	–	–	6	6	6	5	5	5	4	4	4
X	–	–	–	–	–	–	6	6	6	6	5	5	5	4	4
Y	–	–	–	–	–	–	6	6	6	6	5	5	5	4	4
Z	–	–	–	–	–	–	6	6	6	6	6	5	5	5	4

more advantageous in combat situations. Ship's computers work just like personal computers (see page 91) but are considerably more powerful because the software for ship operations requires more processing power than normal programs (see Ship Software, page 113).

Computer	TL	Rating	Cost
Model 1	7	5	Cr. 30,000
Model 2	9	10	Cr. 160,000
Model 3	11	15	MCr. 2
Model 4	12	20	MCr. 5
Model 5	13	25	MCr. 10
Model 6	14	30	MCr. 20
Model 7	15	35	MCr. 30

OPTIONS

Jump Control Specialisation (bis): A computer's rating can be increased by 5 for the purposes of running Jump Control programs only. This increases the computer's cost by 50%.

Hardened Systems (fib): A computer and its connections can be hardened against attack by electromagnetic pulse weapons. A hardened system is immune to EMP, but costs 50% more.

Both options can be applied to the same computer by doubling its cost (+100%).

Electronics

A ship comes with a basic communications, sensor and emissions-control electronics suite, but more advanced systems can be installed. The Dice Modifier applies to jamming and counter-jamming attempts.

System	TL	DM	Includes	Tons	Cost
Standard	8	−4	Radar, Lidar	Included in bridge	Included in bridge
Basic Civilian	9	−2	Radar, Lidar	1	Cr. 50,000
Basic Military	10	+0	Radar, Lidar, Jammers	2	MCr. 1
Advanced	11	+1	Radar, Lidar, Densitometer, Jammers	3	MCr. 2
Very Advanced	12	+2	Radar, Lidar, Densitometer, Jammers, Neural Activity Sensor	5	MCr. 4

Design plans for ships often include reserve tonnage for later use in installing fire control for turrets (see page 111) and upgrading sensor equipment.

Alternative Drives

Traditionally, the only form of faster-than-light movement in *Traveller* has been the classic Jump drive, which always takes one week to travel a number of parsecs equal to its Jump rating and consumes a vast amount of fuel. If the Referee wishes to model other science fiction settings with their own forms of stardrive, the classic Jump drive rules may not be entirely appropriate. The alternative drives below use all the same rules as the Jump drive (mass, fuel, power consumption, range) unless otherwise stated.

Some of these drives consume much less fuel or allow much faster travel than the Jump drive, so introducing these drives will vastly impact the carrying capacity of a starship, the profitability of trade, the speed of communication and so forth.

Warp Drive: The ship warps space around it, allowing it to move faster-than-light while staying in our universe. A warp drive does not have a maximum range – instead, the ship's drive rating indicates the number of parsecs crossed per week of travel. Warp travel consumes fuel at twice the normal rate for the ship's power plant rather than needing a single massive expenditure in the manner of a Jump drive.

Teleport Drive: The ship instantaneously jumps from one point to another. This works just like the standard Jump drive without the week-long wait in hyperspace. Instead, no time whatsoever elapses during the transition from one place to another. A teleport consumes no extra fuel but jumping is a strain on the ship's systems and multiple successive jumps can damage the drive.

Hyperspace Drive: The portal drive functions by opening up a gateway into hyperspace, through which the ship can pass. When in hyperspace, the ship uses its conventional engines to travel, then opens up a second gateway back to the normal universe, effectively taking a short cut through a higher dimension. A hyperspace drive is limited by the size of the spacecraft that can pass through the portal – see the Hyperspace Portal table. A hyperspace drive consumes no extra fuel, but takes up twice as much space as a jump drive. While in hyperspace, the spacecraft moves at a rate of one parsec per day per manoeuvre drive rating.

HYPERSPACE PORTAL SIZE

Rating	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
Size	200	400	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000

Alternative Power Plants

Traveller posits the development of highly efficient fusion power plants, but other settings may use different sources of power. Unless otherwise noted, these power plants use all the same rules as the standard fusion power plants.

Fission: A fission plant requires radioactive elements as fuel. Fission drives only produce half as much power as a fusion drive of the same type – when calculating required power plant rating, work out the required rating for a fusion drive and then find the rating for a drive that produces twice as much power. For example, a 400 ton ship with manoeuvre and jump ratings of B requires a fusion plant with rating B. Cross-referencing B and 400 tons on the Performance by Hull Volume table gives '1'. A fission plant for that ship would have to be rating D or higher, as that is the minimum rating to get performance level '2'.

Fission drive fuel costs 1,000,000 Cr. per ton. Power plants use the following table to determine how many tons of fuel they consume with a year of operation:

FISSION PLANT FUEL

Power Plant	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
Tons of fuel per year	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48

Antimatter: Antimatter drives work by annihilating small amounts of hydrogen and anti-hydrogen. No tonnage needs to be allocated to fuel, but the drive must be refuelled once per month, at a cost of 5,000 Cr. per ton of drive.

Escape Pod

Abandoning a doomed ship is literally a leap into the darkness. If the ship was disabled close to an inhabitable planet, then the pod may be able to make it to safety. Otherwise, the survivors will have to drift, hoping that a passing rescuer detects their distress beacon.

The escape pod...

1. ... is empty, a mute testament to the dangers of space travel. Its logs contain information about the ship it came from.
2. ... has crashed on an uninhabited and wild world. Any survivors will need rescuing.
3. ... contains a solitary survivor from the doomed ship – but she was the target of the original attack!
4. ... contains children, now orphaned.
5. ... was launched from a military vessel. The surviving officer will demand the characters aid him in completing his mission.
6. ... has landed on a primitive world, and altered their culture forever.

Staterooms

Quarters for the crew and passengers are provided in the form of staterooms containing sleeping and living facilities. Each stateroom is sufficient for one person, displaces 4 tons, and costs Cr. 500,000. In some starships (especially exploratory vessels, military ships, and privately-owned starships) staterooms can be double occupied. No stateroom can contain more than two persons however, as it would strain the ship's life support equipment. The tonnage and cost of the staterooms includes the life support systems needed to keep the crew alive.

Low Passage Berths

Facilities for carrying passengers in cold sleep may be installed in a ship. One low passage berth carries one low passenger, costs Cr. 50,000, and displaces one-half ton. Low berths also serve well in emergencies in that they can provide suspended animation facilities for characters when medical care, rescue, or assistance is not immediately available.

Emergency low berths are also available; they will not carry passengers, but can be used for survival. Each costs Cr. 100,000 and displaces one ton. Each holds four persons.

Cargo Hold

The design plan must indicate cargo capacity. There is no cost but cargo carried may not exceed cargo capacity. Any space left over after all systems have been installed may be allocated to cargo space.

Fuel Scoops

Fuel scoops allow an unstreamlined ship to gather unrefined fuel from a gas giant. Streamlined ships have fuel scoops built in. Adding scoops costs Cr. 1,000,000 and requires no tonnage.

Fuel Processors

Fuel processors convert unrefined fuel into refined fuel. One ton of fuel processors can convert 20 tons of unrefined hydrogen into refined fuel per day. A ton of fuel processing equipment costs Cr 50,000.

Luxuries

While the tonnage allocated to staterooms includes air refreshers, passageways, mess halls, crew lounges and other living space, it is often cramped and uncomfortable. Luxuries cost Cr. 100,000 per ton, and make life on board ship more pleasant. Each ton of luxuries counts as one level of the Steward skill for the purposes of carrying passengers, and therefore allows a ship to carry middle and high passage passengers without carrying a trained steward on board.

Ship's Locker

Every ship has a ship's locker. Typical equipment carried aboard will include protective clothing, vacc suits, weapons such as shotguns or pistols, ammunition, compasses and survival aids, and portable shelters. The contents of the locker are defined only when they

Abusing The Ship's Locker

The purpose of the ship's locker is to provide useful mundane equipment on demand so the players do not have to bother keeping track of every single flak jacket and toolkit. It is not an inexhaustible supply of free stuff, nor is it a magic box that produces whatever the characters happen to need right this second. Referees should sternly refuse any unreasonable requests regarding the contents of the ship's locker – it is a tool to simplify bookkeeping, nothing more.

need to be but always contains vacc suits and other useful items. The ship's locker is usually protected by a biometric lock keyed to the ship's officers.

Vehicles and Drones

A spacecraft can carry a number of smaller ships, vehicles and drones. The tonnage and cost covers minimal hangar space, indicating the vehicle is either carried on the outer hull or in a form-fitting compartment on board. For ease of access and for storage of spare parts and equipment, many ships will allocate more space to some vehicles.

Mining Drones: Mining drones allow a ship to mine asteroids. Each set of mining drones takes up ten tons, and allows the ship to process 1d6 × 10 tons of asteroid per working day. The tonnage allocated includes ore handling machinery, allowing the ship to take on ore and transfer it to the cargo bay.

Repair Drones: Carrying repair drones allows a ship to make battlefield repairs with the AutoRepair software or when managed by a character with Mechanic or Engineer skills. Repair drones have the same statistics as repair robots (page 95) only without an Intellect program.

Probe Drones: Probe drones are for surveying planetary surfaces. Each ton of probe drones contains five drones. Probe drones can be dropped from orbit in disposable entry shells but must be recovered manually. Probe drones are also capable of surveying orbiting satellites, derelicts and other space debris. They can also be used as communications relays. See page 95 for probe drone statistics.

Escape Pods: This covers the installation of rescue bubbles (see page 97) and other escape pods for the entire crew.

Life Boat, Ship's Boat, Shuttle, Pinnace, Cutter: These are all small craft, hangared either in or on the ship's hull. Their statistics can be found from page 132 onwards.

Air/Raft, ATV: These are vehicles, also stored in or on the ship. Their statistics can be found in the vehicles section of the Equipment chapter, page 103.

VEHICLES AND DRONES

Vehicle	Tons	Cost (MCr.)
Mining Drones	10	1
Repair Drones	0.01 × tonnage of ship	0.2 per ton
Probe Drones (5)	1	0.5 per ton
Escape Pods	0.5 per stateroom	0.1 each
Life Boat/Launch	20	14
Ship's Boat	30	16
Pinnace	40	20
Cutter	50	28
Shuttle	95	33
Air/Raft	4	0.275
ATV	10	0.05

ARMAMENTS

Weapons for spacecraft fall into two basic categories – turret weapons and bay weapons. Turrets are small gun emplacements on the outer hull of the ship capable of independently targeting and tracking enemy ships. Bay weapons are larger systems built into the spacecraft.

The number of turrets or bays that may be installed is limited by the tonnage of the spacecraft. A ship has one hardpoint per 100 tons of ship and each weapon system takes up one hardpoint. A weapon system may include multiple weapons – for example, a triple turret contains three lasers, missile launchers, sandcasters or some combination of three weapons.

Turrets

One turret may be attached to each hardpoint on the ship. If a turret is installed, then one ton of space must be allocated to fire control systems (included in the following table):

Weapon	TL	Tons	Cost (MCr.)
Single Turret	7	1	0.2
Double Turret	8	1	0.5
Triple Turret	9	1	1
Pop-Up Turret	10	2	+1
Fixed Mounting	-	0	x 0.5

Single, Double and **Triple** turrets can hold one, two or three weapons.

Pop-Up is a quality that can be applied to any type of turret – the turret is concealed in a pod or recess on the hull, and is detectable only when deployed. A ship with all its weapons in pop-up turrets looks unarmed to a casual sensor scan.

Fixed Mounting weapons cannot move, are limited to firing in one direction (normally straight ahead), and are found mainly on fighters. A fixed mounting costs half as much as a turret of the same type, so a single fixed mounting costs 0.1 MCr., a double fixed mounting costs 0.25 MCr., and a triple fixed mounting costs 0.5 MCr.

Missiles

There are three types of missile in common use in *Traveller* – basic missiles, smart missiles, and nuclear missiles.

Basic missiles get to make a single attack.
Smart missiles may keep making attacks until they hit or are destroyed.
Nuclear missiles make a single attack as basic missiles but also inflict a radiation crew hit as well as a normal hit. Using nuclear weapons near an inhabited planet or orbital is forbidden by Imperial law.

Missile Type	TL	Damage	Cost per 12 missiles (Cr.)
Basic	6	1d6	15,000
Smart	8	1d6	30,000
Nuclear	6	2d6 + crew hit	45,000

TURRET WEAPONS

Weapon	TL	Optimum Range	Damage	Cost (MCr.)
Pulse Laser	7	Short	1d6	0.5
Beam Laser	7	Medium	2d6	1
Particle Beam	8	Long	3d6 + crew hit	4
Missile Rack	6	Special	Depends on missile	0.75
Sandcaster	7	Special	Special	0.25

Pulse lasers fire short bursts of energy at targets.

Beam lasers fire continuous beams of energy at targets.

Particle beams fire a stream of accelerated subatomic particles. They inflict an automatic radiation crew hit in addition to any other damage.

Missile racks are launchers for small anti-ship missiles. The damage of a missile depends on the type of missile used. Missile racks need ammunition – twelve missiles take up one ton of space.

Sandcasters are defensive weapons; they dispense small particles which counteract the strength of lasers and protect the ship. A sandcaster reduces the damage from a beam weapon by 1d6. Sandcasters require ammunition. Twenty sandcaster barrels take up one ton of space, and cost 10,000 credits.

Bays

Bay weapons are much larger than turrets, and take up 50 tons of space and one hard point, as well as one ton of space for fire control. They are found only on larger spacecraft.

BAY WEAPONS

Weapon	TL	Range	Damage	Cost (MCr.)
Missile Bank	6	Special	Launches a flight of twelve missiles	12
Particle Beam	8	Long	6d6 + crew hit	20
Fusion Gun	12	Medium	5d6	8
Meson Gun	11	Long	5d6 + crew hit	50

Missile banks fire flights of twelve missiles at a time. The missiles otherwise behave exactly as if they were fired from a smaller launcher.

Particle beams are larger versions of the turret-mounted weapon.

Fusion guns fire a directed beam of fusing hydrogen at targets.

Meson guns project a stream of mesons at a target. Mesons have an extremely short half-life, and are calculated to decay while within the enemy ship. Meson weapons are therefore unaffected by armour, as the blast only becomes harmful after it has already passed through the hull. Meson guns also inflict an automatic radiation hit on the crew of any target struck.

Screens

Screens are defensive systems that protect against specific attacks.

Screen	TL	Effect	Tons	Cost (MCr.)
Nuclear Damper	12	Reduces fusion gun and nuclear missile damage by 2d6, removes automatic crew hit from nuclear missile attacks	50	50
Meson Screen	12	Protects against meson weapon damage, reducing damage by 2d6	50	60

Nuclear dampers project a series of nodes and anti-nodes where the strong nuclear force is enhanced or degraded, rendering nuclear warheads ineffective. A nuclear damper reduces the damage from fusion weapons and nuclear missiles by 2d6 when affected.

Meson screens block attacks from meson weapons by preventing meson decay.

SHIP SOFTWARE

Ship software operates in exactly the same way as normal computer software but typically has a much higher rating. Ship computers are fully capable of running normal software as well.

Program	TL	Rating	Cost (MCr.)	Effect
Manoeuvre/0	8	0	Included	Allows basic control of ship
Intellect	11	10	1	Allows a ship to understand and obey verbal commands.
Jump Control/1	9	5	0.1	Allows Jumps of up to the specified number. Incorporates astrogation software and Jump engine management.
Jump Control/2	11	10	0.2	
Jump Control/3	12	15	0.3	
Jump Control/4	13	20	0.4	
Jump Control/5	14	25	0.5	
Jump Control/6	15	30	0.6	
Evade/1	9	10	1	The computer reacts automatically to incoming fire, applying a negative DM of −1. The ship can make a number of dodges each round equal to the listed number.
Evade/2	11	15	2	
Evade/3	13	25	3	
Fire Control/1	9	5	2	Allows the computer to fire a number of weapons per round equal to the listed number. Alternatively, it can give a positive DM to an attack equal to the listed number, or any combination of the two. For example, a ship with Fire Control/3 could make three attacks, or give a +3 DM to an attack, or make one attack with a +2 DM.
Fire Control/2	10	10	4	
Fire Control/3	11	15	6	
Fire Control/4	12	20	8	
Fire Control/5	13	25	10	
Auto-Repair/1	10	10	5	Allows the computer to make a number of repair attempts per round equal to the listed number. Alternatively, it can give a positive DM to a repair attempt equal to the listed number, or any combination of the two. Requires the ship to carry repair drones.
Auto-Repair/2	12	20	10	
Library	8	0	Included	Contains a wealth of data on numerous subjects.

Crew Requirements

The number of crew on a ship varies depending on its level of automation and complexity. It is possible to run a ship with a very small crew – a single scout can run a hundred-ton scout ship, running from position to position – but if disaster strikes, a lightly crewed ship has a much slower response time than a fully crewed spacecraft. Independent traders and scouts tend to run with as small a crew as possible. Corporate vessels have an average-size crew, while military ships are usually fully crewed to maximise their effectiveness in battle.

Position	Minimum	Average	Full
Pilot	One pilot	Three pilots (one per eight hour shift)	Three pilots, plus backups
Navigator	Expert Astronavigation program	One navigator	One navigator, plus backups
Engineer	One engineer	One engineer per 50 tons of drives	One engineer per 50 tons of jump drive, power plant, or manoeuvre drive
Medic	None	One per 120 passengers	One per 120 passengers
Gunner	None	One per turret or bay	Two per turret or bay
Steward	None	One steward skill per two high or five middle passengers (see page 142).	One steward skill per two high or five middle passengers (see page 142).
Officers	None	One per 20 crew	One per 10 crew

Mercenary Ticket

Many travellers are former military personnel, and so mercenary tickets are an obvious line of work for them. A small group of highly mobile and heavily armed characters can be employed for a variety of purposes, some of them even legal. Mercenary tickets can pay tens of thousands of credits for a few days of action, but are often highly dangerous.

The ticket...
1. ... is training a band of revolutionaries on a troubled planet to use modern weapons. The revolutionaries are rebelling against the planet's corrupt and autocratic ruler, and intend to storm the palace as soon as they know how to defeat its defences.
2. ... involves recovering the cargo of a crashed ship from the middle of a swamp, filled with dangerous creatures, natural hazards and crazed territorial natives. Another criminal gang is also after the crashed cargo.
3. ... is part of a long-running war between two corporations over the resources of a rich world. The other corporation will offer them more cash to change sides.
4. ... is hunting pirates in the asteroid belt. The characters will have to track the pirates to their hidden asteroid base and storm it.
5. ... is protecting a small community from raiders. The peasants can only pay a few credits in cash, but will offer the characters a home and farmland instead.
6. ... is tracking down and capturing a crime lord who is untouchable by the authorities. The characters will have to sneak into his urban arcology, kidnap him and escape alive.

Scout, Type S

Using a 100-ton hull, the scout ship is intended for exploration, survey, and courier duties, with many in service throughout known space. The wedge-shaped scout is a common sight on the frontier. Many are in the hands of former members of the Scout Service. The Type S is one of the most venerable designs in the Imperium, and is remarkably easy to maintain and repair.

Seeker Mining Ship

A variation on the hundred-ton Scout hull, the Seeker removes half the staterooms and brings the fuel tank down to a more modest twenty-four tons. The mining ship carries ten tons of mining drones, and its cargo capacity is increased to twenty-two tons. These small mining ships scavenge the asteroid belts, looking for deposits of valuable minerals. Many Seekers mount a pulse laser in the turret for mining.
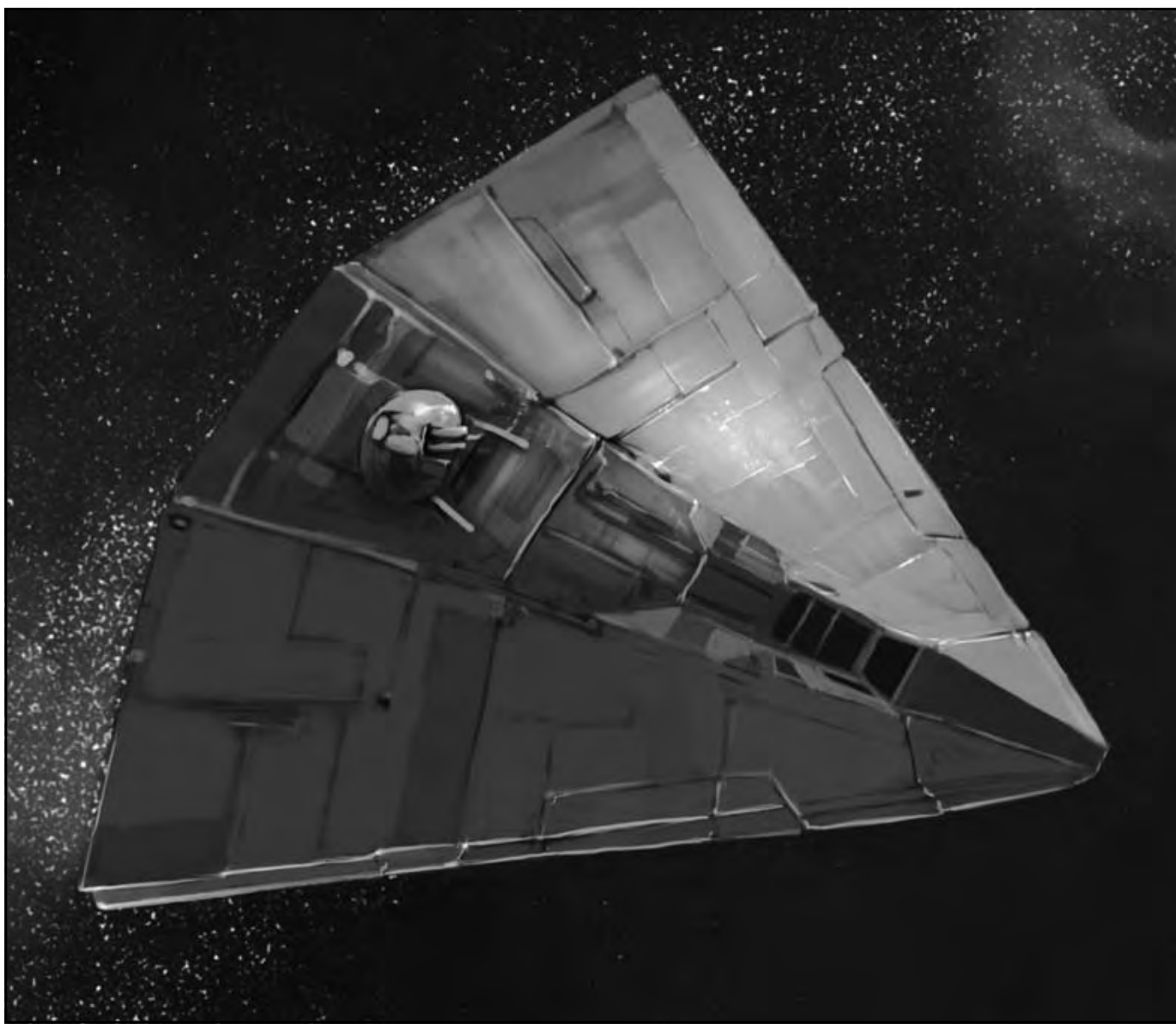
All the spacecraft designs in this section of the book are in common use throughout the Imperium, and can be constructed at any standard shipyard. The cost listed for each vessel includes the 10% discount for being a standard design but does not include any fuel or ammunition for the weapon systems (if they require it). Where designs come in 'under-tonned' this is usually because space has been reserved for fire control or ammunition in upgraded versions of the same ship.

Scout, Type S

			Tons	Price (Cr.)
Hull	100 tons	Hull 2		2,200,000
	Streamlined	Structure 2		
Armour	Crystaliron	4 points	5	400,000
Jump Drive A		Jump 2	10	10,000,000
Manoeuvre Drive A		Thrust 2	2	4,000,000
Power Plant A			4	8,000,000
Bridge			10	500,000
Computer	Model 1/bis	Rating 5 (10 for Jump Control)		45,000
Electronics	Military Sensors	+0 DM	2	1,000,000
Weapons	Hardpoint #1	Double Turret (empty)	1	500,000
Fuel	34 tons	One Jump–2 and fourteen weeks of operation	34	
Cargo	8 tons		8	
4 Staterooms			16	2,000,000
Extras	10 Probe Drones		2	1,000,000
	Fuel Scoop			–
	2 Fuel Processors		2	100,000
	Air/raft		4	600,000
	Ship's Locker			–
Software	Jump Control/2			200,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				2,754
Life Support Cost (monthly)				8,000
Total Tonnage and Cost			100	27,540,500

Seeker Mining Ship

			Tons	Price (Cr.)
Hull	100 tons	Hull 2		2,200,000
	Streamlined	Structure 2		
Armour	Crystaliron	4 points	5	400,000
Jump Drive A		Jump 2	10	10,000,000
Manoeuvre Drive A		Thrust 2	2	4,000,000
Power Plant A			4	8,000,000
Bridge			10	500,000
Computer	Model 1/bis	Rating 5 (10 for Jump Control)		45,000
Electronics	Military Sensors	+0 DM	2	1,000,000
Weapons	Hardpoint #1	Double Turret (empty)	1	500,000
Fuel	24 tons	One Jump–2 and four weeks of operation	24	
Cargo	23 tons		23	
2 Staterooms			8	1,000,000
Extras	Mining Drones		10	1,000,000
	Fuel Scoop			–
	Fuel Processor		1	50,000
	Ship's Locker			–
Software	Jump Control/2			200,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				1,898
Life Support Cost (monthly)				4,000
Total Tonnage and Cost			100	22,765,500

SCOUT, TYPE S

1. Avionics
2. Bridge
3. Fuel Purifier
4. Staterooms
5. Common Area
6. Engineering
7. Air/Raft Bay
8. Sensors/ Ship's Computer
9. Cargo Bay
10. Drone Launch Area
11. Turret Manual Controls
12. Ship's Locker

SEEKER MINING SHIP

1. Avionics
2. Bridge
3. Fuel Purifier
4. Staterooms
5. Ship's Locker
6. Engineering
7. Raised Platform
8. Sensors/ Ship's Computer
9. Mining Drone Storage
10. Drone Launch Area
11. Turret Manual Controls
12. Ore Storage

FREE TRADER, TYPE A

Using a 200-ton hull, the free trader is an elementary interstellar merchant ship plying the space lanes carrying cargo and passengers. Tramp traders of this sort are often used by adventuring groups and small mercenary bands, especially if they have been retrofitted with turrets and weaponry.

FAR TRADER

This redesign of the basic two-hundred-ton Free Trader replaces the jump drive and power plant with larger class-B units, giving the ship Jump–2 capabilities. A Jump–2 trade ship can reach worlds that Jump–1 ships cannot and so has more options when carrying passengers or speculative cargos.

FREE TRADER, TYPE A

1. Avionics
2. Bridge
3. Ship's Locker
4. Air Lock
5. Crew Common Area
6. Crew Quarters
7. Engineering
8. Low Berths
9. Passenger's Staterooms
10. Passenger's Common Area

Cargo Bay

Turret Access

Jump Drive
Power Plant
Maneuver Drive

FAR TRADER

1. Bridge
2. Ship's Locker
3. Engineering
4. Low Berths
5. Crew Stateroom
6. Captin's Stateroom
7. Passenger's Stateroom
8. Passenger Common Area
9. Air Lock

Turret 1

Turret 2

Main Cargo Bay

Aft Cargo Bay

Fuel

FREE TRADER, TYPE A			Tons	Price (Cr.)
Hull	200 tons	Hull 4		8,800,000
	Streamlined	Structure 4		
Armour	Crystaliron	4 points	10	1,600,000
Jump Drive A		Jump 1	10	10,000,000
Manoeuvre Drive A		Thrust 1	2	4,000,000
Power Plant A			4	8,000,000
Bridge			10	1,000,000
Computer	Model 1	Rating 5		30,000
Electronics	Civilian Sensors	−2 DM	1	50,000
Weapons	Hardpoint #1	Empty		
	Hardpoint #2	Empty		
Fuel	22 tons	One Jump–1 and two weeks of operation	22	
Cargo	88 tons		88	
10 Staterooms			40	5,000,000
20 Low Berths			10	1,000,000
Extras	Fuel Scoop			–
	Fuel Processor		1	50,000
	Ship's Locker			–
Software	Jump Control/1			100,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				3,048
Life Support Cost (monthly)				22,000
Total Tonnage and Cost			198	36,567,000

FAR TRADER			Tons	Price (Cr.)
Hull	200 tons	Hull 4		8,800,000
	Streamlined	Structure 4		
Armour	Crystaliron	4 points	10	1,600,000
Jump Drive B		Jump 2	15	20,000,000
Manoeuvre Drive A		Thrust 1	2	4,000,000
Power Plant B			7	16,000,000
Bridge			10	1,000,000
Computer	Model 1/bis	Rating 5 (10 for Jump Control)		45,000
Electronics	Civilian Sensors	−2 DM	1	50,000
Weapons	Hardpoint #1	Empty		
	Hardpoint #2	Empty		
Fuel	44 tons	One Jump–2 and two weeks of operation	44	
Cargo	64 tons		64	
10 Staterooms			40	5,000,000
6 Low Berths			3	300,000
Extras	Fuel Scoop			–
	2 Fuel Processors		2	100,000
	Ship's Locker			–
Software	Jump Control/2			200,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				4,283
Life Support Cost (monthly)				20,600
Total Tonnage and Cost			198	51,385,500

SUBSIDISED MERCHANT, TYPE R ('FAT TRADER')

Using a 400-ton hull, the subsidised merchant (nicknamed 'fat trader') is a trading vessel intended to meet the commercial needs of clusters of worlds. The fat trader requires a crew of five: pilot, navigator, engineer, medic, and steward. The pilot also operates the launch; gunners may be added to the crew list as required.

SUBSIDISED MERCHANT, TYPE R ('FAT TRADER')			Tons	Price (Cr.)
Hull	400 tons	Hull 8		17,600,000
	Streamlined	Structure 8		
Armour	None			
Jump Drive C		Jump 1	20	30,000,000
Manoeuvre Drive C		Thrust 1	5	12,000,000
Power Plant C			10	24,000,000
Bridge			20	2,000,000
Computer	Model 1	Rating 5		30,000
Electronics	Civilian Sensors	−2 DM	1	50,000
Weapons	Hardpoint #1	Empty		
	Hardpoint #2	Empty		
	Hardpoint #3	Empty		
Fuel	52 tons	One Jump−1 and four weeks of operation	52	
Cargo	205 tons		205	
13 Staterooms			52	6,500,000
9 Low Berths			4.5	450,000
Extras	Fuel Scoop			−
	Fuel Processor		1	50,000
	Escape Pods	One for every stateroom	6.5	1,300,000
	Ship's Locker			−
	Launch		20	14,000,000
Software	Jump Control/1			100,000
	Manoeuvre/0			−
	Library/0			−
Maintenance Cost (monthly)				8,099
Life Support Cost (monthly)				26,900
Total Tonnage and Cost			397	97,182,000

SUBSIDISED MERCHANT, TYPE R
('FAT TRADER')

1. Bridge
1a. Avionics
2. Ship's Locker
3. Crew Quarters
4. Crew Common Area
5. Passenger Common Area
6. Passenger Stateroom
7. Low Berths
8. Boarding Area
9. Engineering
10. Secure Cargo Area
11. Landing Strut Access

Chair
Bed
Locker
Iris Valve
Iris Valve Floor
Iris Valve Ceiling
Iris Valve Both

Machinery
Low berth Unit
Access Hatch
Hatch
Hatch Floor
Hatch Ceiling
Hatch Both

1.5 meters
5 meters

Forward Cargo Bay

10   10

Main Cargo Bay

(cargo deck is 6 meters high)

Fuel Purification Unit
Jump Drive

Power Plant

Aft Cargo Bay

(cargo deck is 6 meters high)

11   11

9   9

Maneuver Drive

1a

1

Turret 2

2   2

Turret 1

3   3

3   3

3   4

Escape Pods

5

6   6

6   6

6   6

6   6

7   8

Lift

LABORATORY SHIP

Based on a 400-ton hull, the Type L Lab Ship is designed for scientific research. Twenty staterooms provide quarters for the crew of five (pilot, navigator, medic and two engineers) plus scientific and research personnel as necessary. The lab ship is not streamlined but carries a single pinnace with provisions for landing an ATV or an air/raft to a planetary surface (no ATV or air/raft is included with the lab ship but cargo space can be converted to a garage easily). One hundred tons of space is dedicated to laboratories, with provisions for a wide variety of equipment and research; most equipment in the labs is common and easily purchased.

LABORATORY SHIP			Tons	Price (Cr.)
Hull	400 tons	Hull 8		16,000,000
		Structure 8		
Armour	None			
Jump Drive D		Jump 2	25	40,000,000
Manoeuvre Drive D		Thrust 2	7	16,000,000
Power Plant D			13	32,000,000
Bridge			20	2,000,000
Computer	Model 2	Rating 10		160,000
Electronics	Advanced Sensors	+1 DM	3	2,000,000
Weapons	None			
Fuel	88 tons	One Jump–2 and two weeks of operation	88	
Cargo	21 tons		21	
20 Staterooms			80	10,000,000
Extras	15 Probe Drones		3	1,500,000
	Laboratory Space		100	–
	Ship's Locker			–
	Pinnace		40	20,000,000
Software	Jump Control/2			200,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				10,490
Life Support Cost (monthly)				40,000
Total Tonnage and Cost			400	125,874,000

LABORATORY SHIP

1. Bridge/Avionics
1a. Sensors/Turret Access
2. Staterooms
3. Cargo Bay 1
4. Cargo Bay 2
5. Labs
6. Engineering
7. Flight Deck
8. Probe Launch Bay
9. Common Area
10. Air Lock

Fuel

Fuel

Jump Drive
Maneuver Drive
Power Plant

Turret Access

Lift

Chair
Bed
Locker
Iris Valve
Iris Valve Floor
Iris Valve Ceiling
Iris Valve Both

Machinery
Low berth Unit
Access Hatch
Hatch
Hatch Floor
Hatch Ceiling
Hatch Both

Flight deck
Fuel deck
Fuel deck
Engineering deck
Quarter deck
Ring Connection
Sensor Suite

GAZELLE CLOSE ESCORT

This heavily armed close escort is designed to accompany convoys of trade vessels, protecting them from pirates and other dangers. Eight staterooms provide accommodation for the crew, and it also has a 20-ton launch for inspections and rescue missions. It mounts four double turrets for combat.

Gazelle Close Escort			Tons	Price (Cr.)
Hull	400 tons	Hull 8		17,600,000
	Streamlined	Structure 8		
Armour	Crystaliron	8 points	40	6,400,000
Jump Drive H		Jump 4	45	80,000,000
Manoeuvre Drive H		Thrust 4	15	32,000,000
Power Plant H			25	64,000,000
Bridge			20	2,000,000
Computer	Model 4	Rating 20		5,000,000
Electronics	Military Sensors	+0 DM	2	1,000,000
Weapons	Hardpoint #1	Double Turret (sandcaster/beam laser)	1	1,750,000
	Hardpoint #2	Double Turret (sandcaster/beam laser)	1	1,750,000
	Hardpoint #3	Double Turret (missile rack/missile rack)	1	2,000,000
	Hardpoint #4	Double Turret (missile rack/missile rack)	1	2,000,000
Fuel	176 tons	One Jump–4 and two weeks of operation	176	
Cargo	15 tons		15	
8 Staterooms			32	4,000,000
Extras	Fuel Scoop			–
	2 Fuel Processors		2	100,000
	Ship's Locker			–
	Launch		20	14,000,000
Software	Jump Control/4			400,000
	Manoeuvre/0			–
	Library/0			–
	Evade/2			2,000,000
	Fire Control/3			6,000,000
Maintenance Cost (monthly)				18,150
Life Support Cost (monthly)				16,000
Total Tonnage and Cost			396	217,800,000

GAZELLE CLOSE ESCORT

Ventral Turret

Dorsal Turret

Power Plant

Power Plant

Turret 1

Turret 2

Jump Drive

Manoeuver Drive

Launch Access

1. Avionics
2. Bridge
3. Ship's Locker
4. Air Lock
5. Crew Staterooms
6. Crew's Common Area
7. Cargo Bay
8. Engineering

YACHT

Lift

Air Lock

Fuel

Drives

Lift

Fuel

Power Plant

Maneuver Drive

Jump Drive

1. Bridge/ Sensors
2. Ship's Lockers
3. Air/ raft Bay
4. ATV Garage
5. Ship's Boat Hanger
6. Owner's Suite
7. Passenger's Common Area
8. Passenger's Staterooms
9. Cargo Bay
10. Engineering

HEAVY FREIGHTER

1. Owner Suite
2. Bridge/ Sensors
3. Ship's Locker
4. Captain's Office
5. Purser's Office
6. Crew Common Area
7. Crew Staterooms
8. Vacc Suit Storage/ Air Lock
9. Cargo Staging Area
10. Cargo Elevator
11. Expandable Air Lock/ Docking Ring
12. Engineering

Shuttle Bay

Dorsal turret access

Air Lock

Lift

Dorsal turret

Lift

Forward Cargo Bay

Small Cargo Area

Turret 2

Aft Cargo Bay

Lift

Lift

Fuel

Fuel

Power Plant

Jump Drive

Manoeuver Drive

HEAVY FREIGHTER

'Heavy freighter' is something of a misnomer, as this thousand-ton vessel is still tiny compared to the mammoth corporate vessels that also ply the trade routes. Still, with a cargo capacity of 500 tons, the heavy freighter can serve the needs of a small colony. Its configuration is distributed, making landing impractical. The heavy freighter can be docked at a HighPort (see page 178) or unloaded using shuttles. It carries a single cargo shuttle. There are eight staterooms for the crew; however, such vessels are perennially understaffed. It has a pair of triple turrets for defence, equipped with sandcasters and lasers, but the lack of crew makes the freighter vulnerable to boarding actions.

HEAVY FREIGHTER			Tons	Price (Cr.)
Hull	1,000 tons	Hull 20		90,000,000
	Distributed	Structure 20		
Armour	None			
Jump Drive H		Jump 2	45	80,000,000
Manoeuvre Drive E		Thrust 1	9	20,000,000
Power Plant H			25	64,000,000
Bridge			20	5,000,000
Computer	Model 2	Rating 10		160,000
Electronics	Standard Sensors	−4 DM		
Weapons	Hardpoint #1	Triple Turret (sandcaster/beam laser/beam laser)	1	2,750,000
	Hardpoint #2	Triple Turret (sandcaster/beam laser/beam laser)	1	2,750,000
Fuel	216 tons	One Jump–2 and two weeks of operation	216	
Cargo	552 tons		552	
8 Staterooms			32	4,000,000
Extras	Ship's Locker			–
	Shuttle		95	33,000,000
Software	Jump Control/2			200,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				18,164
Life Support Cost (monthly)				16,000
Total Tonnage and Cost			996	271,674,000

YACHT
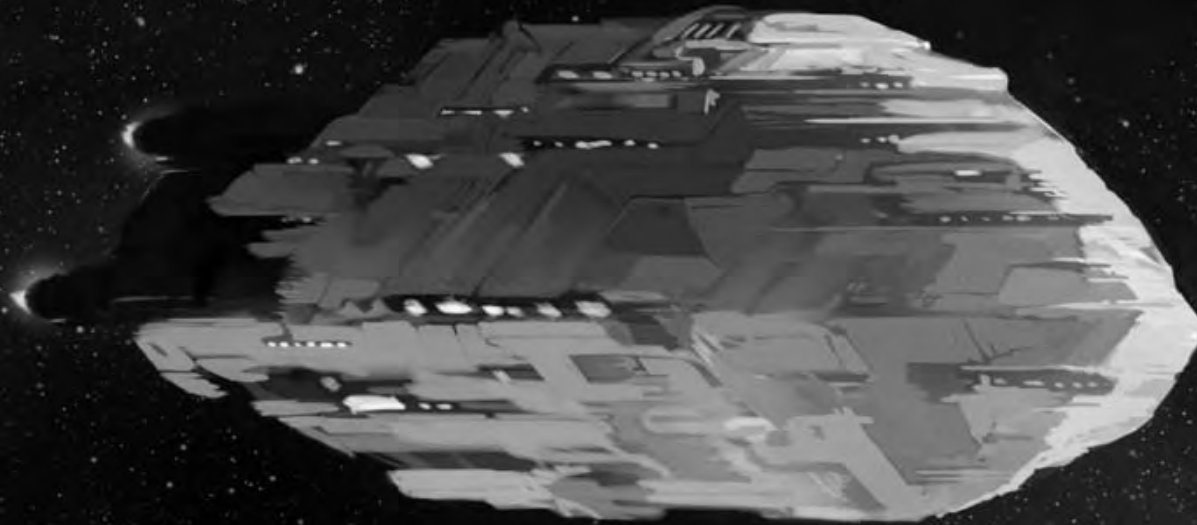
Built on the 200-ton hull, the yacht is a noble's plaything used to entertain friends and undertake political or commercial missions. There are sixteen luxury staterooms; two have been combined into a suite for the owner aboard. The yacht carries an air/raft and a ship's boat in hull compartments; an ATV is also carried, and the ship's boat is fitted to ferry it from orbit to surface and back. The yacht requires a crew of four: pilot, engineer, medic, and steward. Gunners, additional stewards, and other personnel may be may be added as required. Yachts are built to the finest of specifications and have the best fittings money can buy.

YACHT			Tons	Price (Cr.)
Hull	200 tons	Hull 4		8,000,000
		Structure 4		
Armour	None			
Jump Drive A		Jump 1	10	10,000,000
Manoeuvre Drive A		Thrust 1	2	4,000,000
Power Plant A			4	8,000,000
Bridge			10	1,000,000
Computer	Model 1	Rating 5		30,000
Electronics	Standard Sensors	−4 DM		
Weapons	None			
Fuel	44 tons	Two Jump−1s and four weeks of operation	44	
Cargo	21 tons		21	
16 Staterooms		Two are combined into a suite	64	8,000,000
Extras	Luxuries	Steward 1	1	100,000
	Air/raft		4	600,000
	Ship's Locker			–
	Ship's Boat		30	16,000,000
	ATV		10	300,000
Software	Jump Control/1			100,000
	Manoeuvre/0			–
	Library/0			–
Maintenance Cost (monthly)				4,210
Life Support Cost (monthly)				32,000
Total Tonnage and Cost			200	50,517,000

MERCENARY CRUISER

Using an 800-ton hull, the mercenary cruiser is built to carry small troop units for corporate or government operations. The ship carries two 50-ton cutters, each with an ATV module (which includes an ATV). There is provision inside the ship for two additional modules to be stored while not attached to the cutters. There is an air/raft carried in a hull compartment, and the ship carries a suite of repair drones.

The minimum crew necessary for the mercenary cruiser is nine: commanding officer, pilot, navigator, four engineers, and medic. Gunners, cutter pilots, troops, and administrative personnel may be added as desired.

MERCENARY CRUISER			Tons	Price (Cr.)
Hull	800 tons	Hull 16		80,000,000
		Structure 16		
Armour	Crystaliron	4 points	40	16,000,000
Jump Drive M		Jump 3	65	120,000,000
Manoeuvre Drive M		Thrust 3	23	48,000,000
Power Plant M			37	96,000,000
Bridge			20	4,000,000
Computer	Model 5/fib	Rating 25 (hardened vs. EMP)		15,000,000
Electronics	Military Sensors	+0 DM	2	1,000,000
Weapons	Hardpoint #1	Triple Turret (empty)	1	1,000,000
	Hardpoint #2	Triple Turret (empty)	1	1,000,000
	Hardpoint #3	Triple Turret (empty)	1	1,000,000
	Hardpoint #4	Triple Turret (empty)	1	1,000,000
	Hardpoint #5	Triple Turret (empty)	1	1,000,000
	Hardpoint #6	Triple Turret (empty)	1	1,000,000
	Hardpoint #7	Triple Turret (empty)	1	1,000,000
	Hardpoint #8	Triple Turret (empty)	1	1,000,000
Fuel	312 tons	One Jump–3, four weeks of operation and fuel for all vehicles (or six weeks of operation and no fuel for vehicles)	312	
Cargo	77 tons		77	
25 Staterooms			100	12,500,000
Extras	Repair Drones		8	1,600,000
	Air/raft		4	600,000
	Ship's Locker			–
	Modular Cutter #1	ATV module installed, storage space for one more	50	29,800,000
	Modular Cutter #2	ATV module installed, storage space for one more	50	29,800,000
Software	Jump Control/3			300,000
	Manoeuvre/0			–
	Library/0			–
	Evade/3			3,000,000
	Fire Control/3			6,000,000
	Auto-Repair/2			10,000,000
Maintenance Cost (monthly)				36,120
Life Support Cost (monthly)				50,000
Total Tonnage and Cost			796	433,440,000

MERCENARY CRUISER
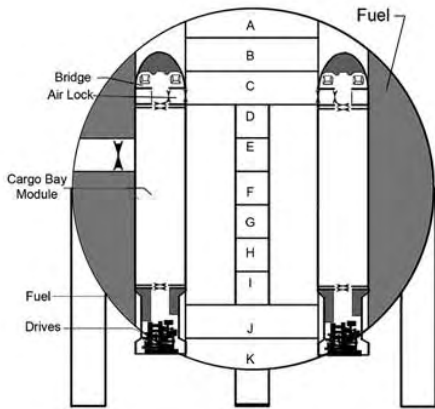
A. Owner's Suite
B. Gunnery Deck
C. Bridge
D. Mess Deck
E. Medical Deck
F. Crew's Quarters
G. Cargo Deck 2
H. Cargo Deck 1
I. Muster Deck
J. Engineering Deck 1
K. Engineering Deck 2

Fuel
Bridge
Air Lock
Cargo Bay Module
Fuel
Drives

Chair
Bed
Locker
Iris Valve
Iris Valve Floor
Iris Valve Ceiling
Iris Valve Both

Machinery
Low berth Unit
Access Hatch
Hatch
Hatch Floor
Hatch Ceiling
Hatch Both
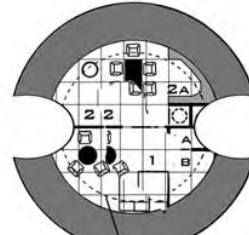
TRANSPARENT CEILING — Owner's Suite
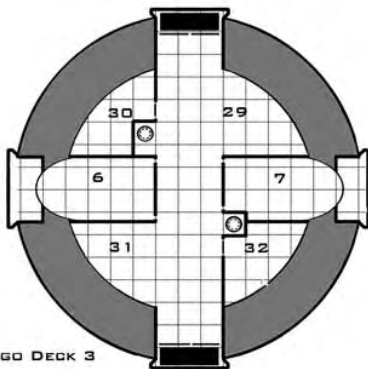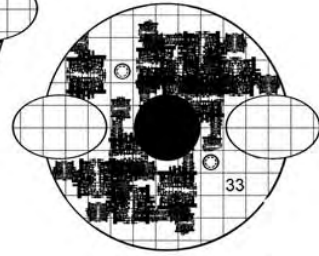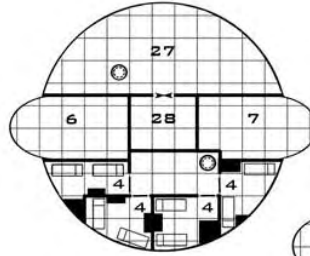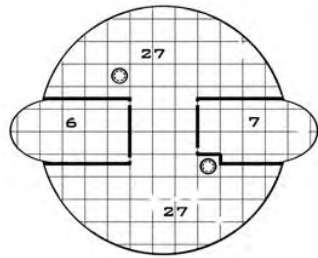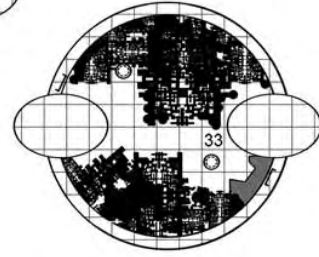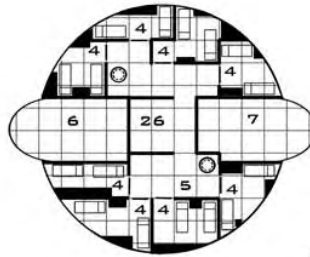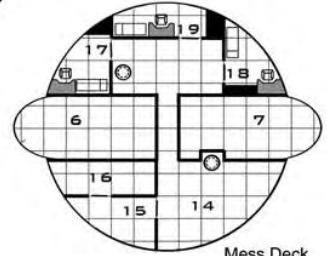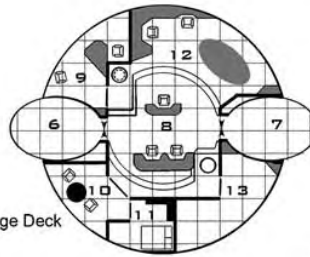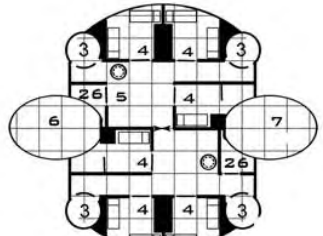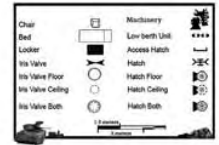
1. Owner's Suite
1a. Fresher
1b. Walk-in Closet
2. Dinning/ Meeting Area
2a. Galley
3. Turret
4. Crew Staterooms
5. Common Area
6. Port Cutter Well
7. Starboard Cutter Well
8. The Pit Control Center (C&C)
9. Executive Office
10. Captain's Suite
11. Captain's Sleeping Area
12. Navigation and Fire Control
13. Ship's Locker
14. Mess Hall
15. Galley
16. Pantry
17. Navigator's Stateroom
18. Cutter 1's Crew Stateroom
19. Chief Engineer's Stateroom
20. Common Area
21. Sick Bay
22. Surgery
23. Medical Lounge
24. Air Lock
25. Entry Section
26. Communal Fresher
27. 17 ton Cargo Bays
28. Secure Vault
29. Marshalling Area
30. Armory
31. Cargo Area
32. Cargo Area
33. Engineering

GUNNERY DECK

Bridge Deck

MEDICAL DECK/ CREW QUARTERS

AIR/RAFT BAY

Mess Deck

QUARTER DECK

CARGO DECK 1

ENGINEERING DECK 1

CARGO DECK 2

CARGO DECK 3

ENGINEERING DECK 2

CORSAIR

The Corsair design was originally intended as a raider and pocket warship, but has been adopted by criminal and terrorist gangs across known space. Ten staterooms serve as quarters for the crew (pilot, navigator, three engineers and assorted thugs and cutthroats numbering up to five more); twenty low berths are available for emergency use, or to hold captives.

Notable features on the Corsair are large cargo doors and variable identification features. The large clamshell doors can open to reveal the entire cargo bay; the ship can accept a hundred-ton ship into its cargo bay. The ship has several centrally controlled identification features which can alter the shape and configuration of the ship at a moment's notice – fins retract and or extend, modules appear or disappear and radio emissions alter frequency and content. The ship's transponders can be altered to identify the vessel as having any of a variety of missions and identities. The Corsair is unarmoured, relying on speed and firepower instead of staying power.
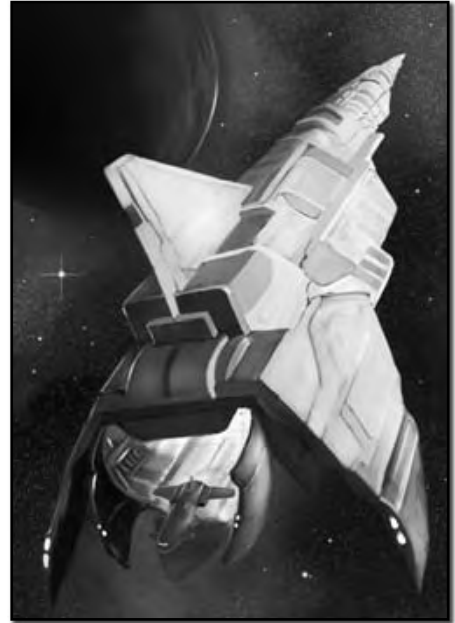
CORSAIR			Tons	Price (Cr.)
Hull	400 tons	Hull 8		16,000,000
		Structure 8		
Armour	None			
Jump Drive D		Jump 2	25	40,000,000
Manoeuvre Drive F		Thrust 3	11	24,000,000
Power Plant F			19	48,000,000
Bridge			20	2,000,000
Computer	Model 2	Rating 10		160,000
Electronics	Military Sensors	+0 DM	2	1,000,000
Weapons	Hardpoint #1	Triple Turret (beam laser/empty/empty)	1	1,500,000
	Hardpoint #2	Triple Turret (beam laser/empty/empty)	1	1,500,000
	Hardpoint #3	Triple Turret (beam laser/empty/empty)	1	1,500,000
Fuel	104 tons	One Jump–2 and six weeks of operation	104	
Cargo	160 tons		160	
10 Staterooms			40	5,000,000
20 Low Berths			10	1,000,000
Extras	Repair Drones		4	800,000
	Ship's Locker			–
Software	Jump Control/2			200,000
	Manoeuvre/0			–
	Library/0			–
	Evade/2			2,000,000
	Fire Control/2			4,000,000
	Auto-Repair/2			10,000,000
Maintenance Cost (monthly)				11,900
Life Support Cost (monthly)				22,000
Total Tonnage and Cost			398	142,794,000

CORSAIR

Chart legend:
- Chair
- Bed
- Locker
- Iris Valve
- Iris Valve Floor
- Iris Valve Ceiling
- Iris Valve Both
- Machinery
- Low Berth Unit
- Access Hatch
- Hatch
- Hatch Floor
- Hatch Ceiling
- Hatch Both

1. Bridge
2. Ship's Locker
3. Common Aera
4. Crew's Quarter
5. Low Berths
6. Engineering
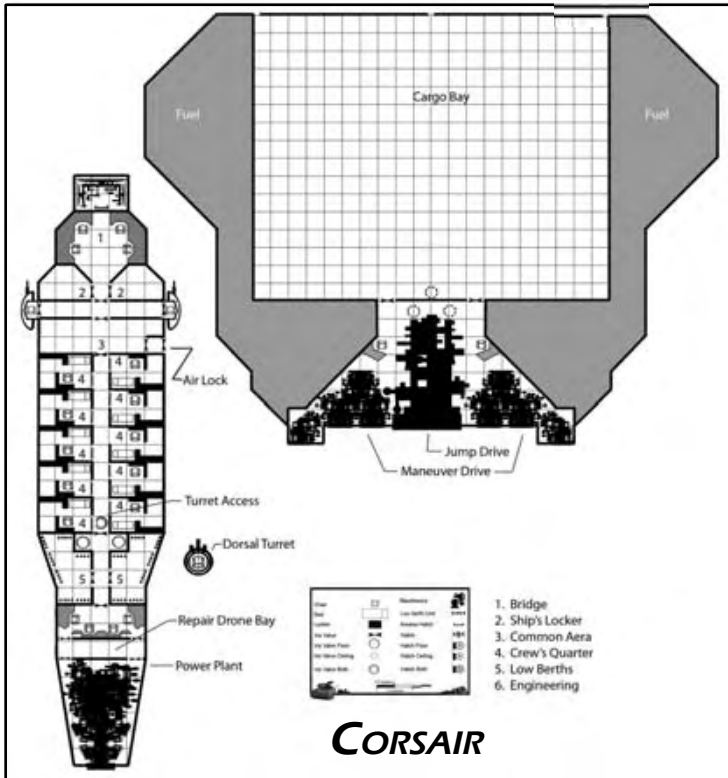
Piracy

Raids on commercial shipping are distressingly common in certain sectors. The high cost of keeping a ship flying forces some captains to turn to piracy. The Imperial Navy hunts down the most troublesome raiders, but others slip through the net. The most common form of piracy involves spies waiting at the starport, watching for suitable targets and transmitting flight paths to pirate vessels lurking near the hundred-diameter jump limit. Other pirates attack vessels in transit to gas giants, outlying moons, or offworld colonies and outposts.

The pirates...
1. ... demand the characters dump their cargo into space, or face immediate destruction.
2. ... intend to board and capture the characters' vessel.
3. ... are actually illegal privateers in the employ of a noble from a neighbouring world, preying on shipping.
4. ... have no idea what they're doing, but are desperate enough to be dangerous.
5. ... have an agent on board the characters' ship, as a stowaway or passenger.
6. ... want something the characters are carrying – possibly something they don't even know is onboard.

Imperial Duty

The Imperium has endured for centuries, and appears to most of its citizens to be an eternal fact of life, as inevitable as gravity or taxes. In truth, the Imperium survives only because the right people were in the right place at the right time. There are always threats to interstellar commerce, ambitious dukes putting their own interests ahead of the common good, and rapacious or subversive alien forces plotting to conquer known space. Characters may find themselves unofficially drafted by Imperial intelligence to do what must be done.

The Imperial duty is...
1. ... bringing a secret message to an Imperial agent in a starport. Enemies are hunting for the message, and the characters must conceal it.
2. ... scouting a neutral system for an enemy base – the Imperium believes it is there, but must work through private spies.
3. ... infiltrating a smuggler's organisation, so the Imperium can swoop in and smash the crime ring with inside information.
4. ... finding a way to test the loyalty of a planetary administrator, who is suspected of allying himself with an enemy.
5. ... transporting an Imperial commando team to a neutral world. The commandoes clash with the characters.
6. ... 'losing' a troublesome passenger.

SERPENT POLICE CUTTER

Chart legend:
- Chair
- Bed
- Locker
- Iris Valve
- Iris Valve Floor
- Iris Valve Ceiling
- Iris Valve Both
- Machinery
- Low Berth Unit
- Access Hatch
- Hatch
- Hatch Floor
- Hatch Ceiling
- Hatch Both

1. Bridge
2. Ship's Locker
3. Crew Staterooms
4. Cargo Bay
5. Low Berth Units
6. Launch Berth
7. Dorsal Turret Access

20 ton Launch
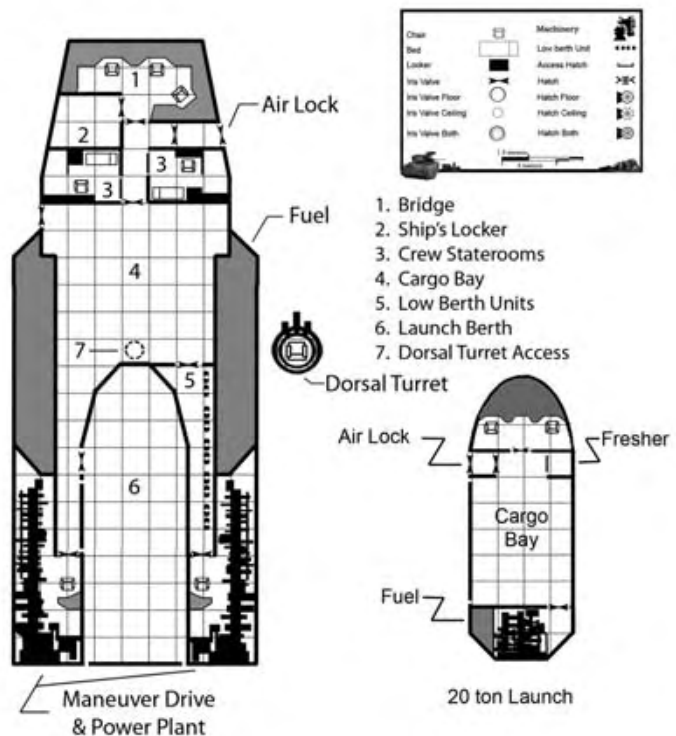
SERPENT POLICE CUTTER

These fast-moving system defence boats are used to patrol the space around settled worlds. As they have no Jump drive they can use the spare internal space to mount a more powerful manoeuvre drive, giving it six Gs of acceleration which is more than enough catch enemy ships. It has two staterooms for the crew, and ten low berths for prisoners or marines. It has twenty tons of cargo space and carries a life boat for rescue missions. A triple turret with a pair of missile launchers and a pulse laser gives the cutter enough firepower to deal with most foes.

SERPENT POLICE CUTTER			Tons	Price (Cr.)
Hull	100 tons	Hull 2		2,200,000
	Streamlined	Structure 2		
Armour	Crystaliron	4 points	5	400,000
No Jump Drive				
Manoeuvre Drive C		Thrust 6	5	12,000,000
Power Plant C			10	24,000,000
Bridge			10	500,000
Computer	Model 1	Rating 5		30,000
Electronics	Military Sensors	+0 DM	2	1,000,000
Weapons	Hardpoint #1	Triple Turret (pulse laser/missile rack/missile rack)	1	2,250,000
Fuel	12 tons	Four weeks of operation	12	
Cargo	20 tons		20	
2 Staterooms			8	1,000,000
10 Low Berths			5	500,000
Extras	Fuel Scoops			–
	Ship's Locker			–
	Launch		20	14,000,000
Software	Manoeuvre/0			–
	Library/0			–
	Evade/2			2,000,000
	Fire Control/1			2,000,000
Maintenance Cost (monthly)				4,641
Life Support Cost (monthly)				5,000
Total Tonnage and Cost			98	55,692,000

SMALL CRAFT

The following ships are all classified as small craft because they displace less than 100 tons. The rules for designing small craft are slightly different to the rules for designing larger spacecraft and will be presented in full in a forthcoming *Traveller* supplement. For now, we present the most common small craft that travellers in the Third Imperium are likely to encounter.

LAUNCH

Also termed a life boat, this craft uses a 20-ton hull. It is a functional spacecraft but not suitable for extended journeys through space; its most common use is to ferry people and cargo between ships or between ships and planetside. A launch's small power plant cannot power a laser and so when adding weapons it is limited to missile racks and sandcasters. The craft has 13 tons of cargo space.

Hull	20 tons	Hull 0
	Streamlined	Structure 1
Armour	None	
No Jump Drive		
Manoeuvre Drive <A		Thrust 1
Power Plant <A		
Computer	Model 1	Rating 5
Electronics	Standard Sensors	−4 DM
Weapons	None	
Fuel	<1 ton	One week of operation
Cargo	13 tons	
2 Crew Stations		
Software	Manoeuvre/0	
	Library/0	

Purchase Cost: Cr. 14,000,000

SHIP'S BOAT

Using a 30-ton hull, the ship's boat is capable of excellent acceleration and is a worthy upgrade to the more utilitarian launch. Due to its excess cargo space it is often customised as a troop transport and staging point for boarding actions. Although the ship's boat uses a larger power plant, so much power is dedicated to the manoeuvre drive that it can only mount a single beam or pulse laser. All other weapons must be missile racks or sandcasters.

Hull	30 tons	Hull 0
	Streamlined	Structure 1
Armour	None	
No Jump Drive		
Manoeuvre Drive A		Thrust 6
Power Plant A		
Computer	Model 1	Rating 5
Electronics	Standard Sensors	−4 DM
Weapons	None	
Fuel	1 ton	One week of operation
Cargo	13 tons	
2 Crew Stations		
Software	Manoeuvre/0	
	Library/0	

Purchase Cost: Cr. 16,000,000
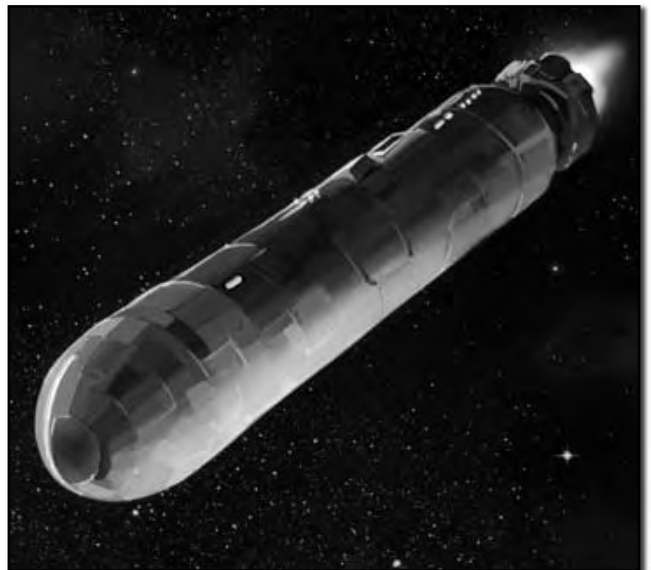
PINNACE

Using a 40-ton hull, the pinnace is a common craft for adventuring ships, as they have the speed, range and cargo capacity to support extended missions. They can mount up to two beam or pulse lasers before overloading the power plant.

Hull	40 tons	Hull 1
	Streamlined	Structure 1
Armour	None	
No Jump Drive		
Manoeuvre Drive A		Thrust 5
Power Plant A		
Computer	Model 1	Rating 5
Electronics	Standard Sensors	−4 DM
Weapons	None	
Fuel	2 tons	Two weeks of operation
Cargo	23 tons	
2 Crew Stations		
Software	Manoeuvre/0	
	Library/0	

Purchase Cost: Cr. 20,000,000

SHUTTLE

A shuttle is capable of moderate acceleration and can carry 71 tons of cargo from ship to surface – the most any small craft is capable of. Most starports have a fleet of cargo shuttles for servicing orbiting trade vessels. They may be retrofitted with weapons but, like the pinnace, can draw only enough power to feed two lasers.

Hull	95 tons	Hull 1
		Structure 1
Armour	None	
No Jump Drive		
Manoeuvre Drive A		Thrust 3
Power Plant A		
Computer	Model 1	Rating 5
Electronics	Standard Sensors	−4 DM
Weapons	None	
Fuel	1 ton	One week of operation
Cargo	71 tons	
2 Crew Stations		
Software	Manoeuvre/0	
	Library/0	

Purchase Cost: Cr. 33,000,000

SMALL CRAFT

10 ton Fighter

Pilot's Seat

Belly Turret

Drive and Power Plant

Bridge

Air Lock

Wing fold

Cargo Bay

Drives

Cargo Loading Ramp
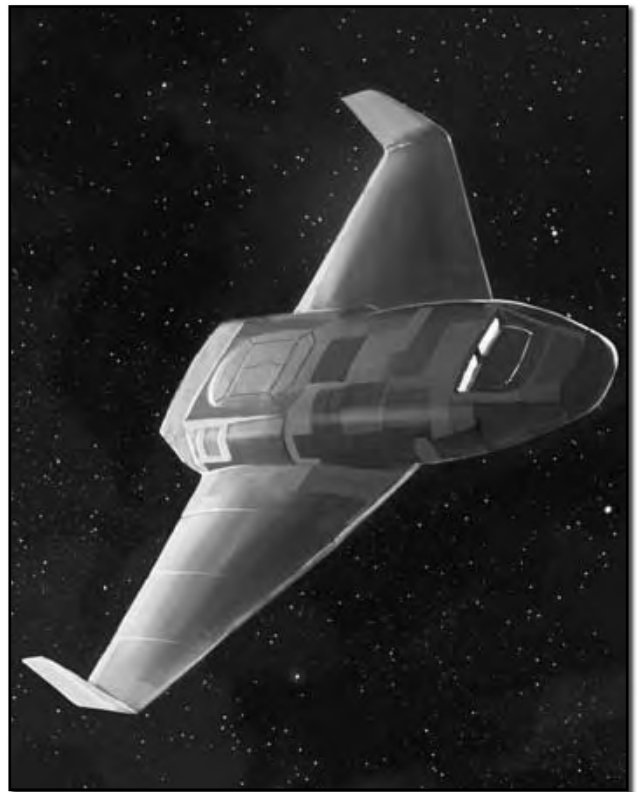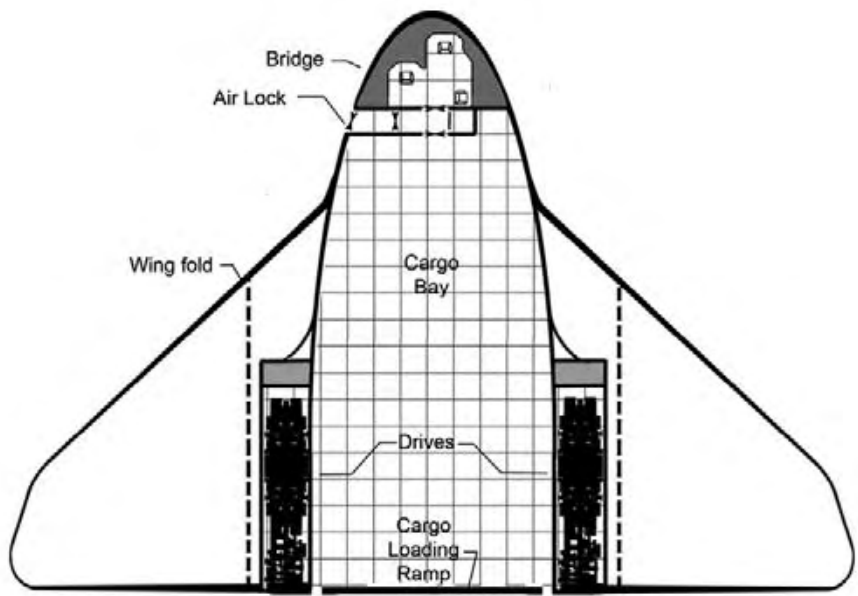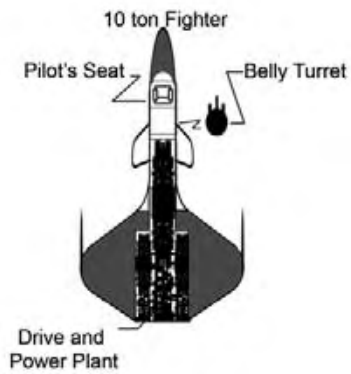
95 dton Shuttle (Cargo Version)

Air Lock

Fresher

Cargo Bay

Fuel

20 ton Launch

Air Lock

Cargo bay

Fuel

Drives

30 dton Ship's Boat

Bridge

Air Lock

Passenger Compartment

Fuel

Cargo Bay

40 ton Pinnace

Air Lock

Cargo bay

Fuel

Drives

50 dton Cutter

Chair		Machinery	
Bed		Low berth Unit	
Locker		Access Hatch	
Iris Valve		Hatch	
Iris Valve Floor		Hatch Floor	
Iris Valve Ceiling		Hatch Ceiling	
Iris Valve Both		Hatch Both	
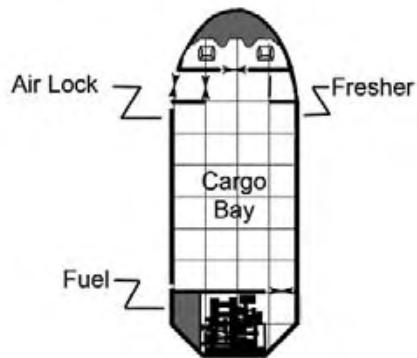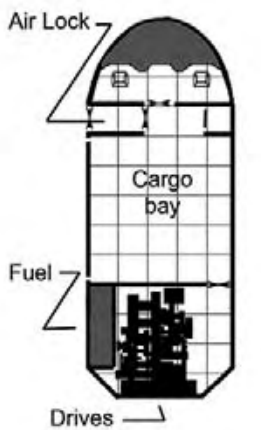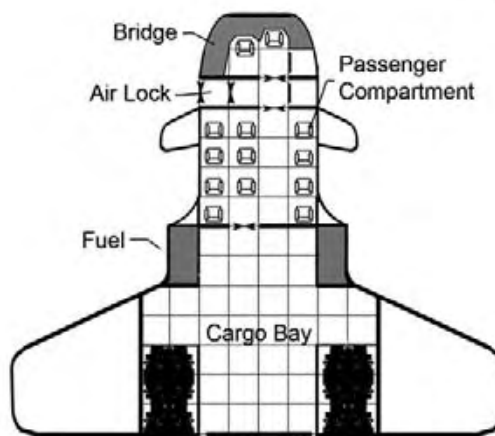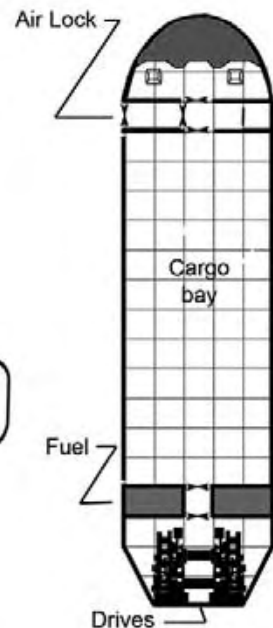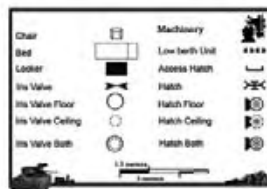
MODULAR CUTTER

The fifty-ton cutter is capable of good speed within a short-range operational capacity and has a crew of two. Its main feature is the 30 ton 'module bay' that allows the cutter to be quickly and easily reconfigured for different missions. Changing the module in a modular cutter is an Easy (+4 DM), Intelligence-based Engineer (any) or Mechanic check, with no non-proficiency penalty. It normally takes 1–6 minutes but is often drawn out to 1–6 hours to ensure success.

The modular cutter can mount up to two lasers but any more puts undue strain on the power plant and causes it to shut down.

Hull	50 tons	Hull 1
	Streamlined	Structure 1
Armour	None	
No Jump Drive		
Manoeuvre Drive A		Thrust 4
Power Plant A		
Computer	Model 1	Rating 5
Electronics	Standard Sensors	–4 DM
Weapons	None	
Fuel	1 ton	One week of operation
Cargo	2.5 tons + 30 ton module	
2 Crew Stations		
Software	Manoeuvre/0	
	Library/0	

Purchase Cost: Cr. 28,000,000 (not including module)

Three modules are commonly available for the cutter:

- The ATV module includes either a wheeled or a tracked ATV and the means to deposit it on a planetary surface and pick it up again later. The module can serve as an ATV storage location. It costs MCr. 1.8.
- The fuel module incorporates a fuel scoop and 30 tons of fuel tank. It is usually used to ferry fuel from point to point and costs MCr. 1.
- The open module is a customisable frame with 30 tons of excess space. The only difference between an open module and a module-less cutter is that without an installed module the cutter's module bay is open to space. An open module provides a sealed environment for a mere 100,000 Credits and can be customised before installation (at additional cost) with staterooms, low berths, fuel tanks, weapons and ammunition, or anything else travellers could want.

LIGHT FIGHTER

The light fighter is a small, fast, highly manoeuvrable ship used for making high-speed attack runs on enemy ships. They consist mainly of a power plant attached to a laser or other weapon with a pilot sitting on top. Fighters pose aggravating tactical complications for the commander of a vessel under attack by them but are seldom enough to destroy a larger ship without support.

Hull	10 tons	Hull 0
	Streamlined	Structure 1
Armour	Crystaliron	2 points
No Jump Drive		
Manoeuvre Drive <A		Thrust 6
Power Plant <A		
Computer	Model 1	Rating 5
Electronics	Standard Sensors	−4 DM
Weapons	Hardpoint #1	Single Fixed Mounting (pulse laser)
Fuel	<1 ton	One week of operation
Cargo	1 ton	
1 Crew Station		
Software	Manoeuvre/0	
	Library/0	

Purchase Cost: Cr. 18,000,000

Some fighter patterns mount a triple fixed mounting with missile racks or sandcasters instead of a pulse laser and convert the cargo space into ammunition storage. A missile fighter costs 21,000,000 Credits without any ammunition, which must be bought separately. A sandcaster fighter costs 18,500,000 Credits without ammunition.

Old Ships

Many ships serve for decades or even centuries before being scrapped. Adventurers and free traders are often forced by necessity to purchase outdated or damaged vessels instead of new or pristine ships. Characters purchasing an outdated ship gain 1d6 ship shares per 10 years of wear. For each ten-year term of wear, choose what role that ship was engaged in, and roll on the table below:

2d6	Trader	Military	Other
2	Black-listed: Trader will be impounded in several systems. −1 DM to all Broker checks.	Severely Damaged: −1 Hull.	Leaky reactor core: Roll 2d6 when the ship jumps. On a 12, crew suffer 2d6 × 20 rads.
3	Well maintained: Reduce all maintenance costs by 10%.	Upgrade sensors to next best type.[1]	Luxurious starship: +1 DM to all Steward checks.
4	Vessel contains concealed smuggling compartments.	Vessel is equipped with an extra turret, if possible.[1]	Library computer contains erroneous information.
5	Cargo bay is tainted by chemical spills and leaks. Vulnerable cargos may be damaged in transit.	Vessel was involved in a notorious battle, and has enemies who wish to destroy it.	Vessel contains disturbing psionic echoes.
6	<------------------------------ Damaged sensors: −1 DM to all Sensors checks ------------------------------>		
7	<-- 1 DM to all repair attempts ------------------------------------>		
8	<------------------------------------ Increase all maintenance costs by 50% ------------------------------------>		
9	<-- 1 Structure[2] -->		
10	<------------------------------ Damaged thrusters: −1 DM to all Pilot checks ------------------------------>		
11	Ship is a famous and respected trader, with a good reputation.	Ship served with distinction, and has a good reputation in the navy.	Library computer contains secret or unusual information.
12	Upgrade computer to next best type.	Add a weapon costing up to 2 MCr.	Upgrade sensors to next best type.[1]

[1]These options may result in additional tonnage being added to the ship. Remove tons from the cargo bay if necessary to make room.

[2]If the ship's Structure is 0 or less, then it is not spaceworthy and will disintegrate within 1d6 minutes of leaving atmosphere. It can be flown within an atmosphere but will come apart the moment it hits severe weather, gets hit by an attack, undergoes stressful manoeuvres, or otherwise comes under strain.

SPACECRAFT OPERATIONS

This chapter covers operations and encounters in space other than combat between spacecraft (for which refer to Space Combat, page 146). This chapter covers the following topics: **Airlocks, Atmospheric Operations, Boarding, Docking and Landing, Costs and Maintenance, Encounters, Fuel, Jump Travel, Life Support, Passage, Repairs, Security, and Travel Times.**

AIRLOCKS

A ship has at least one airlock per 100 tons. The average airlock is large enough for three people in vacc suits to pass through at the same time. An airlock takes ten seconds to cycle. Under normal circumstances, airlocks are locked down from the bridge and require a Very Difficult (–4) Engineer (electronics) check to override. An unlocked airlock can be triggered from outside. Airlocks generally have vacc suits (see page 87), rescue bubbles (see page 97) and cutlasses (see page 98) in a ship's locker nearby.

Ships with cargo space have cargo hatches, allowing up to 10% of their cargo to be transferred at any time. Some ships, such as the Corsair (see page 129) have specially designed cargo hatches that open onto the entire cargo bay but these are the exception rather than the rule.

ATMOSPHERIC OPERATIONS

A streamlined ship is designed to enter a planetary atmosphere, and can function like a conventional aircraft. Pilot or Flyer (winged) checks are required in high winds and other extreme weather.

A standard-configuration ship can also enter a planet's atmosphere, but is reliant on its thrusters to keep it aloft at all times and is extremely ungainly. Pilot checks are required for all movement and suffer a –2 DM.

A distributed ship must make a Pilot check at a –4 DM when it enters an atmosphere and for every minute of flight. Each check that is failed inflicts 2d6 points of damage.

BOARDING, DOCKING AND LANDING

Landing: Any ship with a standard or streamlined hull may land on the surface. Unstreamlined ships suffer a –2 DM to any Pilot checks made in atmosphere while a ship with a Distributed hull suffers a –4 DM to any Pilot checks, and is likely to take severe structural damage if it lands. Landing at a starport is a Routine (+2) task for most ships taking 10–60 seconds (so most pilots will take extra time and get a +1 or +2 DM on top of this – see page 50).

Most ships have landing gear, allowing them to touch down 'in the wild', which requires an Average (+0), Difficult (–2) or even Very Difficult (–4) check, depending on local conditions. Non-distributed ships can also land on bodies of water without sinking. Failing a landing roll means that the ship has landed improperly or even crashed.

Docking: Two spacecraft may dock if they are close together and neither ship attempts to resist the docking manoeuvre. Many airlock designs across charted space are compatible; for incompatible airlocks, ships extend flexible plastic docking tubes that adapt to the target airlock. Docking with another vessel is a Routine (+2) Pilot task taking 1–6 minutes. If one ship is drifting or unpowered, the difficulty rises to Difficult (–2).

Boarding: Hostile boarding actions are safest when the enemy ship is crippled, in which case it is a standard docking procedure. If the enemy ship is still moving, then the prospective boarders must match the target's velocity and dock with it (a Difficult (–2) Pilot task), or else just land on the hull and either make their way to an airlock or cut through from outside. Most boarders wishing to capture a ship intact will head to an airlock and cut or force their way through there, minimising hull damage. Boarding parties customarily use cutlasses or accelerator weapons.

COSTS AND MAINTENANCE

A starship operator faces many costs each month:

Item	Monthly Cost (Cr.)
Mortgage or Debts	Varies
Life Support	2,000 per stateroom (3,000 for double occupancy) 100 per low berth
Fuel	500 per ton of refined fuel 100 per ton of unrefined fuel
Maintenance	1/12 of 0.1% of ship's purchase price/month
Crew Salaries:	
Pilot	6,000
Navigator	5,000
Engineer	4,000
Steward	2,000
Medic	4,000
Gunner	2,000
Marine	2,000

Mortgage or Debts: If the crew are paying off debts on their spacecraft, then these debts must be paid each month. The standard terms for a ship mortgage is paying 1/240th of the cash price each month for 480 months (40 years). In effect, interest and bank financing cost a simple 120% of the final cost of the ship, and the total financed price equals 220% of the cash purchase price.

Ship shares are treated as reducing the *cash price* of the ship, and so reduce the monthly cash payments.

Life Support and Supplies: Each stateroom on a ship costs Cr. 2,000 per month, occupied or not. This cost covers supplies for the life support system as well as food and water, although meals at this level will be rather spartan. Each low passage berth costs Cr. 100 per month.

Fuel: Fuel costs Cr. 500/ton for refined fuel, or Cr. 100/ton for unrefined fuel. Fuel requirements for Jumping and maintaining power are covered on page 107.

Repairs and Maintenance: A ship needs maintenance, which costs 0.1% (1/1000th) of the total cost of the ship per year and requires a shipyard. Maintenance should be carried out each month. If maintenance is skipped or skimped on, roll 2d6 each month, with a +DM equal to the number of months skipped. On an 8+, the ship takes damage to a random system. Roll on the system degradation table for the number of hits.

Skipping Out On Debts

Ship captains hoping to avoid crippling repayments on multi-million credit loans may be tempted to skip out on repayments, Jumping to distant systems to make a new life for themselves. If the characters do so, they may be chased by ship tracers (bounty hunters) employed by the bank, or logged as criminals in the Imperial database and hunted down by naval vessels. For each new system, roll 2d6 and apply the modifiers below. If the result is an 8 or more the characters will be hunted for their crimes while in the system. A natural 12 means the characters have been found regardless of modifiers.

Per parsec distant	−1, reset every time the characters are discovered.
Changes to the ship (repainting, altering transponders, refits, and so on)	−1 to −3
Per ten million credits of ship stolen	+1
If the characters have visited this system more than once recently	+2
Payment is less than one month overdue	−4
Payment is one to six months overdue	+4
Payment is seven to twelve months overdue	+2
Payment is one year or more overdue	+0
Add local Law Level −5.	

SYSTEM DEGRADATION

Roll	Number of Hits
1–3	1
4–5	2
6	3

For the effects of damage see page 150. For details about repairing damage, see page 143. Repair supplies cost Cr. 10,000/ton.

Crew Salaries: Hired crew members must be paid each month.

Berthing Costs: Landing at a starport incurs a cost, which varies wildly from world to world. See Starports, page 178.

Mortgages Made Easy

Although talk of *Traveller's* ship mortgages can seem complex it follows a very simple procedure:
1. Work out the cash price of the ship (including any 10% discount for a standard design, not including any fuel or ammunition).
2. Count up the ship shares that characters can put towards the ship. Reduce the cash price by 1% for every ship share contributed.
3. Divide the reduced price by 240. This is the montly payment.
4. Pay this payment every month for 40 years.

ENCOUNTERS

Space is unimaginably vast – on a galactic scale, stars are little wisps of hydrogen and gas giants are just specks of matter. If ships travelled through the whole of the space in a system, they would never encounter each other. However, spacecraft crowd to a few places in any system, such as the hundred-diameter Jump limit of colonised worlds, to the industrial belts in orbit, and to the gas giants and settled moons. Outside these regions, the chance of an encounter is negligible.

For a random encounter, roll 1d6 every week, day or hour, depending on how busy local space is. On a 6, the ship has encountered something – roll d66 on the table below, applying DMs to the tens dice only. (Thus, Settled Space has a range of 21–76, and Wild Space has a range of 01–56.)

Encounters in **bold** cannot be ignored – they are potentially hostile ships or encounters that will force the characters to respond.

The encounter distance depends on the results of a Sensors check (modified by the other vessel's attempts at Stealth, if any). Civilian vessels and military craft not on manoeuvres broadcast an IFF beacon, which gives a +4 DM to detection attempts.

ENCOUNTER MODIFIERS

Zone	DM	Range	Description
Highport	+3	41-96	The space near an orbital starport.
High-Traffic Space	+2	31-86	The space near an industrial world with a high-class starport.
Settled Space	+1	21-76	Most core worlds in the Imperium.
Border Systems	+0	11-66	Outlying worlds near the border, such as the Spinward Marches.
Wild Space	-1	01-56	Amber or Red worlds.
Empty Space	-4	01-26	Untravelled space or unexplored systems.

SPACE ENCOUNTERS

d66	Encounter	d66	Encounter
01	Alien derelict (possible salvage)	51	**Hostile vessel** (roll again for type)
02	**Solar flare** (1d6 × 100 rads)	52	Garbage ejected from a ship
03	Asteroid (empty rock)	53	Medical ship or hospital
04	Ore-bearing asteroid (possible mining)	54	Lab ship or scout
05	Alien vessel (on a mission)	55	**Patron** (roll on the patron table, page 81)
06	Rock hermit (inhabited rock)	56	Police ship
11	**Pirate**	61	Unusually daring pirate
12	Derelict vessel (possible salvage)	62	Noble yacht
13	Space station (1–4: derelict)	63	Warship
14	Comet (may be ancient derelict at its core)	64	Cargo vessel
15	Ore-bearing asteroid (possible mining)	65	Navigational buoy or beacon
16	Ship in distress	66	Unusual ship
21	Pirate	71	**Collision with space junk** (collision!)
22	Free trader	72	Automated vessel
23	**Micrometeorite storm** (collision!)	73	Free trader
24	**Hostile vessel** (roll again for type)	74	Dumped cargo pod (roll on random trade goods)
25	Mining ship	75	Police vessel
26	Scout ship	76	Cargo hauler
31	Alien vessel (1–3: trader, 4–6: explorer, 6: spy)	81	Passenger liner
32	Space junk (possible salvage)	82	Orbital factory (roll on random trade goods)
33	Far trader	83	Orbital habitat
34	Derelict (possible salvage)	84	Orbital habitat
35	Safari or science vessel	85	Communications satellite
36	Escape pod	86	Defence satellite
41	Passenger liner	91	Pleasure craft
42	Ship in distress	92	Space station
43	Colony ship or passenger liner	93	Police vessel
44	Scout ship	94	Cargo hauler
45	Space station	95	System defence boat
46	X-boat courier	96	Grand fleet warship

ENCOUNTER DISTANCE

Sensors Check Effect	Encounter Distance
Failed	1d6 × 500 km
1	1d6 × 1,000 km
2	2d6 × 1,000 km
3	1d6 × 5,000 km
4	2d6 × 5,000 km
5	1d6 × 10,000 km
6+	2d6 × 10,000 km

Collisions, signals and solar flares are obviously exempt from encounter distance rules.

Collision!: Almost any collision at high speed will destroy even the most powerful spacecraft. In this case, the ship has collided with a tiny object that has nevertheless smashed into the hull with great force. The ship suffers 2d6 damage (see page 150 for the effects of damage). If a pilot was on duty at that time, he may make a Pilot check to avoid disaster.

Distress Signals: Ships in the Imperium transmit the standard timestamped SOS message (also known as Mayday in Solomani or Signal GK in Vilani) when in distress. Any vessel which detects an SOS is legally required to respond and offer assistance or contact the authorities. Failure to render assistance is a criminal offence but the harsh requirements of life support and orbital mechanics mean that many deaths in space are slow ones, where a crew know they are doomed but have days or weeks in which to contemplate it. Most ships carry emergency low berths where the crew can freeze themselves and wait for rescue.

Some distress calls are fakes, intended to draw ships in so they can be attacked.

Mining: A ship carrying mining drones can mine an asteroid for useful ores. Roll 2d6 on the Asteroid Mining table to determine how many tons of ore are available.

Result	Ore Available (see pages 165–166 for details)
2	2d6 tons of crystals and gems
3–4	2d6 × 20 tons of common ore
5–6	2d6 × 50 tons of common ore
7–8	2d6 × 10 tons of uncommon ore
9–11	2d6 × 20 tons of uncommon ore
12	1d6 tons of radioactives

Police Vessel: This result may also indicate a military vessel or government ship. A police vessel will aid the characters if they are attacked, but will also challenge them to identify themselves and will scan them for contraband cargo.

Pirate: Pirates operate in three ways, all aimed at avoiding contact with the authorities at a spaceport (except in lawless systems where pirates operate with impunity). Some ambush ships that are travelling through normal space to outlying moons and colony worlds. Others lurk around the hundred-diameter mark, hoping to surprise a ship as it prepares to Jump. The pirates then quickly loot the most valuable cargo and supplies and Jump themselves before the authorities arrive. The third category of pirates have agents and spies in the starport, and know exactly which ships are suitable targets.

Pirates use Corsair-class vessels for preference, but many are in armed Free Traders or even armed Scouts.

Salvage: A derelict vessel or jettisoned cargo can be salvaged. Salvaging requires at least one person to leave the salvaging ship and enter the derelict in order to physically move the salvage between ships. Imperial law permits salvage, but the discovery must be registered first with the system starport, if any. Roll 2d6 on the salvage table, applying a DM of –0 to –6 depending on how damaged the derelict is. If the result is an 8 or more, then it includes all the potential salvage in the table below it.

SALVAGE

Roll	Result
3 or less	**Hazard!** The ship's reactor is damaged, the ship is about to break up, there is a virus loose aboard ship, an alien monster killed the crew...
4	**No salvage.** Nothing useful can be recovered.
5	**Junk.** Minor personal effects, spare parts, trophies and other junk.
6	**Fuel.** 2d6 × 10 tons of fuel can be extracted from the salvage (up to the derelict's maximum capacity).
7	**Equipment:** Equipment like vacc suits, medical supplies or weapons, with a total value of 2d6 × 2,000 credits.
8	**Cargo:** 2d6 tons of the derelict's cargo. Roll d66 on the Trade Goods table (pages 165–166).
9	**Considerable Cargo:** 2d6 × 10 tons of cargo (up to the derelict's maximum cargo). Roll d66 on the Trade Goods table (pages 165–166).
10	**Interesting Artefact:** An alien relic, useful personal data, mail cannister or other adventure hook – or a survivor in a low berth.
11	**Fittings:** Weapon turrets, ship's computers or vehicles, with a total value of 2d6 × 0.25 MCr.
12	**Ship:** The ship is potentially repairable.

Pirates have been known to use derelicts as bait.

FUEL

Most ships use refined hydrogen as a fuel for their fusion engines and Jump drives. Starports (see page 178) and virtually any other facility that regularly hosts spacecraft will offer refuelling facilities. Hydrogen is obtained from water or from the atmospheres of gas giants, and refined fuel costs Cr. 500 per ton.

Some out-of-the-way places only offer unrefined fuel for only Cr. 100 per ton. Using unrefined fuel is dangerous when Jumping.

A ship with fuel scoops may gather fuel from bodies of water using hoses. It may also scoop hydrogen from a gas giant. Scooping takes 1–6 hours and requires a successful Pilot skill check. Fuel gathered 'in the wild' is unrefined, but a ship with fuel processors may refine it.

JUMP TRAVEL

Jump travel is the only known means by which a vessel may travel faster than the speed of light. To Jump, a ship creates a bubble of hyperspace by means of injecting high-energy exotic particles into an artificial singularity. The singularity is driven out of our universe, creating a tiny parallel universe which is then blown up like a balloon by injecting hydrogen into it. The Jump bubble is folded around the ship, carrying it into the little pocket universe.

This new universe is short-lived, and will eventually collapse, precipitating the ship back into normal space several light-years from its original position.

A ship can only safely Jump when it is more than one hundred diameters distant from any object. A vessel could only Jump away from Earth when it is more than 1.27 million kilometres distant (as well as 140 million kilometres away from Sol and 300,000 kilometres away from the Moon). Gravity can cause a Jump bubble to collapse prematurely, bringing a ship back into normal space early (so if a ship tried to Jump from Earth to Mars when the Sun was between the two, the vessel would fall out of Jump space as soon as it came within one hundred diameters of the Sun.

Preparing for Jump

To Jump, the following procedures must be followed:

- **Astrogation:** The Jump needs to be plotted. This is an Easy (+4) Education-based Astrogation check taking 10–60 minutes, modified by the Jump distance (thus, a Jump–4 gives a –4 DM to the check). If the check is failed, then the astrogator must plot the Jump again. A Jump cannot be made until the astrogation calculations are complete. Astrogation can be done in advance (a Jump is normally plotted while the ship is travelling out to the hundred-diameter distance).

- **Divert Power:** A Jump drive requires a tremendous amount of power to function which must be supplied by the ship's power plant. On many vessels, especially older ships, the power plant strains to provide this much, leading to the tradition of 'Jump dimming' where non-essential systems including lighting are shut down to allow for Jump. If insufficient power is available the Jump drive cannot be activated. Firing the Jump drive is an Average (+0) Education-based Engineer (Jump drive) check taking 10–60 seconds. The Effect of this check aids the Jump roll.

- **Jump!:** Roll 2d6 and add the following DMs. If the result is 0 or less, the ship misjumps (see below). If the result is 8+ the Jump is accurate. Any other result is an inaccurate Jump (which is only a minor setback).
  - + the Effect of the divert power Engineer check
  - –2 per Jump drive hit
  - –2 for using Unrefined fuel
  - –8 if still within the hundred-diameter limit

Jump Travel

A Jump carries the vessel a number of parsecs equal to the Jump number. Jumps of less than one parsec (less than three light years, or one hex) are possible, and count as Jump–1 for the purposes of astrogation and fuel expenditure. Regardless of how far the ship Jumps, it *always* stays in Jump Space for roughly one week (148+6d6 hours).

While in Jump space, the ship is completely and utterly cut off from the universe. It hangs in a shimmering bubble of boiling hydrogen, a pocket dimension from which nothing can escape. It cannot communicate with the normal universe, not even by psionic means. It is utterly alone.

When the ship exits Jump space after an accurate Jump, it tends to arrive close to the target world, but outside or on the verge of the hundred-diameter limit. Inaccurate Jumps just dump the ship somewhere in the inner system, requiring a long space flight.

Misjumps

On rare occasions, normally because of a lack of maintenance or using unrefined fuel, a ship can misjump. Some misjumps are lethal, causing the Jump bubble to collapse early or for time in the bubble to flow differently, so that trillions of subjective years pass inside the bubble and all that comes out the other end is hard radiation caused by protons exceeding their half-life. A merciful Referee, though, may wish to subject his players to the most survivable form of misjump, where the ship ends up 1d6 × 1d6 parsecs in a random direction.

LIFE SUPPORT
Radiation

Radiation is a constant danger in space. Modern hull materials shield against most radiation; coupled with the added protection offered by hydrogen fuel tanks lining the inner hull this means that the exposure suffered by most spacers is only a few times that of a planetlubber. Characters in vessels flying too close to a star or with breached hulls or damaged reactors do risk exposure.

Radiation exposure is measured in rads. Once a character has absorbed a certain number of rads, he will suffer certain effects. One problem with radiation exposure is that while physical symptoms can be treated and may heal, the radiation never goes away. The character's rads must be tracked. Further exposure adds to what the character is already carrying around until a deadly level is reached. Accumulated rads can be removed using anti-rad drugs.

Effects are suffered each time a character is exposed to radiation. Thus a character who has absorbed 75 rads and recovered from the effects, who absorbs another 20 from a solar flare, now has an exposure of 95 rads whether he suffers any serious effects this time or not. He is fast approaching a moderate dose.

Radiation Exposure

Characters exposed to a radiation weapon will receive a one-time dose of radiation. Entering a radioactive area or being exposed to a leak or solar flare will cause exposure each round or hour.

RADIATION EXPOSURE

Radiation Source	Rads
Minor reactor leak	2d6/hour
Serious leak	2d6/20 minutes
Minor solar flare	1d6 × 100/hour
Major flare	3d6 × 100/hour

Vacc suits and other protection reduce radiation exposure.
Vacc Suit: Decreases exposure by 50.
Hazard Suit or Battle Armour: Decreases exposure by 200.
Starship Armour: Decreases exposure by 500.

RADIATION EFFECTS

Immediate Radiation Exposure	Effects	Cumulative Exposure	Cumulative Effects
<50 rads	None	<50 rads	None
51–150	Nausea (−1 DM to all rolls until the character receives medical treatment), 1d6 damage	51–150	None
151–300	2d6 burn damage	151–300	−1 Endurance permanently
301–500	4d6 burn damage, hair loss	301–500	−2 Endurance permanently
501–800	6d6 burn damage, sterility	501–800	−3 Endurance permanently
801+	8d6 burn damage, internal bleeding	801+	−4 Endurance permanently

Solar flares are still dangerous even to an armoured starship, so when a serious flare is detected space vessels try to hide behind asteroids, moons etc. Orbital stations in systems with a lot of flare activity have layers of radiation-absorbent materials and personnel sanctuaries with even more protection, and can ride out even the worst flares. Such protection is too bulky for most starships although the orbital station itself might provide useful cover.

Suffocation

A spacecraft with power can sustain life support for one person per stateroom for one month comfortably, and for six months at a stretch (number of staterooms × 5,000 person/hours). Without power, this drops to two weeks at most. Other shelters list the amount of air and life support available. The atmosphere can be 'freshened' by a visit to a world with a breathable atmosphere.

Without life support, a character begins to suffocate, suffering 1d6 damage each minute. A character who is utterly without air (such as one who is being smothered or strangled, or who has been dumped out an airlock) suffers 1d6 damage each round instead.

PASSAGE

Passenger travel within the Imperium has been standardised into four overarching categories – high, middle, working and low. In all cases, passage is paid per Jump, and it is assumed that the ship will take between one and three weeks to deliver the passenger to its destination (allowing enough time to fly out, Jump for a week, then travel to the destination world).

High Passage: The passenger receives the best possible treatment. The passenger receives a stateroom and one ton of cargo space for baggage, and can expect high-quality entertainment. Each level of Steward skill (including level 0) allows the steward to effectively look after two high passage passengers on board a ship (so a character with Steward 2 could care for six passengers).

Middle Passage: Middle passage is generally sold on a stand-by basis (so middle passengers can be 'bumped' by high passengers who arrive later – a ship will only take middle passengers if it cannot fill its staterooms with high passage clients). Each level of the Steward skill (including level 0) allows the steward to care for five middle passengers. A baggage allowance of 100 kg is permitted.

Working Passage: This is identical to middle passage but the passenger pays his way by serving on board ship in some capacity.

Low Passage: A low passenger is frozen in a cryoberth and carried as cargo. There is some danger to the passenger – a Medic check is required upon opening the capsule, applying the passenger's Endurance DM to the check. If failed, the passenger does not survive. Low passage costs includes a 10 kg baggage allowance; many commercial cryoberth units have a built-in baggage compartment. It is customary for the ship's captain to contribute 10 credits from every low passage towards a lottery in which each low passenger randomly guesses how many will survive the trip. If the winner is among the dead, the captain collects the prize. This lottery is administered by the ship's steward.

The price of passage varies depending on how far you want to go:

Parsecs Travelled	High	Middle	Low
1	Cr. 6,000	Cr. 3,000	Cr. 1,000
2	Cr. 12,000	Cr. 6,000	Cr. 1,200
3	Cr. 20,000	Cr. 10,000	Cr. 1,400
4	Cr. 30,000	Cr. 15,000	Cr. 1,600
5	Cr. 40,000	Cr. 20,000	Cr. 1,800
6	Cr. 50,000	Cr. 25,000	Cr. 2,000

Of course, passengers who are working their passage do not need to pay but may find themselves doing all the unpleasant jobs that no one else wants to do.

RANDOM PASSENGERS

d66	Passenger	d66	Passenger
11	Refugee – political	41	Ex-scout
12	Refugee – economic	42	Wanderer
13	Starting a new life offworld	43	Thief or other criminal
14	Mercenary	44	Scientist
15	Spy	45	Journalist or researcher
16	Corporate executive	46	Entertainer (Steward and Perform of 1d6–1 each)
21	Out to see the universe	51	Gambler (Gambling skill of 1d6–1)
22	Tourist (1–3 Irritating, 4–6 Charming)	52	Rich noble – complains a lot
23	Wide-eyed yokel	53	Rich noble – eccentric
24	Adventurer	54	Rich noble – raconteur
25	Explorer	55	Diplomat on a mission
26	Claustrophobic	56	Agent on a mission
31	Expectant Mother	61	Patron
32	Wants to stowaway or join the crew	62	Alien
33	Possesses something dangerous or illegal	63	Bounty hunter
34	Causes trouble (1–3 drunkard, 4–5 violent, 6 insane)	64	On the run
35	Unusually pretty or handsome	65	Wants to be on board the PC's ship for some reason
36	Engineer (Mechanic and Engineer of 1d6–1 each)	66	Hijacker or pirate agent

REPAIRS

Damage to a ship falls into three categories – Hull Damage, Structure Damage and System Damage.

A destroyed system costs 2d6 × 10% of its original cost to repair, and cannot be repaired using spare parts – it can only be repaired at a world with the appropriate Technology Level or a well-equipped starport.

Hull Damage: Hull damage can be repaired with a Mechanic check taking 1–6 hours, and consumes one ton of spare parts.

Structure Damage: Structure damage can only be repaired at a shipyard, and requires 1–6 weeks per point of damage. It costs 500,000 Credits per point.

System Damage: A damaged system can be jury-rigged back to functioning, but it will stop functioning again after 1d6 hours. Repairing a damaged system requires not only an Average skill check (Mechanic, Engineer (appropriate speciality) or Science (appropriate speciality)) taking 1–6 hours but also spare parts. The Effect of the check determines how many spare parts are required. Spare parts can be purchased at the cost of Cr. 10,000 per ton.

Effect	Spare Parts Required
1	1 ton
2	0.8 tons
3	0.6 tons
4	0.4 tons
5	0.2 tons
6+	None

SENSORS

The kind of sensors a ship has are dependent on the sensor package installed (see page 108). Compare the range that something is to the sensing ship with the sensors being used and look up the result on the Detail By Sensors table (overleaf).

Visual sensors are electronically-enhanced telescopes.
Thermal sensors pick up heat emissions.
EM sensors detect power flows and transmissions.
Radar/Lidar detects physical objects. It can be *active* or *passive.* If a ship is using active sensors, it is easier to detect (+2 DM to Sensors checks) but detects more about its surroundings.
NAS detects neural activity and intelligence.
Densitometers can determine the internal structure and makeup of an object.

SPACECRAFT SECURITY

Hijacking is one of the biggest threats faced by independent traders, especially those that carry passengers or travel to dangerous space. As the characters will likely face this threat (or *be* this threat) it is worth looking at this in detail.

Cameras and Sensors

Most vessels have security cameras in public areas, such as the galley, cargo bay and lounge, but not in private staterooms (but these can be added at negligible additional cost). Cameras can be viewed from any terminal by an authorised person. Internal sensors on a ship are limited to environmental detectors like smoke alarms, and most ships are not calibrated to, say, detect heat traces or life signs within the hull. It is possible to detect when a door is opened or closed, although these sensors can easily be disabled.

Computers

The difficulty to hack into a ship's computer depends on the rating of the Security software running on it (see page 92). Few ships have

SENSORS TABLE

Range	Distance	Visual	Thermal	EM	Active Radar/Lidar	Passive Radar/Lidar	NAS	Densitometer
Adjacent	<1 km	Full	Full	Full	Full	Limited	Full	Full
Close	1 to 10 km	Full	Full	Full	Full	Limited	Limited	Full
Short	10 to 1250 km	Full	Full	Limited	Limited	Minimal	Minimal	Limited
Medium	1250 to 10,000 km	Limited	Limited	Limited	Limited	Minimal	None	Minimal
Long	10,000 km to 25,000 km	Limited	Limited	Minimal	Minimal	None	None	None
Very Long	25,000 km to 50,000 km	Minimal	Minimal	Minimal	Minimal	None	None	None
Distant	50,000 km+	Minimal	Minimal	None	None	None	None	None

DETAIL BY SENSORS

Level of Detail	Visual	Thermal	EM	Radar/Lidar	NAS	Densitometer
Full	Fine details	Fine temperature gradations, individual heat sources	Individual systems	Fine details	Individual brain activity	Fine details
Limited	Shape and structure	Hot or cold spots	Powerful EM sources	Shape and structure	Level of activity	Internal Structure
Minimal	Basic outline of an object	Hot or cold overall	Presence or absence of activity	Basic outline of an object	Presence or absence of activity	External structure

anything less than Very Difficult (–4) Security, but often the security system will apply only to external connections, and a hacker inside the ship will only face Average (+0) Security software.

Gaining access to the ship's records is an Average (+0) task. Convincing the computer that you are a member of the crew is Difficult (–2). Overriding security systems is Very Difficult (–4), and gaining control of key systems like navigation or power is Formidable (–6). All these are cumulative with the Security software DM – trying to hack into the power core of a warship is going to incur a –12 (doubly Formidable) modifier *at least*. The use of task chains (see page 51) can offset this difficulty somewhat – once you have stolen the identity of a crewmember you have greater access to security, and once you have beaten security you can access key systems more easily, and so on.

Locks
Doors, airlocks, lockers and other secure panels are locked. In general, external locks are tougher than internal ones (increasing the difficulty by +2). Locks can be:

Mechanical: Requiring a key or combination. These can be opened with an Average (+0) Mechanic check or by stealing a key or learning the combination.

Electronic: Requiring a keycard or combination. These can be opened with a Difficult (–2) Engineer (electronics) check or by stealing a key or learning the combination.

Biometric: Requiring a voiceprint, DNA test, palm print or retina scan. These can be opened with a Very Difficult (–4) Engineer (electronics) check or by stealing a sample from an authorised person.

Intelligent: Intelligent locks recognise authorised crew. These can be opened with a Very Difficult (–4) Engineer (electronics) check or by hacking the computer.

Any non-mechanical lock can be opened or closed remotely if the crew wishes to allow this option (but then the doors can also be hacked remotely). Internal doors on a ship are airtight.

Security Systems
Alarms: If an alarm is tripped (hull breach, fire, door being forced open, alarm button pressed) it will alert the crew. The location of the alarm will be shown on computer displays. The average passenger ship has several crew trained in combat; military ships will carry marines. Some vessels will even have security robots who respond automatically to alarms.

Gravity: It is possible to alter the artificial gravity on board. Reducing gravity to zero will limit actions to the level of a character's Zero-G skill. Gravity can also safely be increased up to 3G.

Tranq Gas: Some ships carry tranq gas canisters in the air vents, which can be released automatically. These flood a compartment with gas that forces an Endurance check each round, with a –1 DM per previous check. Any character who fails the Endurance check is knocked unconscious.

Venting Atmosphere: If a compartment is connected to an airlock, then the air can be vented from that area. Characters in that area must make a Strength check to hang on and will also begin to suffocate.

TRAVEL TIMES

Interplanetary Travel: Worlds orbiting the same star are accessible by interplanetary travel, on ships operated by local entrepreneurs, or with a variety of small craft. Interplanetary travel takes long periods of time; since most stellar systems have only one major world, interplanetary travel is infrequent.

Commercial starships usually make two Jumps per month. They spend one week in Jump, followed by one week in the star system, travelling from the Jump point to the local world, refuelling, marketing cargo, finding passengers, leaving the starport and proceeding to a Jump point again. The week in the system usually provides some time for crew recreation and wandering around the planet.

Non-commercial ships usually follow the same schedule of one week in Jump and one week in a system. If haste is called for, a ship may refuel at a gas giant immediately and re-Jump right away. This allows the ship to make one Jump per week but makes no provision for cargo, passengers, or local stops.

INTERPLANETARY TRANSIT TIMES TABLE

Distance (km)	Example	Thrust Rating of Ship					
		1	2	3	4	5	6
1,000		633 seconds	447 seconds	365 seconds	316 seconds	283 seconds	258 seconds
10,000	Surface to Orbit	2,000 seconds	1,414 seconds	1,155 seconds	1,000 seconds	894 seconds	816 seconds
100,000		105 minutes	74 minutes	61 minutes	53 minutes	47 minutes	42 minutes
300,000		183 minutes	129 minutes	105 minutes	91 minutes	82 minutes	73 minutes
400,000	Surface to moon	211 minutes	149 minutes	122 minutes	106 minutes	94 minutes	86 minutes
1,000,000		333 minutes	236 minutes	192 minutes	167 minutes	149 minutes	136 minutes
10,000,000		17.6 hours	12.4 hours	10.1 hours	8.8 hours	7.9 hours	7.2 hours
30,000,000	100 light-seconds	30.42 hours	21.5 hours	17.5 hours	15.2 hours	13.6 hours	12.4 hours
45,000,000	Close neighbour world	37.3 hours	26.4 hours	21.5 hours	18.6 hours	16.7 hours	15.2 hours
100,000,000		55.6 hours	39.3 hours	32.1 hours	27.8 hours	24.8 hours	22.3 hours
150,000,000	One astronomic unit	68 hours	48.11	39.2 hours	34 hours	30.3 hours	27.6 hours
255,000,000		88.7 hours	62.7 hours	51.2 hours	44.4 hours	39.7 hours	36.2 hours
600,000,000	Close gas giant	136.1 hours	96.2 hours	68.0 hours	60.9 hours	60.9 hours	55.6 hours
900,000,000	Far gas giant	166.7 hours	117.9 hours	83.4 hours	74.5 hours	74.5 hours	68.0 hours
1,000,000,000		7.3 days	5.2 days	3.7 days	3.3 days	3.3 days	2.9 days

Corporate Intrigue

On many worlds, the corporations and the nobility are inextricably entwined – lords and dukes sit on the boards of the megacorporations, while corporate money buys the prestige of a noble title. On other planets, the nobility are a bulwark against commercial greed. Imperial society is delicately balanced between these two great estates, and when this balance is disturbed, it is a time of danger and opportunity.

The corporation...
1. ... is a bio-weapons researcher, and is experimenting on the local population, and hires the characters to help cover up its crimes.
2. ... is trying to replace the local planetary governor with a more malleable administrator.
3. ... controls all trade on the planet, and sees the player characters as smugglers and threats to its authority.
4. ... is divided between two factions, who are warring for control of the board.
5. ... has an embarrassing secret in its past that needs to be concealed.
6. ... is being driven offworld by an isolationist regime.

Space Combat

Clashes between spacecraft in *Traveller* take place over distances of thousands of kilometres and over long hours. While a warship may sometimes find itself desperately firing point-defence guns at a swarm of fighters buzzing around its hull many battles are slow, calculated affairs, with spears of brilliant light lancing out into the darkness aimed at where the enemy is predicted to be.

Overview

Each turn in space combat lasts six minutes. Ship combat functions similarly to personal combat, with each character taking up a particular position on board such as pilot, gunner or engineer. In each turn, the characters will have the opportunity to perform several actions or move between positions.

Order of Events

1. **Setup**
   a. Determine range between ships.
   b. Determine crew positions.
   c . Determine initiative.
2. **Manoeuvre Phase**
   a. The position of ships is changed based on their thrust.
3. **Combat Phase**
   a. In order of Initiative, ships can take actions.
   b. Actions include: firing energy weapons, launching missiles, boarding actions.
   c. Reactions include: dodging, point defence, firing sand.
   d. Actions are resolved.
4. **Ship Action Phase**
   a. In order of Initiative ships can take actions.
   b. Actions include: repairing damaged systems, jumping, launching craft.
5. **Go to step 2.**

Starting an Engagement

At the start of an encounter in space, the following must be determined:

Enemy Vessel Locations

If two vessels randomly encounter each other while travelling, the encounter will begin at Very Long range. More often, ships engage near a planet, where the range is Short or Medium.

Adjacent: <1 km
Close: 1 km–10 km
Short: 10–1250 km
Medium: 1250 km–10,000 km
Long: 10,000 km- 25,000 km
Very Long: 25,000 km – 50,000 km
Distant: 50,000 km+

Range Table

Range	Distance	Thrust to Change	Example
Adjacent	<1 km	1	Docked ships
Close	1 to 10 km	1	Nearby vessels
Short	10 to 1250 km	2	Ships in same orbital path
Medium	1250 to 10,000 km	5	Surface to orbit
Long	10,000 km to 25,000 km	10	Near a planet
Very Long	25,000 km to 50,000 km	25	Within jump limit
Distant	50,000 km+	50	Distant ships

Crew Positions

At the start of an engagement, all crew must be assigned to a position on board ship. There can be only one pilot, but other than that, any number of people can occupy the same position. It is generally a good idea to cover as many as possible. Characters can change positions during combat but it is important to know where they start.

- **Pilot:** Flies the ship, responsible for changing course and for evasive manoeuvres.
- **Captain:** Commands the ship, and can use Leadership and Tactics skills.
- **Drive Engineer:** An engineer can be assigned to each of the M-drive and the J-drive.
- **Turret Gunner:** Each turret has its own gunner. A character must choose which turret he is manning at the start of the combat.
- **Bay Gunner:** Each bay weapon has its own gunner.
- **Damage Control:** A character assigned to free-floating damage control can repair any system.
- **Marine:** Prepares to repel boarders, or to board enemy ships.
- **Passenger:** Passengers are all people aboard ship who are not assigned a position and are assumed to be waiting in staterooms.

Automated Positions

The ship's computer can cover several positions if it is running the appropriate software:
- Fire Control programs can either act gunners or aid existing gunners.
- A ship equipped with repair drones and Auto-Repair software acts as damage control.
- A ship running an Intellect program and Expert Pilot can be the pilot.
- A ship equipped with repair drones and running an Intellect program and Expert Engineer (M-drive or J-drive) can be a drive engineer.

For more information on ship software, see page 113.

Initiative

Each ship in an engagement rolls 2d6 to determine their starting Initiative score. The ship with a greater Thrust score gains a +1 DM to its roll.

The commander of each spacecraft (or each fleet, if more than one ship is involved on each side) may a Tactics (naval) check. The Effect is added to the Initiative of the spacecraft (or fleet).

MANOEUVRE PHASE

In each manoeuvre phase, a ship can allocate Thrust either to movement (closing or increasing the range to a target) or manoeuvring. The amount of thrust needed to close or open by one range category is given in the Range Table – the number given is the amount of thrust needed to move *from* that range category to either a closer or more distant one. A ship can spend thrust over multiple rounds to close or open a range category.

The Beowulf *is 10,000 Kilometres away from a planet (Medium range). It will cost the* Beowulf *five thrust to close from Medium to Short range. Once at Short range, it will take another two thrust to close to Close range or to back out to Medium range again.*

If two ships are travelling towards each other, then add together the Thrust allocated by both ships to movement to see how close they are to changing range categories; if one ship is trying to escape from the other then subtract the lower Thrust from the higher value to work out the effective change in position – the faster ship will either gain slightly or pull away slightly.

Any thrust not allocated to movement is allocated to manoeuvring, which is done in the combat phase. Manoeuvring does not change the range to the target but allows the ship to position itself better for an attack or to avoid incoming fire.

COMBAT PHASE

In each combat phase, a ship may manoeuvre, fire any of its weapons, or board enemy vessels.

Manoeuvre

A ship can manoeuvre, dodging and weaving to evade enemy fire or to position itself for a better attack. A ship may make a number

of manoeuvre actions per combat phase equal to the amount of Thrust allocated to manoeuvring.

A manoeuvre action can be used to:

- **Dock with another vessel:** The pilot must make a successful Pilot check. If the other ship does not wish to be docked with then make opposed Pilot checks; the ship trying to dock suffers a –2 DM. When docked, boarding actions can take place.
- **Help line up a shot:** A pilot may attempt to aid his gunners by providing a stable firing platform along an optimum attack vector. The pilot makes a Pilot check to aid his gunners as per the normal rules on task chains (see page 51).
- **Dodge incoming fire:** Any leftover Thrust can be spent as a reaction to dodge incoming fire. See page 149.

Firing Beam Weapons

To fire a beam weapon, the gunner must make a successful Gunner (turret) or Gunner (capital weapons) check, modified by the range to the target (see page 148). When targeted by a beam weapon, the enemy ship may react by dodging, firing sand or triggering screens (see Reactions). A gunner may fire any or all of the weapons in his turret or bay but each turret or bay may only fire once per round.

If the attack is successful it will inflict damage. See Damage on page 150. Damage is resolved *after* all attacks have been made in a round.

Launching Missiles

Unlike beam weapons, which travel at the speed of light and so hit the enemy vessel almost instantly, missile weapons take time to cross the gulf of space. Missiles travel at Thrust 5 towards their designated target and their position can either be tracked as additional craft in the battle or, for the sake of simplicity, they can be assumed to strike after a number of turns dependent on launch range:

Range	Turns to Impact
Adjacent	-
Close	-
Short	1
Medium	1
Long	2
Very Long	5
Distant	10

Missiles cannot be used at Adjacent or Close range.

The gunner must make a Gunner (turret) or Gunner (capital weapons) check to determine how accurate the missile launch was. The effect of the Gunner check determines the chance that the missile will strike its target when it hits.

Surprise

Stealth is virtually impossible in space – a spacecraft shows up as a hot spot against the cold, so unless it is hiding behind an asteroid or other object, it is easy to detect. The only way to attack from surprise is to appear as a harmless ship until you open fire, or to jump in and attack without warning. If a ship has surprise, then its opponents do not act in the Combat Phase of the first round.

WEAPON RANGE MODIFIERS

Weapon	Adjacent	Close	Short	Medium	Long	Very Long	Distant
Lasers							
Pulse Laser	-1	-1	+0	-1	-2	-3	Out of range
Beam Laser	-2	-1	-1	+0	-1	-1	-2
Particle Beam	-3	-2	-1	-1	+0	-1	-1
Fusion Gun	-2	-2	-1	+0	-1	-1	-2
Meson Gun	-4	-3	-2	-1	+0	-1	-2
Missiles (flight time)	-	-	1	1	2	5	10
Sandcaster	-2	+0	-2	Out of range	Out of range	Out of range	Out of range

---

Quick Resolution of Boarding Actions

To resolve a boarding action abstractly, roll 2d6 for both sides, adding the following modifiers:

Superior Armour: +1

Superior Weaponry: +1

Superior Skills and Tactics: +2

Superior Numbers: +1

Defender has no Ready Marines: −2

Compare the difference on the Boarding Action Table. If there is no difference, the battle continues next round.

BOARDING ACTION TABLE

Difference	Attacker Winning	Defender Winning
1–3	Defender has no free ship action this round; attacker has a +2 DM to next boarding action roll. The ship suffers one hit.	Defender has a +2 DM to next boarding action roll. The ship suffers one hit.
4–6	Boarding action is successful; the ship suffers 2d6 hits. The attackers may take control of the ship after another turn of pacification.	Boarding action is driven off. Attackers must retreat to their ship or out into space. If unable to do either, they are killed or captured.
7+	Attackers storm the ship and may take control of it immediately.	Attackers are defeated; if the enemy ship is docked, then the defenders may mount a counter-attack and gain a +4 DM in the first round of the new boarding action

Gunnery check	Missile to-hit roll	Gunnery check	Missile to-hit roll
Failed With Effect –6 or less	11+	Succeeded With Effect 0	8+
Failed With Effect –2 to –5	10+	Succeeded With Effect 1–5	7+
Failed With Effect –1	9+	Succeeded With Effect 6+	6+

A target may react to incoming missiles by dodging or point defence. This reaction does not take place until the turn the missiles arrive at their destination, so any manoeuvring or shooting must wait until then.

Smart Missiles

Advanced smart missiles are able to correct their course in flight and even turn around and re-acquire targets they have missed. The missile to-hit roll for smart missiles is always 8+ and if they miss they make another attack every turn until they are destroyed with point defence, jammed with ECM or otherwise dissuaded.

Boarding Actions

If two ships are Adjacent or docked, then a boarding action can be attempted. If the ships are docked, then the attackers may cross over safely via airlocks. If the ships are merely adjacent, then the attackers must use thruster packs or small craft to cross over. While crossing, the attackers may be attacked with point defence weapons or by firing sand (see Reactions).

Once across, boarding actions can be resolved using the personal combat rules or the quick boarding rules (see opposite).

Special Attacks

Several types of weapons have their own rules.

- **Meson Guns:** Meson guns ignore armour and always roll on the Internal Damage table. Furthermore, they also automatically inflict a radiation crew hit in addition to any other damage.
- **Fusion Guns:** Fusion guns inflict a radiation crew hit in addition to any other damage. The bonus radiation hit suffers a –DM equal to the ship's armour.
- **Particle Beams:** Particle beams inflict a radiation crew hit in addition to any other damage. The bonus radiation hit suffers a –DM equal to the ship's armour.
- **Nuclear Missiles:** Nuclear missile hits inflict a radiation crew hit in addition to their normal damage. The bonus radiation hit suffers a –DM equal to the ship's armour.
- **Sandcasters:** While the primary purpose of a sandcaster is to block incoming beam attacks, they can also be used as an attack. A sandcaster has a range of Close and inflicts 1 damage.

Reactions

A ship may react to incoming attacks. The following situations allow reactions:

- **Targeted by a beam attack**
- **Incoming missile**
- **Attempted boarding**

The ship's Initiative determines how many times it may react in a round.

> ### Burning Initiative
> A ship may reduce its Initiative score to get bonus reactions. Each bonus reaction costs two Initiative and affects the ship's Initiative score for the following round only.

Initiative	Reactions
0–4	1
5–8	2
9–12	3
13+	4

Dodge

Each dodge reaction counts as a manoeuvre and so is limited by the amount of Thrust allocated to manoeuvres. One point of Thrust allows a single dodge. To dodge, the pilot must make a Pilot check. If successful, the attack suffers a –2 DM.

Point Defence

Turret lasers can be used to destroy incoming missiles. The missiles can only be destroyed in the moments before they strike the spacecraft as they are too small and fast-moving to effectively target at greater ranges. The gunner must make a Gunner (turrets) check against the missile. If successful, the missile is destroyed. A gunner may keep making Gunner checks against missiles until he misses an attack; each attack suffers a cumulative –1 penalty. Attacks may be directed against different incoming missiles.

Point defence can also be used to destroy incoming boarders in the same way.

Fire Sand

Turrets equipped with sandcasters can fire sand at incoming beam attacks. Each reaction spent on firing sand allows the gunner to make a Gunner (turrets) roll. If successful the damage of each beam in the incoming attack is reduced by 1d6. Resolve each beam separately. Each firing of sand costs one canister of sand.

Sand can also be directed against incoming boarding parties using thruster packs. If the sand attack is successful, each target in the boarding party takes 8d6 damage.

System Defence Boat

A non-starship specifically intended for defensive operations inside a star system. Developed on the principle that a non-starship (because of the increased armament made possible by its lack of jump drives) can normally defeat a starship of equal tonnage. SDBs are typically stationed at the vital points of a system (the gas giants, the asteroid belt, the major world, and so on) and attack invading vessels according to one or more predetermined plans. System Defence Boats range in size from 100 to 5000 tons and are constructed at all tech levels from 8 to 15. There are hundreds of different types, depending upon the specific mission for which they are designed. Because SDBs have no jump drives, shifting them from system to system can be a problem. Some types have jump shuttles which fit to the craft and provide jump capability. Another method is simple transport in large bulk cargo containers; The SDBs are loaded into 10,000-ton or 20,000-ton bulk carriers for the multi-parsec journey. This method, of course, is not recommended if immediate combat is expected at the destination.

Trigger Screens

Screens can be activated as long as the commander or one of the gunners has the Gunner (screens) skill at Level 0 and the ship has the required screen type (nuclear against nuclear missiles and fusion guns; meson against meson guns). Screens reduce the damage from the attack by 2d6+the operator's Gunnery (screens) skill. Nuclear dampers also negate radiation hits against crew from nuclear missiles and fusion guns.

SHIP ACTION PHASE

In each ship action phase, a ship may take one ship action per crew position manned (including automated positions). Ship actions are wholly internal to the ship.

Repair Damaged System

A character on damage control may attempt to repair a damaged system by making an Education-based Mechanic check. If the check is successful, determine how many hits are repaired:

Mechanic Check Effect	Hits Repaired
0	1
1–5	2
6+	3

A ship with repair drones and the Auto-Repair software also makes one or two repair checks in the ship action phase (unless it is being used to assist other repair attempts – see page 113 for details about the software). The standard Auto-Repair software makes the check with a +1 DM.

These are battlefield repairs only and will break down as soon as the battle is over unless repaired properly using the rules on page 143.

Sensor Lock

A ship's sensors operator may make an Education-based Sensors check to establish a lock on an enemy vessel. Attacks made against a vessel that has been locked onto gain a +1 DM. When using missiles the initial Gunner check gets this bonus – the individual missile to hit rolls do not benefit directly. Smart missiles are unaffected.

Electronic Warfare

A ship's sensors operator may attempt to jam radio communications and sensor locks by making an opposed Intelligence-based Sensors check against the sensors operator of the opposing vessel. Electronic warfare can be used to break sensor locks.

Alternatively, electronic warfare can be used to attack smart missiles that are targeting the ship. The sensors operator makes a Difficult (–2) Sensors check and, if successful, a single attacking smart missile ceases attacking. The sensors operator may continue making checks to disable smart missiles until he fails one, with a cumulative –1 DM each time.

Increase Initiative

The commander of a spacecraft may make a Leadership check and increase the Initiative of his spacecraft by the Effect of the check. This increase only applies for the following round.

Change Positions

Any characters not doing anything else may elect to swap positions during the ship action phase. As of the next round they are considered to be manning their new position rather than their previous one.

DAMAGE

Damage to spacecraft is tracked in two ways – by Hull and Structure points (which represent damage to the structure of the spacecraft) and by hits to systems such as engines and turrets. Systems can take a variable number of hits before being destroyed, depending on the system in question. A ship can endure one Hull damage per fifty tons, rounding down. A ship that runs out of Hull Damage will rapidly be incapacitated. A ship can endure one Structure damage per fifty tons, rounding down to a minimum of one. A ship that runs out of Structure breaks up and is completely destroyed.

The effects of damage are determined by subtracting the ship's armour from the damage rolled by the weapon, then consulting the damage table to determine the number of hits inflicted. Then roll on the Location table for each hit.

A double hit applies two hits to the same location. A triple hit applies three hits to the same location.

Damage	Effect
0 or less	No damage
1–4	Single Hit
5–8	Two Single Hits
9–12	Double Hit
13–16	Three Single Hits
17–20	Two Single Hits, Double Hit
21–24	Two Double Hits
25–28	Triple Hit
29–32	Triple Hit, Single Hit
33–36	Triple Hit, Double Hit
37–40	Triple Hit, Double Hit, Single Hit
41–44	Two Triple Hits
For every extra three points	+1 Single Hit
For every extra six points	+1 Double Hit

Use the Small Craft table for vessels of less than 100 tons. For larger vessels, use the External Damage table. When a ship runs out of Hull, damage will begin to transfer to the Internal Damage table.

Hull: Reduce the ship's Hull by one. If a ship's Hull is 0, then apply the hits to the location in the same row of the Internal Damage table.

LOCATION TABLE

2d6	Small Craft	External Damage	Internal Damage
2	Hull	Hull	Crew
3	Power Plant	Sensors	Jump Drive
4	Manoeuvre Drive	Manoeuvre Drive	Power Plant
5	Fuel	Fuel	Bay
6	Hull	Hull	Structure
7	Armour	Armour	Hold
8	Hull	Hull	Structure
9	Turret	Turret	Bay
10	Hold	Manoeuvre Drive	Jump Drive
11	Power Plant	Sensors	Power Plant
12	Bridge	Hull	Bridge

Sensors: The sensors are hit.
First Hit: −2 DM to all Sensors checks.
Second Hit: Sensors are disabled preventing the ship from making Sensors checks and on making attacks on targets beyond Adjacent range.
Third Hit: Sensors are destroyed.
Subsequent Hits: Count as Hull hits.

Bridge: The bridge is hit.
First Hit: The crew suffer a Crew Hit, rolling on the Normal Damage column.
Second Hit: The bridge is disabled. Until the bridge is repaired, the ship cannot take any Pilot or Sensor actions, it cannot jump, and any attacks suffer a −2 DM.
Third Hit: The bridge is destroyed.
Subsequent Hits: Count as Structure Hits.

Structure: Reduce the ship's Structure by one. If a ship's Structure is reduced to 0, the ship is destroyed.

Armour: Reduce the ship's armour by one. If the ship's armour is already 0, then this counts as a Hull hit.

Turret: A random turret is hit.
First Hit: The turret's tracking mechanism is damaged. It can still be used, but all attacks suffer a −2 DM.
Second Hit: The turret and all weapons in it are disabled.
Third Hit: The turret and all weapons in it are destroyed.
Subsequent Hits: Count as Hull hits.

Bay: A random bay is hit.
First Hit: The bay's targeting mechanism is damaged. It can still be used, but all attacks suffer a −2 DM.
Second Hit: The bay weapon is disabled.
Third Hit: The bay weapon is destroyed.
Subsequent Hits: Count as Structure hits.

J-Drive: The Jump drive is hit.
First Hit: All attempts at Jump suffer a −2 DM to Engineering (jump) checks.
Second Hit: The jump drive is disabled.
Third Hit: The jump drive is destroyed.
Subsequent Hits: Count as Structure hits.

M-Drive: The manoeuvre drive is hit.
First Hit: Reduce the ship's thrust by one.
Second Hit: Reduce the ship's thrust by 50%.
Third Hit: The drive is disabled.
Subsequent Hits: Count as Hull hits.

Power Plant: The power plant is hit.
First Hit: Damaged.
Second Hit: The crew suffer a Crew Hit, rolling on the Radiation Damage column.
Third Hit: The Power Plant is destroyed and the ship is disabled.
Subsequent Hits: Count as Structure Hits.

Fuel: The fuel is hit.
First Hit: Causes a minor fuel leak of 1d6 tons per hour.
Second Hit: Destroys 1d6 × 10% of stored fuel.
Third Hit: Destroys fuel tank.
Subsequent Hits: Count as Structure Hits.

Hold: The crago hold is hit.
First Hit: Destroys 1d6 × 10% of stored cargo.
Second Hit: Destroys 1d6 × 10% of stored cargo.
Third Hit: Destroys cargo hold and everything in it.
Subsequent Hits: Count as Structure Hits.

Crew: Each hit on the crew indicates that radiation or flying debris has injured one or more crew. Roll 2d6 on the appropriate column on the Crew Damage table. See page 141 for details of radiation damage.

Roll	Normal Damage	Radiation Damage
4 or less	Lucky escape – no damage	Lucky escape – no radiation
5–8	One random crew member suffers 2d6 damage	One random crew member suffers 2d6 × 10 rads
9–10	One random crew member suffers 4d6 damage	One random crew member suffers 4d6 × 10 rads
11	All crew suffer 2d6 damage	All crew suffer 2d6 × 10 rads
12	All crew suffer 4d6 damage	All crew suffer 4d6 × 10 rads

Spacecraft Weapons and Personal Combat

On rare and messy occasions, characters may find themselves using ship-scale weapons on smaller vehicles or even people. Starship weapons are incredibly powerful and destructive – multiply the damage from a starship weapon by 50 to get the damage in personal-scale terms. The exceptions are sandcasters, which do only a single point of damage against enemy spacecraft but 8d6 on a personal scale.

PSIONICS

In *Traveller* a few humans – and other sophonts – have developed potent psionic abilities such as telepathy, telekinesis and even teleportation. In the Imperium, learning to harness this gift is a difficult process, made even harder by the Imperial ban on psionics. The Psionics Institutes that study mental powers have gone underground, following a disastrous attempt to guide human development centuries ago. In other civilisations, such as the Zhodani Consulate, psionics are an accepted part of the human condition.

Psionic Strength

Psionics are powered by the Psionic Strength characteristic (abbreviation Psi). This characteristic cannot be rolled or bought during character creation without the Referee's permission. To determine a character's Psionic Strength, roll 2d6 and subtract the number of terms served by the character in any career (Psionic Strength diminishes over time unless actively used). For example, a 38 year old character (five terms served) would roll 2d6–5 to determine his Psionic Strength. A character with a Psionic Strength of 0 has no potential for psionic powers.

Using a psionic talent costs a number of Psionic Strength points, temporarily reducing the character's total. As the Characteristic DM for all Psionic skill checks is determined by the characters' current Psionic Strength total, it gets harder and harder to use powers as the character's strength declines.

Recovering Psionic Strength Points: Expended Psionic Strength points are recovered at the rate of one point per hour, beginning three hours after the character last used a psionic talent.

INSTITUTE TESTING

A character who wishes to develop psionic abilities requires training. In settings where psionics are uncommon or illegal he must find a teacher, normally one of the underground Psionics Institutes. Finding such an instructor is an adventure in itself. Most teachers will charge at least Cr. 5,000 to test the character's abilities. Testing takes two weeks.

The first step is testing a character's Psionic Strength, which is determined as described above (2d6 – number of terms served). If the character still has any Psionic Strength remaining, he can be trained.

Training requires four months of work, and costs Cr. 100,000. As part of training, the character may attempt to learn any of the common psionic talents on the Psionic Training table by making a Psionic Strength check. He may attempt the talents in any order, but suffers a –1 DM per check attempted. If a character learns a talent, he gains that talent at level 0.

Talent	Learning DM
Telepathy	+4
Clairvoyance	+3
Telekinesis	+2
Awareness	+1
Teleportation	+0
Per previous talent acquisition check	–1

For example, Luka has just determined that she has a Psionic Strength of 9. She now rolls to determine powers. She can select powers in any order, so she begins with telekinesis. She roll 2d6+1 (her Psionic Strength DM) +2 (the Telekinesis learning DM), but unfortunately, the dice roll is a 3 for a total of 6 – less than eight, a failure, and so she does not develop telekinesis.

Next, she tries telepathy. She rolls 2d6 +1 (her Psionic Strength DM) +4 (the telepathy learning DM) –1 (one previous talent acquisition check), and gets a total of 10. Luka gains Telepathy at level 0.

PSIONIC TALENTS

There are several psionic talents, each of which works like a skill for the powers in question. A character trained in the use of psionics may develop his talents over time just as if they were normal skills (see page 59). Unlike other skills, psionic talents cannot be used untrained. The most common talents are:

- Telepathy – reading minds and mental communication.
- Clairvoyance – perceiving at a distance.
- Telekinesis – mind over matter.
- Awareness – control over one's own mind and body.
- Teleportation – moving from one point to another instantly.

Each talent grants access to all of its powers – a character with Telepathy 0 can use *life detection*, *read surface thoughts* or *assault* as the situation demands.

Using A Psionic Talent

To activate a talent, the psion must make a skill check using the appropriate talent (Telepathy, Telekinesis, etc), adding his Psionic Strength characteristic DM and any other DMs. He must also spend the listed number of Psionic Strength points if he succeeds,

> ### Special Powers
> The Psionic powers described here are not the only manifestations of psionic ability. There are other, rarer abilities such as precognition, electrokinesis, telepathic control or astral projection that may also be encountered, but these abilities are usually plot devices used by the Referee.

or one point if he fails. If this cost brings him below zero Psionic Strength, then any excess points are applied to his Endurance score as damage. A character with no Psionic Strength points cannot attempt to activate a power.

Using a talent in combat is a significant action.

Many abilities are ranged. The Psionic Range table lists the number of points to project an ability out to a given range – these must be paid as well as any points to activate the ability. Each talent has a different set of costs, with the exception of Awareness – all Awareness abilities apply to the Psion only. The range bands are the same as those for combat; see page 64 for more information.

For example, a Psion could read the mind of a target at Medium range using the Telepathy power read surface thoughts *for 3 Psionic Strength points (2 for the ability, 1 for the range).*

Telepathy

Telepathy is the talent of mind-to-mind contact. It is subtle by nature but can also be used to bluntly crush the wills of those who oppose the telepath.

LIFE DETECTION

The most elementary form of telepathy is the ability to detect the presence of other minds. *Life detection* enables a character to sense the presence of other minds, the number of minds present, the general type of minds (animal, human, and so on) and their approximate location.

Life detection is reasonably sophisticated, and can distinguish intelligent beings from bacteria or unimportant animals in the area. It functions best at detecting intelligent minds. Shielded minds are undetectable (whether the shield is natural or artificial in origin). If an individual whom the telepath knows is 'life detected' he or she will be recognised.

Telepathy, Psionic Strength, 10–60 seconds, Easy (+4).
Costs 1+Range.

TELEMPATHY

The communication of emotions and basic feelings is accomplished by *telempathy*. This ability serves well in the handling of animals and beasts of burden but may also be applied as a psychological weapon against humans. Sending of emotions such as love, hate, fear, and others may influence other beings (although not necessarily in the manner desired). *Telempathy* also allows the emotions and feelings of others to be read by a character. The Effect of the check determines the strength of the projected emotion.

Telepaths will always recognise when someone is using *telempathy* to bend their emotions but others will not. The change in mood may be dramatic and inexplicable but most people will simply ascribe it to the mercurial nature of human emotions. Shielded individuals are immune to *telempathy* as they are all other Telepathy powers.

Telepathy, Psionic Strength, 10–60 seconds, Routine (+2).
Costs 1+Range.

READ SURFACE THOUGHTS

The most widely known feature of Telepathy is the ability to read the thoughts of other individuals. Only active, current thoughts are read by this ability, with the subject (if himself not a telepath) unaware of the activity. Individuals with telepathic ability cannot be read due to the presence of their natural shields, unless they willingly lower their shielding. The Effect of the check determines the clarity of the telepath's perceptions.

Telepathy, Psionic Strength, 10–60 seconds, Average (+0).
Costs 2+Range.

SEND THOUGHTS

Complementary to the ability to *read surface thoughts* is the ability to *send thoughts* to others. Such individuals need not themselves be telepathic to receive such thoughts. Telepathic individuals are normally open to such transmissions, but may close their shields against them if they become bothersome or threatening.

Telepathy, Psionic Strength, 10–60 seconds, Difficult (–2).
Costs 2+Range.

		Telepathy or		
Range	Distance to Target	Clairvoyance	Telekinesis	Teleportation
Personal	Less than 1.5 metres	0	1	1
Close	1.5 to 3 metres	0	1	1
Short	3 to 12 metres	1	2	2
Medium	12 to 50 metres	1	4	2
Long	51 to 250 metres	2	8	4
Very Long	251 to 500 metres	2	-	4
Distant	500 metres to 5 kilometres	3	-	6
Very Distant	5 kilometres to 500 kilometres	3	-	6
Continental	501 to 5,000 kilometres	4	-	8
Planetary	5,000 to 50,000 kilometres	4	-	8

PSIONIC RANGE TABLE

PROBE

The application of great psionic strength will enable a telepath to delve deep into the mind of a subject and to then read his innermost thoughts. Questioning can be used in the procedure to force the subject to divulge specific information. The prober can easily determine deliberate untruths told (thought) by the subject. *Probe* cannot be used against a shielded mind. Again, the Effect of the check determines the clarity of the telepath's perceptions.

Telepathy, Psionic Strength, 1–6 minutes, Very Difficult (–4). Costs 4+Range.

ASSAULT

Violence may be dealt by a telepath. An unshielded mind, when assaulted telepathically, is rendered unconscious immediately and the character suffers 2d6 + Effect damage. Unlike normal damage, *assault* damage is applied to Psionic Strength (if the victim has it), then Intelligence, then Endurance. Psionic Strength and Endurance return as normal (see pages 152 and 74 respectively). Intelligence returns at the rate of one point per day.

When a shielded mind is assaulted the two telepaths make opposed Telepathy checks. If the attacker wins, the victim suffers damage as normal.

Telepathy, Psionic Strength, 1–6 seconds, Formidable (–6). Costs 8+Range.

SHIELD

All telepathically able characters learn how to create a mental shield which protects the mind against unwanted telepathic interference. *Shield* is automatically in force at all times and requires no Psionic Strength point expenditure to maintain. However, while a telepath has his *shield* up he cannot use any telepathic powers either. *Shield* can be lowered to allow telepathic contact or to use telepathic powers – this takes a mere thought (a free action in combat).

Clairvoyance

Clairvoyance is the general talent which allows a person to sense events at some location displaced from the viewer. There are several levels of clairvoyant ability. Clairvoyance abilities allow eavesdropping activities as well as spying and detection-free exploration of situations. While telepathic *life detection* will determine the presence of living minds in a closed room, for example, *sense* will determine if a room is occupied or empty. Clairvoyant activity cannot be sensed by others, including by other psionic individuals.

SENSE

The basic ability to sense things at some point in the distance. A character will become aware of the most rudimentary characteristics of a location when applying this ability. For example, the Referee will give a basic description, without detail: 'a room containing four dogs' or 'an open plain with a tree, and no animals or men present'. The clairvoyant character must state the range at which he is applying his talent, and will generally sense the most interesting or important feature at that range. The Effect of the check determines the level of accuracy and clarity.

Clairvoyance, Psionic Strength, 10–60 seconds, Routine (+2). Costs 1+Range.

TACTICAL AWARENESS

With this ability, the character can perceive dangers and foes around him using his clairvoyant abilities. This enhanced spatial perception allows him to ignore the effects of darkness, smoke, fog or other environmental effects that impede vision. He may also detect hidden foes within range. The Effect of the check how long the enhanced awareness lasts in rounds.

Clairvoyance, Psionic Strength, 1–6 seconds, Average (+0). Costs 2+Range

CLAIRVOYANCE

This specific ability allows actual remote viewing of a situation at some displaced point. Rather than the 'snapshot' that *sense* gives, *clairvoyance* allows the psion to observe as if he was there in person. The clairvoyant character must state the range at which he is applying his talent. The Effect of the check determines the level of detail perceived and the duration in rounds the vision can be maintained for.

Clairvoyance, Psionic Strength, 10–60 seconds, Average (+0). Costs 2+Range.

CLAIRAUDIENCE

This ability is identical to *clairvoyance*, with the exception that it allows hearing instead of seeing.

Clairvoyance, Psionic Strength, 10–60 seconds, Average (+0). Costs 2+Range.

CLAIRSENTIENCE

This power combines the effects of *clairvoyance* and *clairaudience*. The character is capable of both seeing and hearing a specific situation.

Clairvoyance, Psionic Strength, 10–60 seconds, Difficult (–2). Costs 3+Range.

Telekinesis

Telekinesis is the talent which allows objects to be manipulated without physically touching them. Any manipulation is treated as if the person was physically handling the item but physical

danger, pain, or other stimuli are not present. Telekinesis includes a limited amount of sensory awareness, sufficient to allow actual intelligent manipulation.

TELEKINESIS
This basic form of the talent allows the character to move objects at range. The Effect of the check determines the duration of the telekinesis in rounds. The number of points spent determines the Strength of the Telekinesis.

Telekinesis, Psionic Strength, 1–6 seconds, Average (+0).
Costs Strength+Range.

FLIGHT
By applying telekinesis to his own body the character can fly, or at least levitate over short distances. The character can fly for a number of rounds equal to the Effect of the check at a speed of six metres per round.

Telekinesis, Psionic Strength, 1–6 seconds, Average (+0).
Costs 5.

TELEKINETIC PUNCH
Telekinesis can be used as a direct attack, smashing the foe with a blast of telekinetic force. The damage inflicted is 2d6 + the Effect of the check.

Telekinesis, Psionic Strength, 1–6 seconds, Average (+0).
Costs 1+Range.

MICROKINESIS
This more challenging form of telekinesis allows for fine manipulation of very small or even microscopic objects. A telekinetic can use this power to pick locks, perform microsurgery, sabotage a computer system and so forth. The range is always Personal.

Telekinesis, Psionic Strength, 10–60 seconds, Difficult (–2).
Costs 3.

PYROKINESIS
By exciting the substance of an object the character can raise its temperature, possibly even causing it to burst into flames. Roll 1d6 and add the Effect of the check.

Pyrokinesis Effect	Target...
0–4	Becomes warmer, but is undamaged.
5–8	Is burned, suffering 1d6 damage.
9+	Suffers 2d6 damage and may burst into flame if flammable.

Telekinesis, Psionic Strength, 10–60 seconds, Difficult (–2).
Costs 3+Range.

Awareness
Awareness is the psionic talent which allows control of one's own body. Awareness powers never have a range – they are used only on yourself.

SUSPENDED ANIMATION
Personal body activity may be suspended for varying periods of time. A character with Awareness may enter a suspended animation state (similar to cold sleep but without the intrinsic danger of death) by willing himself into it. Such a state continues for 7 days without need for food or water and with minimal air needs. Such a person could effectively travel in a low passage berth without actually undergoing cold sleep and its dangers. *Suspended animation* may be stopped at any time previous to its duration expiring, provided external stimulus is given to awaken the sleeper (such as a friend or a mechanical alarm).

Awareness, Psionic Strength, 1–6 minutes, Average (+0).
Costs 3.

ENHANCED AWARENESS
By focussing his mind, the character can improve his concentration and ability to perform complex tasks. While under the effects of *enhanced awareness*, the character may add his Psionic Strength DM (if positive) to any skill checks. *Enhanced awareness* lasts until the character fails a skill check or sleeps.

Awareness, Psionic Strength, 1–6 seconds, Average (+0).
Costs 1.

PSIONICALLY ENHANCED STRENGTH
Psionic Strength points may be converted to normal Strength points on a temporary basis. The character makes the commitment, reduces his Psionic Strength by a specific number of points, and increases his physical Strength characteristic by that number. In no case may the number of Strength points gained exceed the character's current level in Awareness, and Strength may not be increased beyond the character's racial maximum. *Psionically enhanced strength* reaches its new level immediately, remains at that peak for ten minutes, and then declines at the rate of 1 Strength point per minute until the normal Strength level is reached. This power works as normal on wounded characters but their Strength returns to the wounded level rather than the normal value. It cannot be used as a 'quick heal'.

Awareness, Psionic Strength, 1–6 seconds, Average (+0).
Costs boosted Strength.

PSIONICALLY ENHANCED ENDURANCE
Psionically enhanced endurance works in exactly the same way as *psionically enhanced strength* except the characteristic boosted is Endurance rather than Strength, including its lack of healing ability.

Awareness, Psionic Strength, 1–6 seconds, Average (+0).
Costs boosted Endurance.

REGENERATION

Wounds and injuries may be healed rapidly. Strength, Dexterity and Endurance lost to injury, disease, poison or other trauma may be healed by the application of this ability, exchanging one Psionic Strength point to regenerate one characteristic point. Any amount of Psionic Strength may be expended with a single use of *regeneration* but it may not be used again until *all* expended Psionic Strength is recovered. *Regeneration* may also be applied to the growing of new limbs or organs to replace lost ones or to heal unrecovered old wounds suffered prior to psionic training. *Regeneration* may not be used to counteract aging. Awareness is not capable of affecting others and may not be used for healing or enhancing other characters.

Awareness, Psionic Strength, 10–60 seconds, Very Difficult (–4). Costs amount healed.

BODY ARMOUR

By channelling psionic strength to his skeletal structure and boosting his healing rate, the character can enhance his ability to absorb damage. Body armour lasts for a number of rounds equal to the Effect of the check and provides an armour rating equal to the number of Psionic Strength points expended. This armour stacks with worn armour as normal.

Awareness, Psionic Strength, 1–6 seconds, Very Difficult (–4). Costs amount healed.

Teleportation

Teleportation is a talent which allows effectively instantaneous movement from one point to another point without regard to intervening matter. Psionic teleportation is limited to the movement of the teleported character's body and (for highly skilled teleporters) his or her clothing and weapons.

Unlike the other talents, Teleportation has only a single power: the ability to teleport yourself. Teleporting without any equipment or clothing uses the Teleportation talent with the Psionic Strength DM as a modifier. The act of teleporting takes 1–6 seconds (a significant action in combat) and costs nothing except what the psion spends on range.

Teleporting with up to 10 kg of equipment or clothing is Difficult (–2 DM) and costs 2 + range Psionic Strength points.

Teleporting with up to 500 kg of equipment is Very Difficult (–4 DM) and costs 4 + range Psionic Strength points.

Teleportation always involves the movement of one's body to another location. Independent items or other individuals may not be moved. Teleportation involves certain requirements in order to be accurate, and to insure obedience of the laws of physics.

Alien Horror

Many worlds harbour creatures dangerous to humans, from predators that have little fear of guns to lethal bacterial or fungal infections. On settled worlds, the inhabitants have taken precautions to deal with such threats – dangerous creatures are hunted to extinction or driven to the deepest wilderness, while medical treatments are developed to cure native pathogens. Still, unwary travellers or explorers of uncharted planets can run afoul of such dangers.

The alien horror...
1. ...is a rare predator that has wandered into civilisation.
2. ...is being chased by an eccentric noble hunter.
3. ...is a previously unknown and highly dangerous life form.
4. ...was deliberately released by an enemy, who is trying to kill the characters but wants to make it appear an accident.
5. ...was imported from another world. Perhaps it escaped from the starport, or from a crashed ship.
6. ...is actually intelligent, but is so different that communication may be impossible.

Psionic Phenomenon

Ever since the psionics suppression, understanding of psychic phenomena in the Imperium is limited. Those who develop powers are often mistrusted and feared, and without the guidance of the Institutes, they cannot easily learn to control or hone their abilities. The sudden blossoming of a Psionic talent can sow chaos in a community.

The psionic phenomenon...
1. ... is a teleporting thief or assassin, who uses his talent to bypass security systems.
2. ... is a dream projected by a troubled telepath that is driving other insane.
3. ... is being investigated by Imperial agents, who are searching for an underground Institute.
4. ... is a product of Zhodani manipulation.
5. ... involves psi-drug smuggling.
6. ... is the product of a Psionic doomsday cult.

Preknowledge of Destination: A character must always have a mental image of his or her destination before teleporting. This mental image is acquired by personally visiting the location first (or viewing it from a distance), having the mental image implanted in one's mind (by telepathy) by another person who has visited the destination, or by viewing the location through clairvoyance. The key to remember is that someone has to actually view the location – recorded images are not enough.

Energy and Momentum: Teleportation involves serious restrictions on movement in order to assure the conservation of energy and momentum.

On planetary surfaces, teleportation is restricted to jumps of Very Distant range or less. Jumps at Very Distant range involve disorientation for a period of 20 to 120 seconds (2d6 × 10) after arrival. This restriction results from the law of conservation of momentum: on a rotating planet, two locations will have different rotational speeds and directions. A jump from a point on the Earth's equator to one of its poles would result in a total velocity difference between the character and his surroundings of over 3300 kph, which would lead to a messy death in short order.

Teleporting to or from vehicles travelling at high speed can also result in energy gains or losses. When teleporting into, onto or out of a fast-moving vehicle the psion takes damage as if the vehicle had rammed him at its current speed (see page 66).

Changes in altitude (actually all movement to locations of differing gravitational potential) will result in potential energy changes, manifesting themselves as changes in body temperature. A jump of one kilometre straight down will result in a temperature increase of 2.5 degrees Celsius; this is sufficient to cause extreme fever, brain damage, and even death. A jump up will cool the body by the same amount, with equally serious results. To be safe, a jump may not involve an elevation change of more than 400 meters, and multiple jumps should not involve a cumulative elevation change or more than 600 meters in one hour. These problems may be gotten around through the use of technological devices: energy compensators, heated suits, and other means. Characters may feel driven to invent such materials, commission their invention, or seek them out from those who already have them.

PSIONIC TECHNOLOGY

The ban on psionics within the Imperium means that most of these technologies are illegal. The exception is anti-psionic devices like the psionic shield or inhibitor drugs.

Psi-Drugs (TL 8+): These drugs restore Psionic Strength if taken when the character has already spent Psionic Strength points, or temporarily increase the character's Psionic Strength if taken when he is at full Psionic Strength.

Drug	TL	Psionic Strength Restored	Psionic Strength Boosted	Cost (Cr.)
Standard	8	3	2	1,000
Double	9	6	4	4,000
Special	10	9	6	10,000

A character who takes more than one dose of Standard or Double Psi-Drug, or a single dose of the Special drug must make an Endurance check, with a –1 DM per dose of psi-drug taken in the last week (not including the one just taken). If the check is failed the character falls ill with a serious fever, suffering 3d6 damage and permanently reducing his Psionic Strength by one.

Inhibitor Drug (TL 9): Psionic inhibitors dampen the brain's ability to generate psychic effects. A character who takes (or, more often, is forcibly injected with) an inhibitor drug suffers a –4 DM to all Psionic Strength checks and cannot regain Psionic Strength points. Each hour the character may make an Endurance check to throw off the effects of the drug with a +1 DM for every previous check. Inhibitor drugs have no effect on non-psionic individuals. The drugs cost Cr. 500 per dose.

Psionic Shield (TL 12): Any armour incorporating a helmet or hood can be outfitted with a psionic shield, blocking Telepathy. Unlike the Telepathy power *shield* a technological shield is invulnerable to *assault* and blocks *send thoughts*. It cannot be lowered without removing the helmet or hood containing the shield. Cr. 40,000.

Buildings and vehicles can also be psionically shielded, but this is much more costly, increasing the cost by 10%.

Teleportation Suit (TL 12): This device can be integrated into a suit of armour or worn as a form-hugging body-suit. It rapidly cools or warms the body after a teleport, minimising the damage from sudden energy gains or losses. The suit costs Cr. 50,000 and allows a character to jump up to 600 metres up or down in a single teleport, or up to ten kilometres in a single hour when using successive jumps.

Psionic Interface (TL 14): Any weapon or technological device can be outfitted with a psionic interface. A character using a device with a psionic interface can use his Psionic Strength DM instead of his Dexterity DM when using the weapon or device; a character without psionic ability cannot use the device. The character must either touch the device or use *telekinesis* to interact with it at range. Adding a psionic interface increases the cost of the device by 20%.

PSION

A career for characters who deliberately choose to focus on their psionic potential instead of more conventional lifestyles.

Qualification: Psionic Strength 6+
−1 DM for every previous career.

A character may only attempt to enter the Psion career with the permission of the Referee. One life event (see page 34) allows a character to find a Psionics Institute and begin his training during character generation; some campaigns may allow access to psionics for any character.

Assignments: Choose one of the following:
- **Wild Talent:** You developed your powers without formal training.
- **Adept:** You are a scholar of the psionic disciplines.
- **Psi-Warrior:** You combine combat training with psionic warfare.

Basic Training: Unlike other careers, a Psion gains level 0 skills from the appropriate Specialist table instead of the Service Skills table in basic training.

CAREER PROGRESS

	Survival	Advancement
Wild Talent	Soc 6+	Int 8+
Adept	Edu 4+	Edu 8+
Psi-Warrior	End 6+	End 6+

MUSTERING-OUT BENEFITS

Roll	Cash	Other Benefits
1	1,000	Gun
2	2,000	2 Ship Shares
3	4,000	Contact
4	4,000	Traveller's Aid Society
5	8,000	Contact
6	8,000	Combat Implant
7	16,000	10 Ship Shares

Psionic Abilities: The Psion must still roll to acquire psionic talents when he determines his Psionic Strength. When rolling on the service skills table, if the Psion rolls the skill for a talent he does not possess, then he may make another roll to acquire that talent. If that roll fails then he gains no skill for that term.

For example, Luka develops the Telepathy and Clairvoyance talents at the start of character generation. In her first term of Psion training, she rolls Teleportation on the service skills table. She may now roll to acquire Teleportation by making a Psionic Strength check with a −2 DM (+0 for Teleportation, −2 for two previous talent acquisition rolls).

SKILLS AND TRAINING:

Roll	Personal Development	Service Skills	Advanced Education (Minimum Edu 8)
1	+1 Edu	Telepathy	Comms
2	+1 Int	Clairvoyance	Computers
3	+1 Str	Telekinesis	Language (any)
4	+1 Dex	Awareness	Medic
5	+1 End	Teleportation	Life Sciences (any)
6	+1 Psi	Any skill	Space Sciences (any)

Roll	Specialist: Wild Talent	Specialist: Adept	Specialist: Psi-Warrior
1	Telepathy	Telepathy	Telepathy
2	Telekinesis	Clairvoyance	Awareness
3	Deception	Awareness	Teleportation
4	Stealth	Medic	Gun Combat (any)
5	Streetwise	Persuade	Battle Dress
6	Melee (any) or Gun Combat (any)	Social Sciences (any)	Recon

RANKS AND BENEFITS

Rank	Wild Talent	Skill or Benefit	Adept	Skill or Benefit	Psi-warrior	Skill or Benefit
0					Marine	
1	Survivor	Survival 1 or Streetwise 1	Initiate	Life Science (psionology) 1		Gun Combat (any) 1
2					Captain	Leadership 1
3	Witch	Deception 1	Acolyte	Any psionic talent 1		
4						
5					Force Commander	Tactics (any) 1
6			Master	Any psionic talent 1		

MISHAPS

1d6	Mishap
1	Injured. Roll on the injury table (page 37).
2	You telepathically contact something dangerous. Lose one Psionic Strength. You also suffer from persistent and terrifying nightmares.
3	An anti-psi cult or gang attempts to expose or attack you. Roll 1d6 – on a 1–2, you are injured; roll on the injury table. On a 3–4, lose one Social Standing. On a 5–6, nothing else happens, but you still must leave this career.
4	You are asked to use your psionic powers in an unethical fashion. Accept, and you may continue in this career, but you gain an Enemy. Refuse, and you must leave the career.
5	You are experimented on by a corporation, government, or other organisation. You escape, but are forced to leave this career. Gain a Contact within that organisation and the organisation as a whole as an Enemy.
6	Your gift causes a former ally to turn on you and betray you. One Ally or Contact becomes an Enemy. If you have no Allies or Contacts, gain an Enemy anyway.

EVENTS

2d6	Events
2	Disaster! Roll on the mishaps table, but you are not ejected from this career.
3	Your psionic abilities make you uncomfortable to be around. One Contact or Ally becomes a Rival. If you have no Contacts or Allies, your psionic abilities attract a Rival anyway.
4	Choose one of these skills, reflecting your time spent mastering mind and body: Athletics (any) 1, Stealth 1, Survival 1 or Art (any) 1.
5	You have a chance to use your powers unethically to better your standing. If you accept, roll Psi 8+. If you succeed, gain an extra benefit roll or +1 Social Standing. If you fail, lose one Social Standing instead.
6	You make an unexpected connection outside your normal circles. Gain a Contact.
7	Life Event. Roll on the Life Events table (page 34).
8	You achieve a new level of psionic strength. Increase your Psionic Strength by +1.
9	You are given advanced training in a specialist field. Throw Education 8+ to gain one level in any skill.
10	You pick up potentially useful information using your psychic powers. Gain a +1 DM to any one Benefit roll.
11	You gain a mentor. Gain an Ally and a +4 DM to your next Advancement roll thanks to his aid.
12	You achieve a new level of discipline in your powers. You are automatically promoted.

TRADE

Free traders traditionally deal in three forms of commerce – passenger shipping, freight shipping, and speculative trade.

PASSENGERS

Passage on board ship is standardised into three categories – low passage, middle passage, and high passage.

PASSAGE TYPES

Category	Requirements
High	Stateroom, one displacement ton of cargo space, steward
Middle	Stateroom, 100 kg of cargo, steward
Low	Low Berth, 10 kg baggage allowance

High passage is the equivalent of a luxury cruise or a flight in first class – comfortable quarters, good food, and staff to wait on you hand and foot.

Middle passage is 'standard class'. A stateroom to yourself and occasional service from the steward but more of a functional way of getting somewhere than an enjoyable experience.

Low passage is being cryogenically frozen and stuffed into a tube to be unfrozen at your destination. It is not unknown for low passengers to die in transit, whether from the system shock of being frozen, being improperly revived, or from malfunctions in the low berth.

The cost of passage varies depending on the distance:

Parsecs Travelled	High	Middle	Low
1	Cr. 6,000	Cr. 3,000	Cr. 1,000
2	Cr. 12,000	Cr. 6,000	Cr. 1,200
3	Cr. 20,000	Cr. 10,000	Cr. 1,400
4	Cr. 30,000	Cr. 15,000	Cr. 1,600
5	Cr. 40,000	Cr. 20,000	Cr. 1,800
6	Cr. 50,000	Cr. 25,000	Cr. 2,000

The number of travellers seeking passage to a given destination varies depending on where the ship is going and its current location. Add the current planet's Population value (see page 172) to the Passenger Traffic modifiers for current and destination worlds on the Passenger Traffic table, then consult the Available Passengers table.

Characters can attempt to seek out passengers using Carouse or Streetwise checks; add half the Effect to the traffic value if successful. Other factors may also play into the number of passengers available – for example, a war might induce people to leave a world, while a tourist attraction or booming economy would draw people to a planet.

Steward Requirements

Each level, including level 0, of the Steward skill allows a character to care for two high passage passengers or five middle passage passengers. A steward can 'mix' his levels of Steward skill to care for High and Middle passengers at the same time.

Steward Skill	High Passengers	Middle Passengers
0	2	5
1	4	10
2	6	15
3	8	20
4	10	25

For example, the Beowulf *is docked at an asteroid mine (Population 3), and is heading for a rich world. The Traffic Value is 3 +1 (leaving asteroid) +2 (heading to rich world) for a total traffic value of 6. There will be 3d6–1d6 low passages available, 3d6–1d6 middle passages, and 3d6–2d6 high passages.*

More details on passengers can be found on page 142. The number of passengers available cannot usually exceed the number of people resident on a planet, except in unusual circumstances (for example, a passenger liner might break down in a nearly uninhabited system, so a planet with a population of only a few dozen might have hundreds of passengers clamouring for transport out).

FREIGHT

Characters not wishing to risk speculative trade can go for the safer option of shipping freight. Freight shipments pay Cr. 1,000 per ton for shipping a ton for one parsec, +200 Cr. per additional parsec. Freight lots must be transported in their entirety, and come in three sizes:

- Major cargos are composed of 1d6 × 10 tons of freight.
- Minor cargos are composed of 1d6 × 5 tons of freight.
- Incidental cargos are composed of 1d6 tons of freight.

To determine the number of cargos available, add the destination planet's Population value to the modifiers from the Freight Traffic table, then consult the Freight Lots Available table.

A freight lot cannot be broken up. Cargo is paid for upon delivery, assuming it is delivered on time. Failing to deliver cargo on time reduces the amount paid by 1d6+4 × 10%.

Mail

Mail is a special form of freight, consisting of large data storage drums which contain a vast amount of information that must be transported from one world to another, but is not vital enough to be

PASSENGER TRAFFIC

World Type	Current World	Destination World
Agricultural	+0	+0
Asteroid	+1	−1
Barren	−5	−5
Desert	−1	−1
Fluid Oceans	+0	+0
Garden	+2	+2
High Population	+0	+4
Ice-Capped	+1	−1
Industrial	+2	+1
Low Population	+0	−4
Non-Agricultural	+0	+0
Non-Industrial	+0	−1
Poor	−2	−1
Rich	−1	+2
Water World	+0	+0
Amber Zone	+2	−2
Red Zone	+4	−4
No classification	+0	+0

AVAILABLE PASSENGERS

Passenger Traffic Value	Low Passages	Middle Passages	High Passages
0 or less	0	0	0
1	2d6−6	1d6−2	0
2	2d6	1d6	1d6−1d6
3	2d6	2d6−1d6	2d6−2d6
4	3d6−1d6	2d6−1d6	2d6−1d6
5	3d6−1d6	3d6−2d6	2d6−1d6
6	3d6	3d6−2d6	3d6−2d6
7	3d6	3d6−1d6	3d6−2d6
8	4d6	3d6−1d6	3d6−1d6
9	4d6	3d6	3d6−1d6
10	5d6	3d6	3d6−1d6
11	5d6	4d6	3d6
12	6d6	4d6	3d6
13	6d8	4d6	4d6
14	7d6	5d6	4d6
15	8d6	5d6	4d6
16+	9d6	6d6	5d6

FREIGHT TRAFFIC

World Type	Current World	Destination World
Agricultural	+2	+1
Asteroid	−3	+1
Barren	None	−5
Desert	−3	+0
Fluid Oceans	−3	+0
Garden	+2	+1
High Population	+2	-
Ice-Capped	−3	+0
Industrial	+3	+2
Low Population	−5	+0
Non-Agricultural	−3	+1
Non-Industrial	−3	+1
Poor	−3	−3
Rich	+2	+2
Water World	−3	+0
Amber Zone	+5	−5
Red Zone	−5	No Freight

Additionally, there is a −1 modifier per TL difference between the two worlds, to a maximum of −5.

AVAILABLE FREIGHT LOTS

Freight Traffic Value	Incidental	Minor	Major
0	0	0	0
1	0	1d6−4	1d6−4
2	0	1d6−1	1d6−2
3	0	1d6	1d6−1
4	0	1d6+1	1d6
5	0	1d6+2	1d6+1
6	0	1d6+3	1d6+2
7	0	1d6+4	1d6+3
8	0	1d6+5	1d6+4
9	1d6−2	1d6+6	1d6+5
10	1d6	1d6+7	1d6+6
11	1d6+1	1d6+8	1d6+7
12	1d6+2	1d6+9	1d6+8
13	1d6+3	1d6+10	1d6+9
14	1d6+4	1d6+12	1d6+10
15	1d6+5	1d6+14	1d6+11
16+	1d6+6	1d6+16	1d6+12

Imperial Credit

The basic unit of legal tender in the Imperium is the Imperial credit. Individual worlds may issue their own currencies, and those currencies may or may not be acceptable on other worlds. Similarly, corporations and megacorporations may issue scrip, and its acceptance outside of the corporate environment is a matter of conjecture. But Imperial credits are accepted everywhere in the Imperium and in many locations outside of it.

Imperial credits are almost impossible to counterfeit because of their unique method of manufacture. Plastic fibres are combined under high temperature and pressure and extruded as a rectangular bundle of great length. The different coloured fibres form the pattern of the bill. It is not printed on but actually made a part of the structure of the note. The bundle is sliced to paper thinness, and a 14-digit alphanumeric (letter/number combination) is added for uniqueness. Credit bills are issued in 10, 20, 50, 100, 500, 1000, and 10,000 credit denominations. Plastic coins, manufactured in a similar manner in various shapes, are issued in quarter, half, one, and five credit denominations. The larger coins are often called the kilo, the ton, the toi, the low passage and the high passage, to reflect their value.

entrusted to the X-Boat service or a private courier. To determine if there is mail available, determine the applicable Mail DMs, then roll on the available mail table.

MAIL DICE MODIFIERS
- Freight Traffic modifier of −10 or more: −2 DM
- Freight Traffic modifier of −9 to −5: −1 DM
- Freight Traffic modifier of −4 to +4: +0 DM
- Freight Traffic modifier of 5 to 9: +1 DM
- Freight Traffic modifier of 10+: +2 DM
- Characters' ship is armed: +2 DM
- + characters' highest Naval or Scout rank
- + characters' highest Social Standing DM
- World has a TL of 5 or less: −4

Roll 2d6. On a 12 or more, after modifiers, the characters can transport mail to the destination world. A mail container takes up five tons of space and the characters will be paid Cr. 25,000 for transporting the mail.

SPECULATIVE TRADE AND SMUGGLING
The greatest profits and losses are to be found in speculative trade – buying low and selling high across the stars.

Trade Checklist
1. Find a supplier.
2. Determine goods available.
a. Common Goods are always available.
b. Trade Goods matching the Trade Codes of the planet are always available.
c. 1d6 random Trade Goods are available.
3. Determine the amount of each type of goods available.
4. Choose which goods you wish to purchase.
5. Determine purchase price for the goods, rolling 3d6+DMs.
6. Purchase goods.
7. Travel to another market.
8. Find a buyer.
9. Determine sale price for the goods you wish to sell, rolling 3d6+DMs.

Finding a Supplier
On worlds that are regularly visited by trade vessels, finding a supplier is easy. There are traders and brokers at the starport, eager to deal with offworlders, and the whole planetary economy may rely on trade with other planets. Technologically advanced worlds will have computer networks that can be searched for suppliers. On lower-tech worlds, traders will have to seek out suppliers in

A trader can hire a local guide to help him find a supplier, or a local broker to help him negotiate a deal.

Broker DM	Percentage
+1	1%
+2	2%
+3	5%
+4	7%
+5	10%
+6	15%

A local guide costs 1d6 × 100 Credits to find a supplier, or 1d6 × 500 Credits to find a black market supplier.

A broker will take a percentage of the purchase or sale price in exchange for using his Broker skill to negotiate the deal.

the markets and bazaars themselves. Characters can search for multiple suppliers, but there is a –1 DM per previous attempt on a planet in a given month.

Finding a supplier: Broker, Education or Social Standing, 1–6 days, Average (+0).
Finding a black market supplier: (Illegal goods only) Streetwise, Education or Social Standing, 1–6 days, Average (+0).
Finding an online supplier: (Worlds with TL 8+ only) Computers, Education, 1–6 hours, Average (+0).

The size of the Starport provides a bonus to finding a supplier. Class A starports give a +6 DM, class B starports give a +4 DM and class C starports give a +2 DM.

Determine Goods Available

Goods are divided into two categories of goods – Common and Trade Goods. Common Goods can be purchased on any world. Trade Goods can usually only be found on a world with a matching trade code. The amount of each type of goods available is limited – the tons column determines how many tons of a given type of goods are available for purchase.

A given supplier has all Common Goods available, the Trade Goods that match the world's trade code, and 1d6 randomly determined goods. Roll d66 on the table to determine the goods available, ignoring results 61–65 unless dealing with a black market supplier. If you roll the same type of goods multiple times, then the supplier has extra amounts of those goods available.

Some goods are illegal, and can be purchased only through a black market supplier. A black market supplier has whatever illegal goods match his world's trade code, as well as any randomly rolled illegal goods.

For example, the characters have contacted a supplier on an Industrial world. Consulting the table below, the supplier has the following goods available: Basic Electronics, Basic Machine Parts, Basic Manufactured Goods, Basic Raw Materials, Basic Vehicles, Basic Ore, Advanced Electronics, Advanced Machine Parts,

Advanced Manufactured Goods, Advanced Weapons, Advanced Vehicles, Polymers and Robots, as all those goods are Common or Industrial.

The Referee then rolls 1d6 to determine other goods that are available. He rolls a 3, so he rolls d66 three times. The first result is a 25 – Advanced Vehicles, which means there is an extra 1d6 × 5 tons of Advanced Vehicles available for purchase. Next, he rolls a 51 – Spices, which are not normally available on Industrial worlds but can be bought from this particular supplier at this time. Finally, he rolls a 63 – Illegal Drugs. As the characters are dealing with a legitimate supplier instead of a black-market supplier, this roll is ignored.

Determine Purchase Price

To determine the purchase price, roll 3d6 and apply the following modifiers:
- \+ the character's Broker skill (or the local broker's skill).
- \+ the character's Intelligence or Social Standing DM, whichever is higher.
- \+ the largest Dice Modifier from the Purchase DM column.
- \- the largest Dice Modifier from the Sale DM column.
- \- any Dice Modifiers from the supplier. Some especially rich or powerful suppliers can demand high prices.

In cases where multiple Purchase or Sale DMs apply, use only the largest ones from each column.

Next, consult the Purchase column of the Modified Price table. The trader does not have to accept this price, but if he rejects the deal, then he cannot deal with that supplier again for at least one week. After that week, he may reroll one of the dice thrown to determine the purchase price for those goods.

For example, the Beowulf *lands on a Desert world. Erik finds a supplier, who has the following goods available by default.*

Item	Cost (Cr.)	Purchase DM
Basic Electronics	25,000	+0
Basic Machine Parts	10,000	+0
Basic Manufactured Goods	20,000	+0
Basic Raw Materials	5,000	+0
Basic Vehicles	30,000	+0
Crystals and Gems	20,000	+1
Petrochemicals	10,000	+2
Pharmaceuticals	100,000	+0
Precious Metals	50,000	+1
Radioactives	1,000,000	+0
Spices	6,000	+2
Uncommon Raw Materials	20,000	+0

The merchant has no unusual trade goods available.

Modified Price Table

Result	Purchase Price	Sale Price
–1 or less	400%	25%
0	300%	45%
1	200%	50%
2	175%	55%
3	150%	60%
4	135%	65%
5	125%	75%
6	120%	80%
7	115%	85%
8	110%	90%
9	105%	95%
10	100%	100%
11	95%	105%
12	90%	110%
13	85%	115%
14	80%	120%
15	75%	125%
16	70%	135%
17	65%	150%
18	55%	175%
19	50%	200%
20	40%	300%
21+	25%	400%

Purchase and Sale prices are calculated as a percentage of base price.

Deciding that precious metals offer the best return, Erik negotiates a price. He rolls 3d6, +1 (purchase DM), +1 (his Broker skill), for a total of 12. This lets him purchase the precious metals at 90% of base price, or for 45,000 per ton. He rolls 1d6 to see how many tons of precious metals are available for him and rolls a 6. Buying all six tons of precious metals costs him 270,000 Credits.

He fills the remainder of his (small) hold with petrochemicals. He rolls 3d6, +2 (purchase DM) +1 (his Broker skill) for a total of 10, letting him buy petrochemicals at market value (10,000 Credits per ton). He rolls 1d6 × 10 for availability and rolls a 5, meaning he can purchase up to 50 tons of petrochemicals. He only has 16 tons of space remaining in his hold so he purchases 16 tons of petrochemicals for 160,000 Credits.

Illegal Goods

Some goods are illegal throughout the Imperium. These are marked as illegal in the Trade Goods tables. Other goods are illegal only on particular member worlds (see Law Level, page 173).

Trade in illegal goods is highly profitable, but risky. Universally illegal goods have high Sale DMs. For other banned goods, their Sale DM is the difference between the Law Level they are banned at and the Law Level of the world. For example, Military Weapons are banned at Law Level 3. If a trader smuggles any weapons onto a Law Level 9 world, the weapons have a +6 Sale DM. (If a type of goods is both universally and locally illegal, use whichever Sale DM is higher.)

The downside of smuggling is that if the trader is caught, he faces fines or imprisonment. See Law Levels, page 173.

Selling Goods

Selling goods works just like purchasing goods, with the following changes:
- A character must find a buyer, instead of a supplier. The same rules apply.
- When selling goods, *add* the largest Sale DMs for the world trade code and *subtract* the largest Purchase DMs.

If a character does not accept the price offered for his goods, he must find another buyer or wait a week, in which case he may reroll one of the dice thrown to determine the purchase price.

For example, Erik has his six tons of precious metals. They sell best at Rich worlds, but there are no Rich worlds within jump range. There is, however, an Industrial world. Erik jumps there and finds a buyer for his cargo of metal. To determine the sale price, he rolls 3d6 +3 (sale DM) +1 (his Broker skill) for a total of 15. Consulting the table, this gives a sale price of 125% of base, or 62,500 per ton. Erik sells his cargo of 6 tons for 375,000 credits.

He also tries to sell his sixteen tons of petrochemicals, but rolls only a 6, meaning that the best offer he gets is only 80% of the base cost, or 8,000 credits per ton. Unwilling to sell at a loss, Erik spends another few days finding another buyer and rolls again. This time, he gets an offer of 10,500 credits per ton, which he accepts.

Erik has made 8,000 credits on his petrochemicals, and 105,000 credits on his precious metals.

Dangerous Cargo

Travellers trying to make a profit on speculative trade must often deal in unusual cargoes. Trapped in jumpspace for seven long, treacherous days, unusual cargoes can turn out to be deadly ones.

The dangerous cargo...
1. ... is a bomb planted by enemies of the characters.
2. ... is an alien egg that has just hatched.
3. ... contains politically sensitive material that must not fall into the wrong hands.
4. ... is radioactive, and the crew are suffering from exposure.
5. ... is being hunted by pirates or other thieves, who know the route the characters are travelling.
6. ... isn't actually dangerous, but paranoid player characters will tie themselves in knots worrying about it.

TRADE GOODS

d66	Type	Available	Tons	Base Price (Cr.)	Purchase DM	Sale DM	Examples
11	Basic Electronics	All	1d6 × 10	10,000	Industrial +2, High Tech +3, Rich +1	Non-Industrial +2, Low Tech +1, Poor +1	Simple electronics including basic computers up to TL 10.
12	Basic Machine Parts	All	1d6 × 10	10,000	Non-Agricultural +2, Industrial +5	Non-Industrial +3, Agricultural +2	Machine components and spare parts for common machinery.
13	Basic Manufactured Goods	All	1d6 × 10	10,000	Non-Agricultural +2, Industrial +5	Non-Industrial +3. High Population +2	Household appliances, clothing and so forth.
14	Basic Raw Materials	All	1d6 × 10	5,000	Agricultural +3, Garden +2	Industrial +2, Poor +2	Metal, plastics, chemicals and other basic materials.
15	Basic Consumables	All	1d6 × 10	2,000	Agricultural +3, Water World +2, Garden +1, Asteroid −4	Asteroid +1, Fluid Oceans +1, Ice Capped +1, High Population +1	Food, drink and other agricultural products.
16	Basic Ore	All	1d6 × 10	1,000	Asteroid +4, Ice Capped +0	Industrial +3, Non-Industrial +1	Ore bearing common metals.
21	Advanced Electronics	Industrial, High Tech	1d6 × 5	100,000	Industrial +2, High Tech +3	Non-Industrial +1, Rich +2, Asteroid +3	Advanced sensors, computers and other electronics up to TL 15.
22	Advanced Machine Parts	Industrial, High Tech	1d6 × 5	75,000	Industrial +2 High Tech +1	Asteroid +2, Non-Industrial +1	Machine components and spare parts, including gravitic components.
23	Advanced Manufactured Goods	Industrial, High Tech	1d6 × 5	100,000	Industrial +1, High Tech +0	High Population +1, Rich +2	Devices and clothing incorporating advanced technologies.
24	Advanced Weapons	Industrial, High Tech	1d6 × 5	150,000	Industrial +0, High Tech +2	Poor +1 Amber Zone +2 Red Zone +4	Firearms, explosives, ammunition, artillery and other military-grade weaponry.
25	Advanced Vehicles	Industrial, High Tech	1d6 × 5	180,000	Industrial +0, High Tech +2	Asteroid +2, Rich +2	Air/rafts, spacecraft, grav tanks and other vehicles up to TL 15.
26	Biochemicals	Agricultural, Water World	1d6 × 5	50,000	Agricultural +1, Water World +2	Industrial +2	Biofuels, organic chemicals, extracts.
31	Crystals and Gems	Asteroid, Desert Ice-Capped	1d6 × 5	20,000	Asteroid +2, Desert +1, Ice-Capped +1	Industrial +3, Rich +2	Diamonds, synthetic or natural gemstones.
32	Cybernetics	High-Tech	1d6	250,000	High Tech +0	Asteroid +1, Ice Capped +1, Rich +2	Cybernetic components, replacement limbs.
33	Live Animals	Agricultural, Garden	1d6 × 10	10,000	Agricultural +2, Garden +0	Low Population +3	Riding animals, beasts of burden, exotic pets.
34	Luxury Consumables	Agricultural, Garden, Water World	1d6 × 10	20,000	Agricultural +2, Garden +0, Water World +1	Rich +2, High Population +2	Rare foods, fine liquors.
35	Luxury Goods	High Pop	1d6	200,000	High Pop +0	Rich +4	Rare or extremely high-quality manufactured goods.
36	Medical Supplies	High Tech, High Pop	1d6 × 5	50,000	High Tech +2, High Pop +0	Industrial +2 Poor +1, Rich +1,	Diagnostic equipment, basic drugs, cloning technology.
41	Petrochemicals	Desert, Fluid Oceans, Ice Capped, Water World	1d6 × 10	10,000	Desert +2, Fluid Oceans +0 Ice Capped +0, Water World +0	Industrial +2, Agricultural +1, Low Tech +2	Oil, liquid fuels.
42	Pharmaceuticals	Asteroid, Desert, High Pop, Water World	1d6	100,000	Asteroid +2, Desert +0, High Pop +1, Water World +0	Rich +2, Low Tech +1	Drugs, medical supplies, anagathics, fast or slow drugs.
43	Polymers	Industrial	1d6 × 10	7,000	Industrial +0	Rich +2, Non-Industrial +1	Plastics and other synthetics.
44	Precious Metals	Asteroid, Desert, Ice Capped, Fluid Oceans	1d6	50,000	Asteroid +3 Desert +1, Ice-Capped +2, Fluid Oceans +0	Rich +3, Industrial +2 High Tech +1	Gold, silver, platinum, rare elements.
45	Radioactives	Asteroid, Desert, Low Pop	1d6	1,000,000	Asteroids +2 Desert +0, Low Pop −4	Industrial +3, High Tech +1, Non-Industrial −2, Agricultural −3	Uranium, plutonium, unobtanium, rare elements.
46	Robots	Industrial, High Tech	1d6 × 5	400,000	Industrial +0	Agricultural +2, High Tech +1	Industrial and personal robots and drones.

TRADE GOODS (CONT.)

d66	Type	Available	Tons	Base Price (Cr.)	Purchase DM	Sale DM	Examples
51	Spices	Garden, Desert, Water World	1d6 × 5	6,000	Garden +0, Desert +2, Water World +0	High Population +2, Rich +3, Poor +3	Preservatives, luxury food additives, natural drugs.
52	Textiles	Agricultural, Non-Industrial	1d6 × 10	3,000	Agricultural +7, Non-Industrial +0	High Population +3, Non-Agricultural +2	Clothing and fabrics.
53	Uncommon Ore	Asteroid, Ice Capped	1d6 × 10	5,000	Asteroid +4, Ice Capped +0	Industrial +3, Non-Industrial +1	Ore containing precious or valuable metals.
54	Uncommon Raw Materials	Agricultural, Desert, Water World	1d6 × 10	20,000	Agricultural +2, Desert +0, Water World +1	Industrial +2, High Tech +1	Valuable metals like titanium, rare elements.
55	Wood	Agricultural, Garden	1d6 × 10	1,000	Agricultural +6, Garden +0	Rich +2, Industrial +1	Hard or beautiful woods and plant extracts.
56	Vehicles	Industrial, High Tech	1d6 × 10	15,000	Industrial +2, High Tech +1	Non-Industrial +2, High Population +1.	Wheeled, tracked and other vehicles from TL 10 or lower.
61	Illegal Biochemicals	Agricultural, Water World	1d6 × 5	50,000	Agricultural +0, Water World +2	Industrial +6	Dangerous chemicals, extracts from endangered species.
62	Illegal Cybernetics	High Tech	1d6	250,000	High Tech +0	Asteroid +4, Ice Capped +4, Rich +8, Amber Zone +6, Red Zone +6	Combat cybernetics, illegal enhancements.
63	Illegal Drugs	Asteroid, Desert, High Pop, Water World	1d6	100,000	Asteroid +0, Desert +0, Garden +0, Water World +0	Rich +6, High Population +6	Addictive drugs, combat drugs.
64	Illegal Luxuries	Agricultural, Garden, Water World	1d6	50,000	Agricultural +2, Garden +0, Water World +1	Rich +6, High Population +4	Debauched or addictive luxuries.
65	Illegal Weapons	Industrial, High Tech	1d6 × 5	150,000	Industrial +0, High Tech +2	Poor +6, Amber Zone +8, Red Zone +10.	Weapons of mass destruction, naval weapons.
66	Exotics	Exotic goods are outside the normal trade rules, and cover such things are alien relics, prototype technology, unique plant or animal life, priceless treasures and so forth. Buying and selling exotic goods is a matter for roleplaying and adventure.					

Trade Goods by World Type

World Type	Always Available
Common Goods	Basic Electronics, Basic Machine Parts, Basic Manufactured Goods, Basic Raw Materials, Basic Consumables, Basic Ore
Agricultural	Biochemicals, Live Animals, Luxury Consumables, Textiles, Uncommon Raw Materials, Wood, Illegal Biochemicals, Illegal Luxuries
Asteroid	Crystals and Gems, Pharmaceuticals, Precious Metals, Radioactives, Uncommon Ore, Illegal Drugs
Desert	Crystals and Gems, Petrochemicals, Pharmaceuticals, Precious Metals, Radioactives, Spices, Uncommon Raw Materials, Illegal Drugs, Illegal Luxuries
Fluid Oceans	Petrochemicals, Precious Metals
Garden	Live Animals, Luxury Consumables, Spices, Wood
High Population	Luxury Goods, Medical Supplies, Pharmaceuticals, Illegal Drugs
High Technology	Advanced Electronics, Advanced Machine Parts, Advanced Manufactured Goods, Advanced Weapons, Advanced Vehicles, Cybernetics, Medical Supplies, Robots, Vehicles, Illegal Weapons
Ice-Capped	Crystals and Gems, Petrochemicals, Precious Metals, Uncommon Ore
Industrial	Advanced Electronics, Advanced Machine Parts, Advanced Manufactured Goods, Advanced Weapons, Advanced Vehicles, Polymers, Robots, Vehicles, Illegal Weapons
Low Population	Radioactives
Non-Industrial	Textiles
Water World	Biochemicals, Luxury Consumables, Petrochemicals, Pharmaceuticals, Spices, Uncommon Raw Materials, Illegal Biochemicals, Illegal Drugs, Illegal Luxuries

World Creation

The universe is mapped in convenient segments, called subsectors. Each subsector is an area of hexagonal cells measuring eight hexes by ten hexes. Since the recommended scale is one parsec (3.26 light years) per hex, the subsector covers an area ten parsecs by eight parsecs.

Sixteen subsectors (arranged in four rows of four subsectors each) form a sector, probably the largest size practical for a continuing Traveller campaign. Mapping subsectors consists of two sequences: star mapping and world creation. Star mapping examines each hexagon in the subsector grid and determines if there is a star system present. It also determines the presence or absence of starports, bases, and fuel for starships. All of this information is coded onto the subsector hexes, and serves as a guide to the Referee and to the players during interstellar travel. World creation examines the single most important world in each system and determines the basic characteristics for it. This information is retained for use in adventures on the world's surface.

Some campaigns may eschew star mapping, using an existing sector map (such as the Spinward Marches), or focussing on a single star system.

Star Mapping

In order to create a subsector, the Referee uses a blank subsector grid and dice to determine the presence of systems, starports, and bases. The system hex format table shows the coding and placement of information about worlds within a subsector. This format should be used to allow players and Referees to note the information that would normally be available to them. The Referee may elect to omit some information, and only allow it to be inserted after the players have determined it themselves.

System Hex Format

Bases

★ = Naval
▲ = Scout
π = Research
☼ = TAS
■ = Imperial Consulate
☠ = Pirate

Starport Class

Gas Giant Indicator

B

Kakisto

Empty circle indicates amber category; solid grey circle indicates red.

System Name
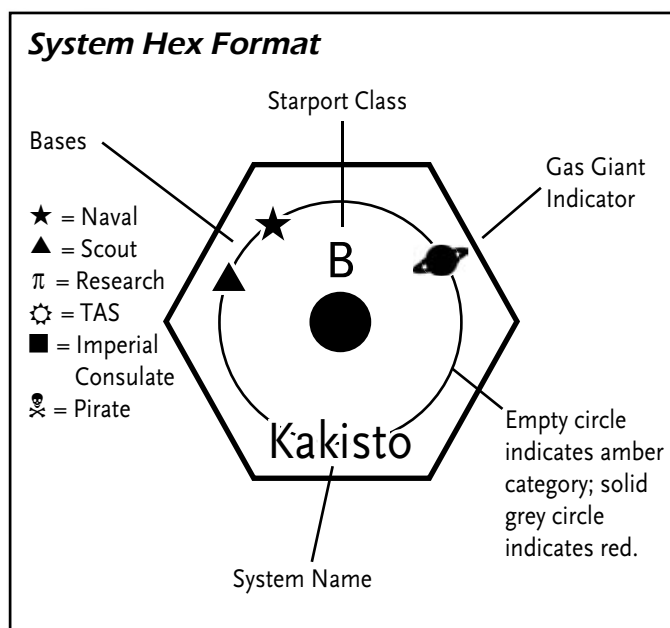
World Occurrence: There is a basic one-half chance normally that a world (and its attendant stellar system) will be in a hex. Systematically check each hex on the subsector map, throwing one die and marking the hex with a circle if the result is a 4, 5, or 6. This indicates that a world is present; otherwise, leave the hex blank.

The Referee may elect to alter the normal chances of worlds, making them more frequent or less frequent to correspond to specific regions of the galaxy. A 50% density (no DM) is appropriate for the spiral arms of the galaxy. Apply a −2 DM for 'rift sectors', a −1 DM for sparse sectors and a +1 DM for densely populated sectors.

Starport Type: Many worlds have starports, their presence being essential to interstellar trade and commerce. See Starports, page 178.

Bases: Stellar systems may have bases for military forces, the navy, the scouts, or for other arms of interstellar government. See Bases, page 179.

Bases will also help determine political boundaries in the sector. An interstellar government will place bases along its borders to guard against aggression from rival states, or to control local systems. The presence of multiple bases within a few parsecs might indicate a contested border, or a mighty stronghold.

Gas Giants: A star system may have one or more gas giant planets (similar to Jupiter or Saturn). The presence of a gas giant allows starships equipped with fuel scoops to refuel by skimming; this eliminates fuel cost for the vessel and increases profit. It also allows refuelling at systems that do not have starports. Refuelling in this fashion requires 1–6 hours. Fuel gained by skimming is unrefined.

Gas giants are relatively common. For each system throw 10+ on 2d6 for at least one gas giant *not* to be present in the system. If one is present, mark the system hex.

System Name: Each system is generally named for the primary world within. This name should be decided upon by the Referee and placed in the hex for identification.

Travel Zones: Most worlds are assumed to be civilized, or at least amenable to travellers and visitors. Some, however, are caught in the throes of war, plagued by disease, or simply not ready for interstellar visitors. Such worlds are classified by travel zones to denote such status. In most cases, the Referee should indicate travel zones based on the information available. Two such zone types exist: amber and red.

Amber travel zones indicate that travellers should exercise caution when visiting such worlds. The amber code may mean that the citizens of the world are xenophobic, that the political situation is chaotic, or that some other danger exists within the system.

DISTRICT RED 23

0101

0201
★
B
▲
●
Kakisto

0301

0401

0501

0601
☼
■
A
●
Agave

0701

0801
D
●
Ekwele

0102

0202
☼
■
B
●
Frange

0302

0402
☠
D
●
Gazeta

0502

0602

0702

0802

0103
▲
B
●
Keping

0203

0303

0403

0503

0603

0703

0803

0104
▲
C
●
Lilangeni

0204

0304

0404

0504

0604

0704

0804
E
●
Agni

0105
▲
D
●
Obol

0205

0305

0405

0505

0605
☠
C
●
Nzappa

0705

0805

0106
E
●
Pa'anga

0206
★
π
B
●
Phoenix

0306

0406

0506
E
●
Nimcha

0606

0706

0806

0107
▲
D
●
Reaal

0207
▲
C
●
Katzbalger

0307
C
●
Kastane

0407
▲
C
●
Golok

0507

0607

0707

0807

0108
▲
D
●
Tögrög

0208
★
π
A
☼
■
●
K. Postel

0308
☠
C
●
Azhi

0408

0508
E
●
Dahaka

0608
★
A
☼
■
●
Haagenti

0708

0808

0109

0209
E
●
Schiavona

0309

0409

0509

0609

0709
E
●
Omel

0809

0110

0210

0310
▲
D
●
Falcata

0410
▲
C
☼
●
Kiooce

0510

0610
D
●
Oracs

0710

0810

Kaskara

LAMBDA

DISTRICT RED 27
A sample subsector map.

Red travel zone usually indicates that a major danger exists within the system. This danger may be disease and the world is quarantined. The system may be involved in a war, and surface or space battles may be probable. Red travel zones are also used to show a government edict prohibiting entry to the system or world. This may be to protect a local civilization which is still developing and not yet ready for interstellar contacts, or to protect valuable resources until the government can mine them.

Travel zones are discussed further in World Creation, page 167.

Polities: Worlds may be independent, or part of a larger polity that spans a system or more. Polities range from loose confederations of a few worlds with common trade or defence policies or cultural links, to vast star empires containing thousand of systems and trillions of citizens. Polity borders should be drawn on the map. Note that larger polities will usually have sub-domains, which should also be marked.

Communications Routes: Within the subsector, local governments will have established communications routes connecting some (but not all) worlds. These routes serve as a conduit for messages between businesses and between governments as well as between people. The also serve as the basic routes that liners and large freighters travel. The Referee should examine the subsector map and connect key worlds with communications routes. If the subsector is an isolated community, the routes may not leave the map; if it is part of a larger confederation or empire, the routes will probably leave the edges to join with other parts of the sector. Use the starports as guides when drawing communication routes – in general, the best routes are the shortest connections between Class-A starports, naval bases and imperial consulates.

Communications routes should be carefully drawn so as to avoid making all parts of the subsector accessible; a subsector should have some areas as backwaters for exploration and adventure. Communications routes are drawn as single lines connecting hexes on the subsector grid.

Trade Routes: Trade routes link worlds that have strong commercial ties. Consult the table below – if any pair of worlds matching the two columns are within four parsecs of each other, and there is a Jump–1 or Jump–2 route between them, then mark a trade route connecting those two worlds.

Column 1	Column 2
Industrial or High Tech	Asteroid, Desert, Ice Capped, Non-Industrial
High Population or Rich	Agricultural, Garden, Water World

The star map, once generated, shows the distribution of star systems in space, and shows their relationships to each other in terms of relative distance and commercial space-lane connections.

Routes

In the Third Imperium travel routes are classified by the kind of Jump drive necessary to make them. This is because of simple refuelling issues – few starships carry enough fuel to make multiple Jumps in succession, so they must make sure to Jump only to places where they can refuel, either at a starport or by skimming fuel from gas giants or water-bearing worlds. A Jump–1 route has a starport or gas giant in every hex, a Jump–2 route has at least one one-hex 'gap' between refuelling points, a Jump–3 route has at least one two-hex 'gap' between refuelling points, and so on. In this way starship captains know that any route classified at less than or equal to their Jump capability can be travelled with no risk of becoming stranded in deep space.

WORLD CREATION

The term *world* refers to the various bodies that are contained in a stellar system; it encompasses planets, satellites, and asteroid belts. For example, the single most important world in a system may not be a planet; it could be a satellite of a gas giant, or it could be a planetoid within an asteroid belt.

The worlds contained in the star systems on the subsector map may be further classified in terms of their gross physical characteristics and their effects on persons living on them or travelling to them. These characteristics indicate specific facts about a world through the use of a numeric rating.

This world creation process is usually only carried out for the mainworld in a system, the most habitable planet in that star system. Almost all systems have additional planets but these are far less habitable. They can be generated by the Referee as necessary.

The basic planetary characteristics are Size, Atmosphere, Hydrology, Population, Government, Law Level, Technology Level, Starport and Bases, and are generated using two-dice throws, with DMs applied based on other characteristics. These characteristics establish the basic identity of a world, and are referred to as the Universal World Profile (UWP). Additional information can be generated, and should be, to more fully describe a world.

When originally generating a world, a subsector index containing world name, location, universal world profile, and other basic data should be compiled. This listing should be available to players who travel through the subsector. In addition, the Referee should generate other information which may be pertinent; this may include details of other planets in the star system, radiation characteristics of the star, the types of terrain present on the planetary surface, unique encounter tables (as described by the section on animal encounters on page 69), data on flora and fauna, industrial or agricultural capacity, data on social structure and government, or possibly actual maps of the planetary surface.

●————————● Communication Route

●∙∙∙∙∙∙∙∙∙∙∙∙● Trade Route

SIZE

The Size characteristic for inhabitable worlds ranges from 0 to 10, and is determined by rolling 2d6–2. Size measures a world's diameter in thousands of kilometres. The bigger a planet, the higher its gravity. The values for gravity in the table below assume that the world has a density similar to that of Earth. Worlds like gas giants have a lower gravity than their size would indicate, while extremely dense worlds have a higher gravity.

SIZE TABLE

Digit	World Size	Examples	Surface Gravity (gs)
0	800 km	Asteroid, orbital complex	Negligible
1	1,600 km		0.05
2	3,200 km	Triton, Luna, Europa	0.15
3	4,800 km	Mercury, Ganymede	0.25
4	6,400 km	Mars	0.35
5	8,000 km		0.45
6	9,600 km		0.7
7	11,200 km		0.9
8	12,800 km	Earth	1.0
9	14,400 km		1.25
10 (A)	16,000 km		1.4

Intelligent species (sophonts) are unlikely to evolve on worlds smaller than Size 4 or 5. Larger planets tend to imply larger populations, as there is more room for expansion.

Worlds of Size 1 or less are asteroids, orbital complexes, space stations and other small satellites, and are much too small to retain a breathable atmosphere. They are uninhabitable by most forms of life without technological support.

High and Low Gravity Worlds

Worlds where the gravity is 0.75 or less are low-gravity worlds. Common features include improbable-looking rock formations, thin and spindly life forms and flying as a common form of locomotion (assuming the atmosphere is thick enough to support flyers). Humans tend to find life on low-gravity worlds to be initially pleasant, but regular exercise regimes and medicinal supplements are required to prevent bone and muscle degradation. Those who spent too long on low-gravity worlds cannot tolerate higher gravities. Characters on low-gravity worlds suffer a –1 DM to all skill checks until they acclimatise, a process which takes 1d6 weeks. Characters with the Zero-G skill at level 0 or better acclimatise instantly.

High-gravity worlds have a gravity 1.25 times or more than of Earth. They tend to be extremely dense worlds; common features include wide rocky plains, squat, muscular creatures, and plant life that spreads out like lichen instead of growing up. Crawling, burrowing or swimming are the commonest forms of locomotion. Humans find high-gravity worlds unpleasant. Especially high-gravity worlds require the use of pressured or powered suits to support the human frame. Characters on high-gravity worlds suffer a –1 DM to all skill checks until they acclimatise, a process which takes 1d6 weeks.

ATMOSPHERE

The Atmosphere characteristic measures the type of atmosphere present. A planet's Atmosphere is generated by rolling 2d6–7 and adding the planet's Size.

Atmosphere Types

Tainted: Tainted atmospheres contain some element that is harmful to humans, such as an unusually high proportion of carbon dioxide. A character who breathes a tainted atmosphere without a filter will suffer 1d6 damage every few minutes (or hours, depending on the level of taint).

Exotic: An exotic atmosphere is unbreathable by humans, but is not otherwise hazardous. A character needs an air supply to breath in an exotic atmosphere.

Corrosive: Corrosive atmospheres are highly dangerous. A character who breathes in a corrosive atmosphere will suffer 1d6 damage each round.

Insidious: An insidious atmosphere is like a corrosive one, but it is so corrosive that it attacks equipment as well. The chief danger

in an insidious atmosphere is that the toxic gases will destroy the seals and filters on the character's protective gear. An insidious atmosphere worms its way past protection after 2d6 hours on average, although vigilant maintenance or advanced protective gear can prolong survival times.

ATMOSPHERE TABLE

Digit	Atmosphere	Examples	Pressure	Survival Gear Required
0	None	Moon	0.00	Vacc Suit
1	Trace	Mars	0.001 to 0.09	Vacc Suit
2	Very Thin, Tainted		0.1 to 0.42	Respirator, Filter
3	Very Thin		0.1 to 0.42	Respirator
4	Thin, Tainted		0.43 to 0.7	Filter
5	Thin		0.43 to 0.7	
6	Standard	Earth	0.71–1.49	
7	Standard, Tainted		0.71–1.49	Filter
8	Dense		1.5 to 2.49	
9	Dense, Tainted		1.5 to 2.49	Filter
10 (A)	Exotic		Varies	Air Supply
11 (B)	Corrosive	Venus	Varies	Vacc Suit
12 (C)	Insidious		Varies	Vacc Suit
13 (D)	Dense, High		2.5+	
14 (E)	Thin, Low		0.5 or less	
15 (F)	Unusual		Varies	Varies

Dense, High (D): These worlds have thick N_2/O_2 atmospheres, but their mean surface pressure is too high to support unprotected human life (high pressure nitrogen and oxygen are deadly to humans). However, pressure naturally decreases with increasing altitude, so if there are highlands at the right altitude the pressure may drop enough to support human life. Alternatively, there may not be any topography high enough for humans to inhabit, necessitating floating gravitic or dirigible habitats or sealed habitats on the surface.

Thin, Low (E): The opposite of the Dense, High atmosphere, these massive worlds have thin N_2/O_2 atmospheres that settle in the lowlands and depressions and are only breathable there – the pressure drops off so rapidly with altitude that the highest topographic points of the surface may be close to vacuum.

Unusual (F): An Unusual atmosphere is a catchall term for an atmosphere that behaves in a strange manner. Examples include ellipsoidal atmospheres, which are thin at the poles and dense at the equator; Panthalassic worlds composed of a rocky core surrounded by a water layer hundreds of kilometres thick; worlds wracked by storms so intense that that the local air pressure changes from dense to thin depending on the current wearther; and other planets with unusual and hazardous atmospheric conditions.

World Temperature

A planet's surface temperature is primarily dependent on its distance from its sun (how much solar radiation it receives) and how thick its atmosphere is (how much of this heat it can retain). The habitable zone is the area around a star which is most conducive to the development of Earth-like, habitable worlds, and it is assumed that most colonised worlds will be in this habitable zone. Roll 2d6 for the planet's temperature, applying the DMs listed below.

TEMPERATURE TABLE

Roll	Type	Average Temperature	Description
2 or less	Frozen	−51° or less	Frozen world. No liquid water, very dry atmosphere.
3–4	Cold	−51° to 0°	Icy world. Little liquid water, extensive ice caps, few clouds.
5–9	Temperate	0°–30°	Temperate world. Earthlike. Liquid and vaporised water are common, moderate ice caps.
10–11	Hot	31°–80°	Hot world. Small or no ice caps, little liquid water. Most water in the form of clouds.
12+	Roasting	81°+	Boiling world. No ice caps, little liquid water.

Temperature is measured in degrees Celsius.

TEMPERATURE DMs

Atmosphere 0 or 1	No modifiers, but temperature swings from roasting during the day to frozen at night.
Atmosphere 2 or 3	−2 DM
Atmosphere 4, 5 or E	−1 DM
Atmosphere 6 or 7	+0 DM
Atmosphere 8 or 9	+1 DM
Atmosphere A, D or F	+2
Atmosphere B or C	+6
Hot edge of Habitable Zone	+4
Cold edge of Habitable Zone	−4

Hydrographics

The Hydrographic characteristic measures the amount of surface liquid, and hence the amount of dry land on the world. Hydrographic percentage goes from 0 to 10, measuring the surface liquid in increments of 10%. For normal worlds, this will be water; on other worlds with corrosive or exotic atmospheres, it could be a corrosive or exotic liquid like ammonia. Hydrographic percentage is obtained by rolling 2d6–7 and adding the planet's Size, modified by the planet's atmosphere or size as described below:

Size 0 or 1	Hydrographics 0
Atmosphere 0, 1, A, B or C	−4

If the planet's atmosphere is *not* D (or a kind of F that is thick enough to retain water) then also apply DMs for temperature:

Hot Temperature	−2
Roasting Temperature	−6
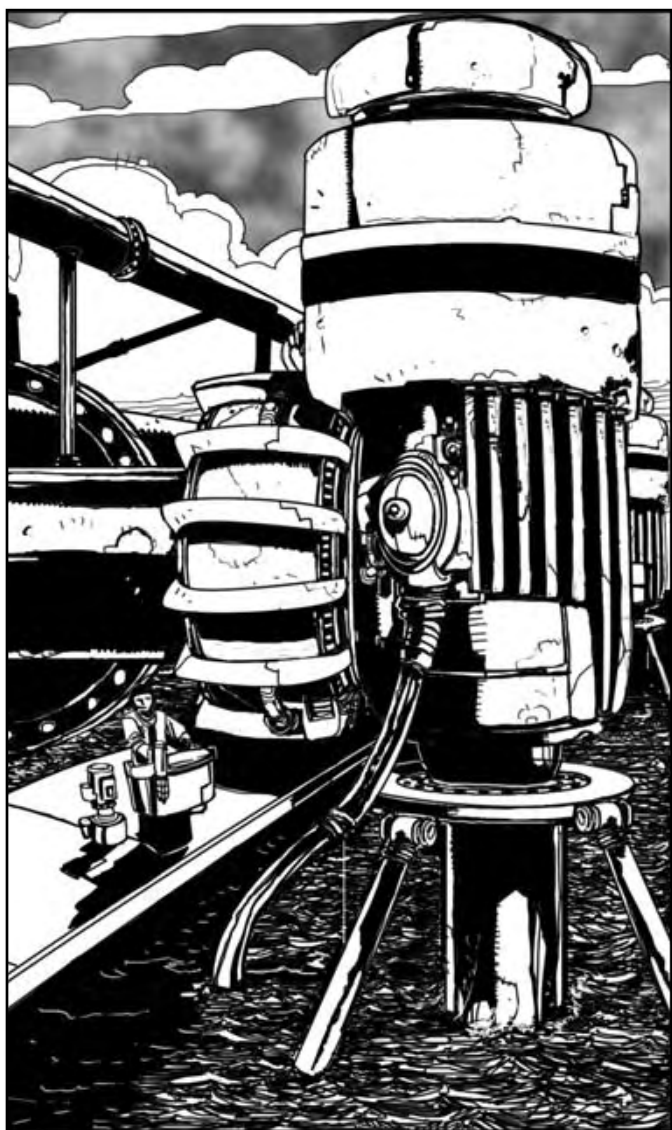
HYDROGRAPHICS TABLE

Digit	Hydrographic Percentage	Description
0	0%–5%	Desert world
1	6%–15%	Dry world
2	16%–25%	A few small seas.
3	26%–35%	Small seas and oceans.
4	36%–45%	Wet world
5	46%–55%	Large oceans
6	56%–65%	
7	66%–75%	Earth-like world
8	76%–85%	Water world
9	86%–95%	Only a few small islands and archipelagos.
10 (A)	96–100%	Almost entirely water.

POPULATION

The Population characteristic measures, obviously, the planet's population. The Population digit can be viewed as the number of zeroes following a one, so a population of 6 indicates a population in the millions (1,000,000). Population is generated by rolling 2d6–2:

POPULATION TABLE

Digit	Population	Range	Description
0	None	0	
1	Few	1+	A tiny farmstead or a single family
2	Hundreds	100+	A village
3	Thousands	1,000+	
4	Tens of thousands	10,000+	Small town
5	Hundreds of thousands	100,000+	Average city
6	Millions	1,000,000+	
7	Tens of millions	10,000,000+	Large city
8	Hundreds of millions	100,000,000+	
9	Billions	1,000,000,000+	Present day Earth
10 (A)	Tens of billions	10,000,000,000+	
11 (B)	Hundreds of billions	100,000,000,000+	Incredibly crowded world
12 (C)	Trillions	1,000,000,000,000+	World-city

Low-Population Worlds

Planets with a Population of 6 or less are very small colonies, and may differ considerably from the descriptions in the rest of this chapter. A world with a Population of 1 can change its government type with an argument over dinner, and is unlikely to bother with a worldwide network of communications satellites even at TL 15.

If a world has a population of 0, it is uninhabited and so has a Government, Law Level and Technology Level of 0.

GOVERNMENT

The Government characteristic indicates a range of possible ruling systems, and is determined by rolling 2d6–7 and adding the planet's Population. Compare the result with the Government table on the following page.

The 'common contraband' column determines goods such a government is likely to restrict, but should not be taken as a universal rule.

Rivals, Factions, Connections and Colonies

The government code determines the *dominant* government type on that planet, but there are usually other factions such rival political parties, cultural groups, religions, rebels and so forth who oppose the government. Conflicts on a planet often involve the player characters; they might be hired to smuggle weapons to a rebel group, or be asked to investigate a political scandal involving a government leader.

Roll 1d3 to determine how many factions there are on the planet, with a DM of +1 if the government type is 0 or 7, and a DM of –1 if the government type is 10 or more. Determine what 'mini-government' each faction uses on the government table. In cases where the faction type is the same as the current government type (or similar, such as two democracies or two dictatorships), then it is a splinter faction within the ruling government. In cases where it is radically different (anarchists against a bureaucracy), then the faction is a rebel group or movement.

Roll 2d6 to determine the strength of each faction:

FACTION STRENGTH TABLE

Roll	Relative Strength
1–3	Obscure group – few have heard of them, no popular support
4–5	Fringe group – few supporters
6–7	Minor group – some supporters
8–9	Notable group – significant support, well known
10–11	Significant – nearly as powerful as the government
12	Overwhelming popular support – more powerful than the government

Cultural Differences

While colonies trace their heritage back to their mother worlds and patron governments, and from there to the ancient homeworlds of the species, every world has a measure of unique cultural drift. Spacefarers may run into bizarre customs or beliefs on different worlds. The Referee should either decide how a culture has developed over the centuries or roll on the table overleaf (or better yet, both – a combination of reasoned extrapolation and random strangeness produces a nicely organic-feeling culture).

LAW LEVEL

The law level of a planet represents the relative force of law extant on the world. A high Law Level indicates that visitors to the world will have their activities curtailed. Law Level determines two things in particular – what it is illegal for characters to possess on the world, and the likelihood that the characters will run afoul of the law.

Law level is determined by rolling 2d6–7 and adding the Government characteristic. Compare this result to the Law Level table on page 176.

Banned Goods

Different governments ban different goods as indicated in the 'common contraband' column of the Government Table. A traveller might be able to carry his laser rifle slung over his shoulder on one world, and be arrested for carrying a lethal weapon on the next planet over. An alien might enjoy full rights on one world, and be treated as an animal on another. Banned goods are important for smuggling (see page 162).

Weapons: A government that bans weapons begins with restricting weapons of terror and mass destruction, then moves onto personal weapons.

Drugs: A government that bans drugs begins with narcotics, but at higher Law Levels, medicinal and anagathic drugs are also banned.

Information: A government that seeks to control information begins by restricting the use of computers and computer programs, especially information-retrieval and information-control. At higher Law Levels, bringing in data from offworld or even communicating with natives is forbidden.

Technology: A government that bans technology seeks to shield its citizens from the influence of advanced technology.

Travellers: A ban on travellers restricts the ability of space travellers to visit the world, confining them to the starport or forbidding them landing entirely.

Psionics: Restrictions on psionics are common throughout the Imperium, and most worlds ban psionics as a matter of course. On other worlds, psionics is technically legal, but there is such prejudice against it that most psionic users hide their abilities.

The Law and Travellers

A planet's Law Level can be used to determine the characters' interactions with the law. In each of the following situations, roll 2d6, add the listed modifiers, and if the total is lower than the planet's Law Level, the characters are investigated or challenged by agents of planetary law enforcement.

Situation	DM	Response
First approach to a planet	+0	Check
Offworlders wandering the streets of a city (once per day)	+0	Check
Offworlders acting suspiciously	−1	Check
Bar fight	−1	Combat
Shots fired	−2	Combat
Breaking and entering	−2	Investigate
Firefight involving armoured characters and military weapons	−4	Combat
Murder and carnage	−4	Investigate

Check means that the characters' travel documents and identities are checked, either by a police officer or guard, or by electronically by querying the characters' comms. A successful Admin or Streetwise roll can allay suspicion but if this check is failed the planetary authorities move on to Investigation.

Investigate means that a detective or bureaucrat probes deeper into the characters' backgrounds. If the characters have a ship, it will be searched. They may be followed, or have their communications tapped. They may also be questioned closely.

Finally, **Combat** means that the police show up ready for a fight. Their response will generally be proportional to the threat posed by the player characters; if the characters are just making trouble in a bar, then most police forces will just use batons, stunners, tranq gas and other non-lethal weapons. On the other hand, if the characters are in Battle Dress and firing PGMPs at the palace of the planetary duke, then the police will show up with the best weapons and armour available at the planet's TL (or even a few levels higher).

Characters arrested for a crime will face punishment, determined by rolling 2d6+DMs on the Sentencing table. For crimes involving smuggling banned goods, the DM is equal to the difference between the planet's law level and the banned goods in question. (For example, laser weapons are banned at Law Level 2. A character found with a laser weapon on a Law Level 6 world would have a +4 DM to his roll on the Sentencing table.) Other crimes have a set DM:

Assault	Law level −5
Destruction of Property	Law level −3
False Identity	Law level −2
Manslaughter	Law level −1
Murder	Law level +0

A character with the Advocate skill may attempt to reduce the severity of sentencing by making a check. If successful, reduce the Sentencing DM by the Effect of the check.

Sentencing Roll	Sentence
0 or less	Dismissed *or* trivial punishment
1–2	Fine of 1d6 × 1,000 credits
3–4	Fine of 2d6 × 5,000 credits
5–6	Exile *or* a fine of 2d6 × 10,000 credits
7–8	Imprisonment for 1d6 months *or* exile *or* fine of 2d6 × 20,000 credits
9–10	Imprisonment for 1d6 years *or* exile
11–12	Imprisonment for 2d6 years *or* exile
13–14	Life imprisonment
15+	Death

A result of Exile means that the character must leave the planet immediately and never return. Fines for smuggling goods are *per ton* of goods seized – gun running can be an extremely risky proposition.

Factionalism

Balkanised worlds or worlds with strong opposition to the planetary government can be unstable and dangerous places. One faction on the world might call in aid from offworld – advanced technology can shift the balance from one side to another. Travellers might be employed to train or hunt down revolutionaries, or help foster a social shift.

The factions...
1. ... are warring over a disputed election. If the characters can uncover evidence of fraud, they can resolve the dispute.
2. ... have their roots in cultural differences between the two. What is the origin of this dispute?
3. ... are actually fostering the dispute to keep the population in line with fear.
4. ... both try to hire the characters to fight against the other faction.
5. ... are both vying for Imperial support in their dispute.
6. ... are both being manipulated by a third party.

GOVERNMENT TABLE

Type	Government	Description	Examples	Common Contraband
0	None	No government structure. In many cases, family bonds predominate.	Family, Clan, Anarchy.	None
1	Company/corporation	Ruling functions are assumed by a company managerial elite, and most citizenry are company employees or dependants.	Corporate outpost, asteroid mine, feudal domain.	Weapons, Drugs, Travellers
2	Participating democracy	Ruling functions are reached by the advice and consent of the citizenry directly.	Collective, tribal council, comm-linked consensus	Drugs
3	Self-perpetuating oligarchy	Ruling functions are performed by a restricted minority, with little or no input from the mass of citizenry.	Plutocracy, hereditary ruling caste.	Technology, Weapons, Travellers
4	Representative democracy	Ruling functions are performed by elected representatives.	Republic, democracy.	Drugs, Weapons, Psionics.
5	Feudal technocracy	Ruling functions are performed by specific individuals for persons who agree to be ruled by them. Relationships are based on the performance of technical activities which are mutually beneficial.		Technology, Weapons, Computers
6	Captive government	Ruling functions are performed by an imposed leadership answerable to an outside group.	A colony or conquered area.	Weapons, Technology, Travellers
7	Balkanisation	No central authority exists; rival governments complete for control. Law level refers to the government nearest the starport.	Multiple governments, civil war.	Varies
8	Civil service bureaucracy	Ruling functions are performed by government agencies employing individuals selected for their expertise.	Technocracy, Communism.	Drugs, Weapons,
9	Impersonal Bureaucracy	Ruling functions are performed by agencies which have become insulated from the governed citizens.	Entrenched castes of bureaucrats, decaying empire.	Technology, Weapons, Drugs, Travellers, Psionics
10 (A)	Charismatic dictator	Ruling functions are performed by agencies directed by a single leader who enjoys the overwhelming confidence of the citizens.	Revolutionary leader, messiah, emperor.	None
11 (B)	Non-charismatic leader	A previous charismatic dictator has been replaced by a leader through normal channels.	Military dictatorship, hereditary kingship.	Weapons, Technology, Computers
12 (C)	Charismatic oligarchy	Ruling functions are performed by a select group of members of an organisation or class which enjoys the overwhelming confidence of the citizenry.	Junta, revolutionary council.	Weapons
13 (D)	Religious dictatorship	Ruling functions are performed by a religious organisation without regard to the specific individual needs of the citizenry.	Cult, transcendent philosophy, psionic group mind.	Varies

LAW LEVEL TABLE — ILLEGAL POSSESSIONS

Digit	Weapons	Drugs	Information	Technology	Travellers	Psionics
0	No restrictions.					
1	Poison gas, explosives, undetectable weapons, WMD	Highly addictive and dangerous narcotics	Intellect programs	Dangerous technologies such as nanotechnology	Visitors must contact planetary authorities by radio, landing is permitted anywhere	Dangerous talents must be registered.
2	Portable energy weapons (except ship-mounted weapons)	Highly addictive narcotics	Agent programs	Alien technology	Visitors must report passenger manifest, landing is permitted anywhere	All psionic powers must be registered; use of dangerous powers forbidden.
3	Heavy weapons	Combat drugs	Intrusion programs	TL 15 items	Landing only at starport or other authorised sites	Use of telepathy restricted to government-approved telepaths
4	Light assault weapons and submachine guns	Addictive narcotics	Security programs	TL 13 items	Landing only at starport	Use of teleportation and clairvoyance restricted
5	Personal concealable weapons	Anagathics	Expert programs	TL 11 items	Citizens must register offworld travel, visitors must register all business	Use of all psionic powers restricted to government psionicists
6	All firearms except shotguns and stunners; carrying weapons discouraged	Fast and Slow drugs	Recent news from offworld.	TL 9 items	Visits discouraged; excessive contact with citizens forbidden	Possession of psionic drugs banned
7	Shotguns	All narcotics	Library programs, unfiltered data about other worlds. Free speech curtailed.	TL 7 items	Citizens may not leave planet; visitors may not leave starport	Use of psionics forbidden
8	All bladed weapons, stunners	Medicinal drugs	Information technology, any non-critical data from offworld, personal media.	TL 5 items	Landing permitted only to imperial agents	Psionic-related technology banned
9+	Any weapons	All drugs	Any data from offworld. No free press.	TL 3 items	No offworlders permitted	All psionics

Imperial Rules of War

The rules of war are an accumulation of unwritten concepts established on a case-by-case basis. They have not been officially codified to prevent formal precedent from preventing Imperial intervention. The main aim of the rules is to maintain the economic and military well-being of the realm.

The Imperium tolerates the use of force as a necessary outlet for built-up political and social pressures beyond the opponents' ability to mediate. A short war is deemed preferable to continuing tension, sabotage, political agitation, etc. However, attempts by extra-planetary forces to seize control of a world's affairs are beyond the scope of the "safety valve" rationale. Recognizing that often some community of interest exists between a faction or state on a planet and some off-planet organization, the Imperium tolerates 'assistance' as long as it is deemed appropriate to the level of legitimate interest in the affairs of the world held by the extraplanetary organization. When it has appeared that the primary burden for the conduct of the war has been carried by an extra-planetary power, the Imperium has intervened.

One prohibition is clear and firm: use or possession of nuclear weapons, if discovered, and regardless of size or type, will almost certainly trigger Imperial intervention. The Imperium alone retains the rights to such weapons, because of their extreme destructive powers and the relatively low tech level at which they can be manufactured.

For similar reasons, certain other weapons (chemical and bacteriological agents, and meson accelerators, for example) are strictly controlled, although they are not subject to the sweeping restrictions placed on nuclear weapons.

CULTURAL DIFFERENCES TABLE

d66	Culture	d66	Culture
11	Sexist – one gender is considered subservient or inferior to the other.	41	Tourist Attraction – some aspect of the culture or the planet draws visitors from all over charted space.
12	Religious – culture is heavily influenced by a religion or belief system, possibly one unique to this world.	42	Violent – physical conflict is common, taking the form of duels, brawls or other contests. Trial by combat is a part of their judicial system.
13	Artistic – art and culture are highly prized. Aesthetic design is important in all artefacts produced onworld.	43	Peaceful – physical conflict is almost unheard-of. The culture produces few soldiers and diplomacy reigns supreme. Forceful characters will be ostracised.
14	Ritualised – social interaction and trade is highly formalised. Politeness and adherence to traditional forms is considered very important.	44	Obsessed – everyone is obsessed with or addicted to a substance, personality, act or item. This monomania pervades every aspect of the culture.
15	Conservative – the culture resists change and outside influences.	45	Fashion – fine clothing and decoration are considered vitally important in the culture. Underdressed characters have no standing here.
16	Xenophobic – the culture distrusts outsiders and alien influences. Offworlders will face considerable prejudice.	46	At war – the culture is at war, either with another planet or polity, or is troubled by terrorists or rebels.
21	Taboo – a particular topic is forbidden and cannot be discussed. Characters who unwittingly mention this topic will be ostracised.	51	Unusual Custom: Offworlders – space travellers hold a unique position in the culture's mythology or beliefs, and travellers will be expected to live up to these myths.
22	Deceptive – trickery and equivocation are considered acceptable. Honesty is a sign of weakness.	52	Unusual Custom: Starport – the planet's starport is more than a commercial centre; it might be a religious temple, or be seen as highly controversial and surrounded by protestors.
23	Liberal – the culture welcomes change and offworld influence. Characters who bring new and strange ideas will be welcomed.	53	Unusual Custom: Media – news agencies and telecommunications channels are especially strange here. Getting accurate information may be difficult.
24	Honourable – one's word is one's bond in the culture. Lying is both rare and despised.	54	Unusual Customs: Technology – the culture interacts with technology in an unusual way. Telecommunications might be banned, robots might have civil rights, cyborgs might be property.
25	Influenced – the culture is heavily influenced by another, neighbouring world. If you have the details for the neighbouring world, choose a cultural quirk that this world has adopted. If not, roll for one.	55	Unusual Customs: Lifecycle – there might be a mandatory age of termination, or anagathics might be widely used. Family units might be different, with children being raised by the state or banned in favour of cloning.
26	Fusion – the culture is a merger of two distinct cultures. Roll again twice to determine the quirks inherited from these cultures. If the quirks are incompatible then the culture is likely divided.	56	Unusual Customs: Social Standings – the culture has a distinct caste system. Characters of a low social standing who do not behave appropriately will face punishment.
31	Barbaric – physical strength and combat prowess are highly valued in the culture. Characters may be challenged to a fight, or dismissed if they seem incapable of defending themselves. Sports tend towards the bloody and violent.	61	Unusual Customs: Trade – the culture has an odd attitude towards some aspect of commerce, which may interfere with trade at the spaceport. For example, merchants might expect a gift as part of a deal, or some goods may only be handled by certain families.
32	Remnant – the culture is a surviving remnant of a once-great and vibrant civilisation, clinging to its former glory. The world is filled with crumbling ruins, and every story revolves around the good old days.	62	Unusual Customs: Nobility – those of high social standing have a strange custom associated with them; perhaps nobles are blinded, or must live in gilded cages, or only serve for a single year before being exiled.
33	Degenerate – the culture is falling apart and is on the brink of war or economic collapse. Violent protests are common and the social order is decaying.	63	Unusual Customs: Sex – the culture has an unusual attitude towards intercourse and reproduction. Perhaps cloning is used instead, or sex is used to seal commercial deals.
34	Progressive – the culture is expanding and vibrant. Fortunes are being made in trade; science is forging bravely ahead.	64	Unusual Customs: Eating – food and drink occupies an unusual place in the culture. Perhaps eating is a private affair, or banquets and formal dinners are seen as the highest form of politeness.
35	Recovering – a recent trauma, such as a plague, war, disaster or despotic regime has left scars on the culture.	65	Unusual Customs: Travel – travellers may be distrusted or feted, or perhaps the culture frowns on those who leave their homes.
36	Nexus – members of many different cultures and species visit here.	66	Unusual Custom: Conspiracy – something strange is going on. The government is being subverted by another group or agency.

STARPORT

Starports are the arteries of interstellar commerce. These ports for spacefaring craft range in size from a landing field with a rudimentary radio beacon and a hydrogen fuel still to city-sized edifices where tens of thousands of ships land daily. Most planets have only a DownPort, a landing zone on the ground accessible only by entering the atmosphere. Ships that cannot land at a DownPort are serviced by a fleet of shuttles and other smaller vessels. Worlds advanced or rich enough may possess a HighPort, an orbiting starport. Some are equipped with space elevators or even gravitic lifts connecting HighPort to DownPort.

Starports are rated from A to E. To determine the level of a starport on a planet, roll 2d6:

STARPORT TABLE

Roll	Starport Class
2 or less	X
3	E
4	E
5	D
6	D
7	C
8	C
9	B
10	B
11+	A

Starports and The Law

Technically, a starport is Imperial territory, and is not under the jurisdiction of the planetary government. The local government may share in the construction costs, running costs and profits of the starport, but the port is extraterritorial and run by an Imperium-appointed governor. This means that travellers can carry locally illegal goods onto a planet as long as they do not leave the starport.

The **quality** of a starport determines both the condition of the port itself, and the level of competence of the staff. Quality may vary up and down – it is possible to find a Class-D port run by expert engineers, or a Class-A that has succumbed to decay. Some worlds have entirely inappropriate starports; a world that was once a centre of commerce, but has now been bypassed by new trade routes might have a cavernous port capable of handling thousands of freighters, but is now almost abandoned.

A frontier installation is just a bare spot of bedrock, marked with a beacon, and is a starport in the most technical sense only.

The **berthing cost** must be paid by any starship that wants to land at or dock with the starport. Costs can vary wildly from starport to starport but remain more or less constant at each port (roll once for each port and record it for future reference).

Fuel refers to the fuel available for purchase – either refined or unrefined. Refined fuel costs Cr. 500 per ton; unrefined fuel costs Cr. 100 per ton but is risky to use when jumping (see page 140). Bases have their own fuel-refining ability – see Bases, below.

Facilities are the starport's repair and construction ability. A shipyard allows for the construction of new vessels. A shipyard capable of building all types of ships can construct small craft (less than 100 tons), spacecraft (100 to 5,000 tons) and capital ships (more than 5,000 tons).

Repair facilities allow a damaged ship to be repaired, and have plenty of spare parts for most common systems. Limited repair facilities can only fix Hull hits but not system damage.

Finally, the **Bases** column lists what sort of bases may be present. Roll 2d6 for each base type listed; if you roll the indicated number or higher, that base is present either as part of the starport or nearby. For more details, see Bases, page 179.

STARPORTS

Class	Quality	Berthing Cost (Cr.)	Fuel	Facilities	Bases	
A	Excellent	1d6 × 1000	Refined	Shipyard (all) Repair	Naval 8+ Scout 10+ Research 8+	TAS 4+ Imperial Consulate 6+
B	Good	1d6 × 500	Refined	Shipyard (spacecraft) Repair	Naval 8+ Scout 8+ Research 10+	TAS 6+ Imperial Consulate 8+ Pirate 12+
C	Routine	1d6 × 100	Unrefined	Shipyard (small craft) Repair	Scout 8+ Research 10+ TAS 10+	Imperial Consulate 10+ Pirate 10+
D	Poor	1d6 × 10	Unrefined	Limited Repair	Scout 7+ Pirate 12+	
E	Frontier	0	None	None	Pirate 12+	
X	No Starport	0	None	None	None	

It also means that criminals and refugees often claim sanctuary in a starport, and that a starport's technology level may be considerably higher than the rest of the planet. Starports operate according to Imperial law (equivalent to Law Level 1 for most items, and Law Level 7 for psionics).

TECHNOLOGY LEVEL

The Technology Level of the planet is determined by rolling 1d6 and adding DMs as follows:

Starport Value	DM	Size Value	DM	Atmosphere Value	DM
0		0	+2	0	+1
1		1	+2	1	+1
2	`	2	+1	2	+1
3		3	+1	3	+1
4		4	+1	4	
5		5		5	
6		6		6	
7		7		7	
8		8		8	
9		9		9	
10 (A)	+6	10 (A)		10 (A)	+1
11 (B)	+4	11 (B)		11 (B)	+1
12 (C)	+2	12 (C)		12 (C)	+1
13 (D)		13 (D)		13 (D)	+1
14 (E)		14 (E)		14 (E)	+1
15 (F)		15 (F)		15 (F)	+1
X	−4	X		X	

Hydro Value	DM	Population Value	DM	Government Value	DM
0	+1	0		0	+1
1		1	+1	1	
2		2	+1	2	
3		3	+1	3	
4		4	+1	4	
5		5	+1	5	+1
6		6		6	
7		7		7	+2
8		8		8	
9	+1	9	+1	9	
10 (A)	+2	10 (A)	+2	10 (A)	
11 (B)		11 (B)	+3	11 (B)	
12 (C)		12 (C)	+4	12 (C)	
13 (D)		13 (D)		13 (D)	−2
14 (E)		14 (E)		14 (E)	−2
15 (F)		15 (F)		15 (F)	

The Technology Level measures the average technology presence on the planet, and gives an idea of local production and repair capability. Trade with offworlders may bring in advanced technology; on average, a rich individual can afford technology two or more levels higher than the planetary average. The government may also have access to higher-technology items.

Environmental Limits

Certain atmospheres require a minimal Technology Level. A world can have a Technology Level lower than this limit, but the population cannot maintain or repair their life support systems and are likely doomed when the inevitable mechanical failure happens.

Atmosphere	Minimum TL
0 or 1	8
2 or 3	5
4, 7 or 9	3
10 (A)	8
11 (B)	9
12 (C)	10
13 (D) or 14 (E)	5
15 (F)	8

A planet's technology may be one or more levels higher or lower in a particular field, such as Medicine, Communications, Weaponry, Ship Construction, Power Generation, Computers and so forth.

Communications

If the planet is below Technology Level 3 then there is no telecommunication system whatsoever except for whatever facilities the starport offers. If it is between TL 4 and TL 6 then it has radio and telephone communications between major cities at least, but no satellite facilities. From TL 7 onwards, the planet has a progressively more advanced communications grid with only occasional gaps. At TL 9, it is accessible from every point of the surface (communications satellites are cheap and easy to deploy).

BASES

In addition to the basic facilities at a starport, there may be one or more special Imperial bases at the starport or nearby in the system. There are six common types of bases, but others are also possible, such as prison facilities, naval shipyards, alien embassies or consulates and other secret operations.

Naval: A naval base is a supply depot, refuelling station, repair yard or fortress of either the Imperial Navy or the local sector navy. Naval vessels can obtain refined fuel and supplies here. Naval bases are always guarded by armed vessels and fixed defences. Ex-navy characters may meet contacts or allies here, and mercenary characters can try to pick up work. Naval bases also have an advanced hospital although it is normally available only to naval personnel. Characters may also be able to purchase navy-surplus weapons here.

Scout: A scout base offers refined fuel and supplies to scout ships (including retired scout ships obtained by retired scouts). They are also an excellent place to pick up rumours and news.

TAS: This is a Traveller's Aid Society Hostel, where characters with TAS membership and their guests can stay. TAS Hostels offer medical facilities for members, as well as supplies and luxuries not normally available on most worlds. TAS Hostels are a good source of rumours and passengers.

Research: A Research base is dedicated to a particular field of research. The base might be a weapons testing facility, or a solar observatory, or part of a secret Imperial project. A research base may have connections or allies of scholar characters. Such bases may have advanced medical facilities if that is their field.

Imperial Consulate: An Imperial consulate is an administration office for various imperial departments such as commerce, justice and foreign affairs. Characters wishing to report significant crimes or obtain various permits will need to visit a consulate.

Pirate: The presence of a pirate base in a system indicates that a group of thieves is active in the area. Pirates are unlikely to be operating out of the starport itself (except on a Law Level 0 world), but no doubt have agents at the port on the look-out for likely prey. Ex-rogues may know of pirate bases.

TRAVEL CODES

There are two travel codes – Amber and Red. An Amber world has been deemed dangerous by the Imperium, and travellers are warned to be on their guard. Amber worlds are often undergoing upheaval or revolution, or else are naturally hazardous environments.

Red worlds are interdicted and travel to them is forbidden. A world might be Red because the Imperium wishes to preserve it, or because the world is too dangerous to allow visitors. Interdictions are enforced by the Imperial Navy.

A world with an Atmosphere of 10+, a government of 0, 7 or 10, or a Law Level of 0 or 9+ should be considered for Amber status. Red codes are given out at the discretion of the Referee.

Variations

The preceding world creation system is geared towards the default *Traveller* setting of the Third Imperium. Interstellar empires are centrally planned and locally managed, travel between worlds takes days rather than minutes or years, and life is everywhere with just enough intelligent alien species to be interesting.

However, there are two other common milieus for science fiction roleplaying: 'space opera' and 'hard science'. Space opera campaigns tend to focus on fewer key worlds and so randomly generated worlds are less likely to be habitable. Hard science campaigns tend to require a rugged individuality and a frontier spirit; slower travel times bleed over to require more generally self-sufficient worlds. In hard science settings, starports are typically built, owned and operated by the host world rather than some central governing power.

SPACE OPERA WORLD CREATION

When generating a mainworld for a space opera setting, generate Size and Atmosphere as normal then consult the following if Size is 4 or less:
- If Size is 0–2, Atmosphere is set to 0. The world is too small to retain an atmosphere.
- If Size is 3–4 and Atmopshere is 0–2, set Atmosphere to 0.
- If Size is 3–4 and Atmosphere is 3–5, set Atmosphere to 1.
- If Size is 3–4 and Atmopshere is 6+, set Atmosphere to A.

Hydrographics is also affected. Apply the following DMs to rolls on the Hydrographics Table (page 172):
- If Size is 3–4 and Atmosphere is A the DM is –6.
- If Atmosphere is 0–1 the DM is –6.
- If Atmosphere is 2–3, B or C the DM is –4.

HARD SCIENCE WORLD CREATION

Hard science worlds use the space opera modifiers above, plus additional Dice Modifiers to Population based on the Size and Atmosphere as follows:
- If Size is 0–2 (low gravity world) then the DM is –1.
- If Size is A (high gravity world) then the DM is –1.
- If Atmosphere is *not* 5, 6 or 8 then the DM is –1.
- If Atmosphere is 5, 6 or 8 then the DM is +1.

In addition, the population of a world has an affect on the class of the local starport. Instead of rolling 2d6 on the Starport Table, roll 2d6–7 and add the Population value.

TRADE CODES

Trade codes designate particular types of worlds, and the types of goods that are likely to be found there. If a world meets all the listed requirements, it gains that trade classification. Trade classifications are important for the trade system (see page 160) and also when creating a character from that world to determine what background skills are available (see page 6).

Classification	Code	Description	Planet Size	Atmosphere	Hydro	Population	Government	Law Level	Tech Level
Agricultural	Ag	Agricultural worlds are dedicated to farming and food production. Often, they are divided into vast semi-feudal estates.		4–9	4–8	5–7			
Asteroid	As	Asteroids are usually mining colonies, but can also be orbital factories or colonies.	0	0	0				
Barren	Ba	Barren worlds are uncolonised and empty.				0	0	0	
Desert	De	Desert worlds are dry and barely habitable.		2+	0				
Fluid Oceans	Fl	Fluid Oceans are worlds where the surface liquid is something other than water, and so are incompatible with Earth-derived life.		10+	1+				
Garden	Ga	Garden worlds are Earth-like.	5+	4–9	4–8				
High Population	Hi	High Population worlds have a population in the billions.				9+			
High Technology	Ht	High Technology worlds are among the most technologically advanced in the Imperium.							12+
Ice-Capped	IC	Ice-Capped worlds have most of their surface liquid frozen in polar ice caps, and are cold and dry.		0–1	1+				
Industrial	In	Industrial worlds are dominated by factories and cities.		0–2, 4, 7, 9		9+			
Low Population	Lo	Low Population worlds have a population of only a few thousand or less.				1–3			
Low Technology	Lt	Low Technology worlds are pre-industrial and cannot produce advanced goods.							5-
Non-Agricultural	Na	Non-Agricultural worlds are too dry or barren to support their populations using conventional food production.		0–3	0–3	6+			
Non-Industrial	NI	Non-Industrial worlds are too low-population to maintain an industrial base.				4–6			
Poor	Po	Poor worlds lack resources, viable land or sufficient population to be anything other than marginal colonies.		2–5	0–3				
Rich	Ri	Rich worlds are blessed with a stable government and viable biosphere, making them economic powerhouses.		6, 8		6–8			
Vacuum	Va	Vacuum worlds have no atmosphere.		0					
Water World	Wa	Water Worlds are nearly entirely water-ocean.			10				

INDEX

D

E

+++Anyone know any good bars in this system?+++

NEED MORE TRAVELLER?

TRAVELLER →

Mercenary

THE POOR BLOODY INFANTRY WHO FIGHT THE GROUND WARS FOR POSSESSION OR DEFENCE OF PLANETS. TRAVELLER: MERCENARY CONTAINS RULES FOR GENERATING VETERAN MERCENARY CHARACTERS, MERCENARY TICKETS, AND ADVANCED COMBAT OPTIONS.

TRAVELLER →

High Guard

PATROL THE SPACE LANES WITH THE INTERSTELLAR NAVY, FROM THE POISED AND CONFIDENT OFFICERS ON THE BRIDGE TO THE DESPERATE AND DIRTY ENGINEERS IN THE CRAMPED BELOWDECKS AND THE SWAGGERING PILOTS OUTSIDE. TRAVELLER: HIGH GUARD EXPANDS SPACECRAFT DESIGN AND COVERS A WIDE VARIETY OF POSSIBLE NAVAL CAREERS.

COMING SOON FROM MONGOOSE PUBLISHING

NEED EVEN MORE TRAVELLER?

SIGNS AND PORTENTS

Online Magazine

RELEASED EVERY MONTH AND FULL OF FRESH AND EXCITING MATERIAL FOR YOUR FAVOURITE ROLEPLAYING GAMES, SIGNS AND PORTENTS IS MONGOOSE PUBLISHING'S ONLINE MAGAZINE. NOT ONLY IS IT THE FIRST AND BEST PLACE TO LOOK FOR BREAKING NEWS ABOUT TRAVELLER PRODUCTS BUT YOU CAN FIND NEW MATERIAL FOR YOUR TRAVELLER GAMES RIGHT THERE IN ITS DIGITAL PAGES. AND IT'S FREE.

FREE.

BECAUSE WHEN YOU'VE GOT A CR. 200,000 MORTGAGE TO PAY ON THAT SHINY NEW STARSHIP, FREE MEANS A LOT.

www.mongoosepublishing.com

Name: **Race:**
Age: **Racial Traits:**
Homeworld:

Characteristics

Modifier	−3	−2			−1			+0			+1			+2			+3
Score	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Str																
Dex																
End																
Int																
Edu																
Soc																

Armour

Type:

Rating

Special Notes

Skills

Admin	Drive ( )	Language ( )	Seafarer ( )
Advocate	Drive ( )	Language ( )	Seafarer ( )
Animals ( )	Engineer ( )	Leadership	Sensors
Animals ( )	Engineer ( )	Life Sciences ( )	Social Sciences ( )
Athletics ( )	Explosives	Life Sciences ( )	Social Sciences ( )
Athletics ( )	Flyer ( )	Mechanic	Space Sciences ( )
Athletics ( )	Flyer ( )	Medic	Space Sciences ( )
Art ( )	Gambler	Melee ( )	Stealth
Art ( )	Gunner ( )	Melee ( )	Steward
Astrogation	Gunner ( )	Navigation	Streetwise
Battle Dress	Gun Combat ( )	Persuade	Survival
Broker	Gun Combat ( )	Pilot ( )	Tactics ( )
Carouse	Gun Combat ( )	Pilot ( )	Tactics ( )
Comms	Heavy Weapons ( )	Physical Sciences ( )	Trade ( )
Computers	Heavy Weapons ( )	Physical Sciences ( )	Trade ( )
Deception	Investigate	Recon	Vacc Suit
Diplomat	Jack of all Trades	Remote Operations	Zero-G

Finances

Pension

Debt

Cash on Hand

Monthly Ship Payment

Equipment

Equipment	Mass

Total Mass =

Weapons

Weapon	Attack	Damage	P	C	S	M	L	VL	D	Notes

Range Modifiers

Career History

Career	Branch	Events	Rank	Title

ALLIES, CONTACTS, ENEMIES, RIVALS