

Starter  
Edition

2

# Charts and Tables

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**TRAVELLER**<sup>®</sup>  
*Science-Fiction Adventure  
in the Far Future*

Game Designers' Workshop

<b>PERSONAL DATA AND HISTORY</b>			1. Date of Preparation	
2. Name		3. UPP	Stren Dext Endur Intel Educ Soc	
4. Noble Title	5. Military Rank	6. Birthdate		
7. Age Modifiers (+ for drugs; - for sleep)		8. Birthworld		
<b>SERVICE HISTORY</b>		Personal service data produced from the appropriate character generation system.		
9. Service	10. Branch	11. Dischargeworld		
12. Terms Served	13. Final Rank	14a. Retired? <input type="checkbox"/> Yes <input type="checkbox"/> No	14b. Retirement Pay	
15. Special Assignments				
16. Awards and Decorations (include Combat Command Credits, Commendations, Medals, etc)				
17. Equipment Qualified On				
18a. Primary Skill		18b. Secondary Skill		
18c. Additional Skills				
19a. Preferred Weapon	19b. Preferred Pistol	19c. Preferred Blade	20. Travellers' Member? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>PSIONICS</b> <i>Warning:</i> Information regarding an individual's psionic ability is confidential, and may not be released without his or her consent.				
21. Date of Test	22. PSR	23a. Trained? <input type="checkbox"/> Yes <input type="checkbox"/> No	23b. Date Completed	
24. Talents and Current Levels				

TAS Form 2



## TAS FORM 2

TAS Form 2— Personal Data and History allows players and referees to maintain a record of the details of any specific **Traveller** character. This form may be reproduced locally (photocopied or printed) by **Traveller** players or referees for their personal use. It is printed on this page closer to the outer margin to make photocopying easier.

This TAS (Travellers' Aid Society) form is intended to record the basic details of a **Traveller** character, and in addition to provide spaces for noting background materials (such as birthdate, world of origin, details of service history, etc.) which are generated in the course of long-term **Traveller** campaigns.

Blocks 3, 4, 5, 9, 12, 13, 14a, 14b, 18a, 18b, 18c, 19a, 19b, 19c, and 20 can be filled out using information produced in the chapter on character generation.

## REFERENCES

The following blocks can be filled in using information provided in other chapters within this book.

1. Dates (blocks 1, 6, 21, and 23b) can use the Imperial calendar explained in the introduction.

2. Worlds (blocks 8 and 11) can be identified using the universal planetary profile specified in Worlds.

3. Psionics (blocks 21, 22, 23a, 23b, and 24) can be determined using the rules provided in Psionics.

## Contents

Characters.....	2-3
Personal Combat.....	4-7
Travelling.....	8
Starship Economics.....	9
Starship Design and Construction.....	10-11
Space Combat.....	12-13
Worlds.....	14-17
Animal Encounters.....	18-19
Encounters.....	20-21
Trade and Commerce.....	22
Personal Equipment and Vehicles.....	23
Psionics.....	24
<i>TAS Form 2 (Personal History)</i> .....	inside front cover
<i>TAS Form 6 (Subsector Map Grid)</i> .....	inside back cover

## Charts and Tables

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# TRAVELLER<sup>®</sup>

Science-Fiction Adventure  
in the Far Future

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### CHARACTER GENERATION CHECKLIST

1. Roll personal characteristics (2D each): strength, dexterity, endurance, intelligence, education, and social standing.
2. Select service and roll for enlistment using all applicable DMs.
  - A. If rejected, try draft.
  - B. Roll for survival.
  - C. Attempt rank.
    - 1) If no rank, attempt commission.
    - 2) If commissioned, attempt promotion.
  - D. Determine skills allowed.
    - 1) Automatic skills.
    - 2) Acquired skills.
    - 3) Specify cascade skills.
  - E. If completing fourth or later term of service, determine aging effects.
  - F. Roll for reenlistment and return to 2B if successful.
3. Muster-Out.
  - A. Determine benefits.
  - B. Record characteristics and skills for later use.

### BASIC SKILL ELIGIBILITY

For initial term of service . . . . . 2  
 Per subsequent term of service . . . 1  
 Upon receiving commission . . . . . 1  
 Upon receiving promotion . . . . . 1  
*Note:* Scouts receive two skills per term of service.

### MUSTER-OUT BENEFITS

Per term of service . . . . . 1  
 If rank 1 or 2 . . . . . 1  
 If rank 3 or 4 . . . . . 2  
 If rank 5 or 6 . . . . . 3

#### Allowable DMs

*Benefits Table:* DM+1 if rank 5 or 6.  
*Cash Table:* DM+1 if gambling skill.

### HEXADECIMAL NOTATION

Base-10	Base-16	Base-10	Base-16
0	0	8	8
1	1	9	9
2	2	10	A
3	3	11	B
4	4	12	C
5	5	13	D
6	6	14	E
7	7	15	F

Use hexadecimal (base-16) numbers to note the six characteristics of the universal personality profile.

### PRIOR SERVICE TABLE

	<i>Navy</i>	<i>Marines</i>	<i>Army</i>	<i>Scouts</i>	<i>Merchants</i>	<i>Other</i>
Enlistment	8+	9+	5+	7+	7+	3+
DM of +1 if	Intel 8+	Intel 8+	Dext 6+	Intel 6+	Stren 7+	—
DM of +2 if	Educ 9+	Stren 8+	Endur 5+	Stren 8+	Intel 6+	—
Draft	1	2	3	4	5	6
Survival	5+	6+	5+	7+	5+	5+
DM of +2 if	Intel 7+	Endur 8+	Educ 6+	Endur 9+	Intel 7+	Intel 9+
Commission	10+	9+	5+	—	4+	—
DM of +1 if	Social 9+	Educ 7+	Endur 7+	—	Intel 6+	—
Promotion	8+	9+	6+	—	10+	—
DM of +1 if	Educ 8+	Social 8+	Educ 7+	—	Intel 9+	—
Reenlist	6+	6+	7+	3+	4+	5+

Characters cycle through this table during each term of service. The reenlistment die throw is required even if the character does not intend to reenlist (a roll of 12 exactly calls for mandatory reenlistment).

DMs are cumulative (in the case of enlistment) if the characters have the necessary prerequisites. All rolls except draft are two-die throws.

### TABLE OF RANKS

	<i>Navy</i>	<i>Marines</i>	<i>Army</i>	<i>Scouts</i>	<i>Merchants</i>	<i>Other</i>
Rank 1	Ensign	Lieutenant	Lieutenant	—	4th Officer	—
Rank 2	Lieutenant	Captain	Captain	—	3rd Officer	—
Rank 3	Lt Cmdr	Force Cmdr	Major	—	2nd Officer	—
Rank 4	Commander	Lt Colonel	Lt Colonel	—	1st Officer	—
Rank 5	Captain	Colonel	Colonel	—	Captain	—
Rank 6	Admiral	Brigadier	General	—	—	—

This table indicates initial rank (rank 1) if a commission is received, and subsequent ranks (ranks 2 to 6) as promotions are received. The other and the scout services do not have ranks, commissions, and promotions.

### MUSTERING OUT TABLES

Die Roll	Benefits Table					
1	Low Psg	Low Psg	Low Psg	Low Psg	Low Psg	Low Psg
2	+1 Intel	+2 Intel	+1 Intel	+2 Intel	+1 Intel	+1 Intel
3	+2 Educ	+1 Educ	+2 Educ	+2 Educ	+1 Educ	+1 Educ
4	Blade	Blade	Gun	Blade	Gun	Gun
5	Travellers'	Travellers'	High Psg	Gun	Blade	High Psg
6	High Psg	High Psg	Mid Psg	Scout Ship	Low Psg	—
7	+2 Social	+2 Social	+1 Social	—	Free Trader	—

Characters with rank 5 or 6 may add +1 to their rolls on this table. Gun and blade benefits must be declared by type immediately; additional benefits of gun or blade may be declared as skill in a weapon of the type previously taken.

Die Roll	Cash Table (in credits)					
1	1000	2000	2000	20000	1000	1000
2	5000	5000	5000	20000	5000	5000
3	5000	5000	10000	30000	10000	10000
4	10000	10000	10000	30000	20000	10000
5	20000	20000	10000	50000	20000	10000
6	50000	30000	20000	50000	40000	50000
7	50000	40000	30000	50000	40000	100000

Amounts shown are in credits (Cr). No more than three rolls may be made on this table. Individuals with gambling skill receive a DM of +1 on the cash table.

# Traveller

# Characters

## ACQUIRED SKILLS TABLES

### 1. Personal Development Table

	<i>Navy</i>	<i>Marines</i>	<i>Army</i>	<i>Scouts</i>	<i>Merchant</i>	<i>Other</i>
1 +1 Stren	+1 Stren	+1 Stren	+1 Stren	+1 Stren	+1 Stren	+1 Stren
2 +1 Dext	+1 Dext	+1 Dext	+1 Dext	+1 Dext	+1 Dext	+1 Dext
3 +1 Endur	+1 Endur	+1 Endur	+1 Endur	+1 Endur	+1 Endur	+1 Endur
4 +1 Intel	Gambling	Gambling	+1 Intel	+1 Stren	Blade Cbt	Brawling
5 +1 Educ	Brawling	+1 Educ	+1 Educ	Blade Cbt	Brawling	Brawling
6 +1 Social	Blade Cbt	Brawling	Gun Cbt	Bribery	-1 Social	-1 Social

### 2. Service Skills Table

	<i>Navy</i>	<i>Marines</i>	<i>Army</i>	<i>Scouts</i>	<i>Merchant</i>	<i>Other</i>
1 Ship's Boat	ATV	ATV	Air/Raft	Vacc Suit	Vacc Suit	Gambling
2 Vacc Suit	Vacc Suit	Air/Raft	Mechanical	Jack-o-T	Brawling	Bribery
3 Fwd Obsvr	Gun Cbt	Fwd Obsvr	Navigation	Steward	Bribery	Bribery
4 Gunnery	Gun Cbt	Blade Cbt	Electronics	Electronics	Blade Cbt	Blade Cbt
5 Blade Cbt	Gun Cbt	Gun Cbt	Jack-o-T	Gun Cbt	Gun Cbt	Gun Cbt

### 3. Advanced Education Table

	<i>Navy</i>	<i>Marines</i>	<i>Army</i>	<i>Scouts</i>	<i>Merchant</i>	<i>Other</i>
1 Vacc Suit	Vehicle	Vehicle	Vehicle	Streetwise	Streetwise	Streetwise
2 Mechanical	Mechanical	Mechanical	Mechanical	Electronic	Electronic	Electronic
3 Electronic	Electronic	Tactics	Tactics	Jack-o-T	Navigation	Gambling
4 Engineering	Blade Cbt	Blade Cbt	Gunnery	Gunnery	Gunnery	Brawling
5 Gunnery	Gun Cbt	Gun Cbt	Medical	Medical	Medical	Forgery

### 4. Advanced Education Table (allowed only for characters with education 8+)

	<i>Navy</i>	<i>Marines</i>	<i>Army</i>	<i>Scouts</i>	<i>Merchant</i>	<i>Other</i>
1 Medical	Medical	Medical	Medical	Medical	Medical	Medical
2 Navigation	Tactics	Tactics	Navigation	Navigation	Navigation	Forgery
3 Engineering	Tactics	Tactics	Engineering	Engineering	Engineering	Electronics
4 Computer	Computer	Computer	Computer	Computer	Computer	Computer
5 Pilot	Leader	Leader	Pilot	Pilot	Streetwise	Streetwise
6 Admin	Admin	Admin	Jack-o-T	Admin	Jack-o-T	Jack-o-T

## AGING TABLE

Term of Service	4	5	6	7	8	9	10	11	12	13	14+
Age	34	38	42	46	50	54	58	62	66	70	74+
Strength	...	-1 (8+)	...	...	...	-1 (9+)	...	...	-2 (9+)	...	...
Dexterity	...	-1 (7+)	...	...	...	-1 (8+)	...	...	-2 (9+)	...	...
Endurance	...	-1 (8+)	...	...	...	-1 (9+)	...	...	-2 (9+)	...	...
Intelligence	...	...	no effect before age 66	...	...	...	...	...	-1 (9+)	...	...
Education	...	...	unaffected by aging	...	...	...	...	...	...	...	...
Social Standing	...	...	unaffected by aging	...	...	...	...	...	...	...	...

The negative number is the potential reduction in characteristic if the saving throw (on two dice; throw shown in parentheses) is not made. Term of service refers to the end of that numbered term; age refers to the first day of the personal (physical, not chronological) year.

## NOBLE RANKS

B 11	Knight, Knightess, Dame
C 12	Baron, Baronet, Baroness
D 13	Marquis, Marquesa, Marchioness
E 14	Count, Countess, Contessa
F 15	Duke, Duchess
	Knights are addressed as <i>Sir</i> .
	Barons are allowed the prefix <i>von</i> , <i>haut</i> , or <i>hault</i> .

## RETIREMENT PAY

Characters who have served at least five terms receive an annual pension.	
5 terms	Cr 4,000
6 terms	Cr 6,000
7 terms	Cr 8,000
8 terms	Cr10,000
9 terms	Cr12,000
per additional term	Cr 2,000

## RANK AND SERVICE SKILLS

Navy Captain	.....	+1 Social
Navy Admiral	.....	+1 Social
Marine	.....	Cutlass-1
Marine Lieutenant	....	Revolver-1
Army	.....	Rifle-1
Army Lieutenant	.....	SMG-1
Merchant First Officer	....	Pilot-1
Scout	.....	Pilot-1

## BLADES AND POLEARMS

Weapon	+DM	-DM	Wounds
Dagger	8+	3-	2D
Blade	9+	4-	2D
Foil	10+	4-	1D
Sword	10+	5-	2D
Cutlass	11+	6-	3D
Broadsword	12+	7-	4D
Bayonet	9+	4-	3D
Spear	9+	4-	2D
Halberd	10+	5-	3D
Pike	10+	6-	3D
Cudgel	8+	4-	2D

## GUNS

Weapon	+DM	-DM	Wounds
Body Pistol	11+	7-	2D
Auto Pistol	10+	6-	3D
Revolver	9+	6-	3D
Carbine	9+	4-	3D
Rifle	8+	5-	3D
Auto Rifle	10+	6-	3D
Shotgun	9+	3-	4D
SMG	9+	5-	3D
Laser Carbine	10+	5-	4D
Laser Rifle	11+	6-	5D

## CASCADE SKILLS

**Aircraft:** Character must immediately select from Prop-driven Fixed Wing, Jet-driven Fixed Wing, or Helicopter.

**Blade Combat:** Character must immediately select a blade or polearm from the blades and polearms list above.

**Gun Combat:** Character must immediately select a gun from the guns list above.

**Vehicle:** Character must immediately select a vehicle type from Aircraft,\* Grav Vehicle, Tracked Vehicle, Watercraft,\* or Wheeled Vehicle. \*Aircraft and Watercraft each require further selection by the character.

**Watercraft:** Character must immediately select from Large Watercraft, Small Watercraft, Hovercraft, or Submersible.

## WEAPONS AND EQUIPMENT

## Brawling, Animal Weapons, and Blades

<i>Item</i>	<i>Base Weight</i>	<i>Length Overall</i>	<i>Base Price</i>	<i>Required Strength Level</i>	<i>DM</i>	<i>Advantageous Strength Level</i>	<i>DM</i>	<i>Weakened Blow or Swing DM</i>	<i>TL</i>
Hands	—	—	—	6	-2	9	+1	-2	—
Claws	—	—	—	—	—	—	—	—	—
Teeth	—	—	—	—	—	—	—	—	—
Horns	—	—	—	—	—	—	—	—	—
Hooves	—	—	—	—	—	—	—	—	—
Stinger	—	—	—	—	—	—	—	—	—
Thrasher	—	—	—	—	—	—	—	—	—
Club	1000	800	—	5	-4	8	+2	-1	0
Dagger	250*	200	10	4	-2	8	+2	-2	1
Blade	350	300	50	5	-2	9	+1	-2	3
Foil	500	800	100	5	-1	10	+1	-2	3
Cutlass	1250	800	100	7	-2	11	+2	-4	3
Sword	1000	800	150	6	-2	10	+1	-3	1
Broadsword	2500	1200	300	8	-4	12	+2	-4	2
Bayonet	250	(+) 200	10	5	-2	9	+2	-2	3
Spear	2000	3000	10	5	-1	9	+2	-3	0
Halberd	2500	2500	75	6	-2	10	+2	-3	2
Pike	3000	4000	40	7	-3	10	+2	-3	1
Cudgel	1000	1500	10	5	-1	8	+2	-1	0

## Guns and Accessories

<i>Item</i>	<i>Base Weight</i>	<i>Ammo Weight</i>	<i>Rds/Clip</i>	<i>Length Overall</i>	<i>Base Price</i>	<i>Ammo Price</i>	<i>Required Dexterity Level</i>	<i>DM</i>	<i>Advantageous Dexterity Level</i>	<i>DM</i>	<i>Maximum Effective Range</i>	<i>TL</i>
Body Pistol	250	50	6	100	500	20	8	-3	11	+1	Medium	7
Automatic Pistol	750	250	15	175	200	10	7	-2	10	-1	Long	5
Revolver	900	100	6	200	150	5	7	-2	9	+1	Long	4
Carbine	3000	125	10	750	200	10	5	-1	9	+1	Very Long	5
Rifle	4000	500	20	1000	200	20	6	-2	8	+1	Very Long	5
Automatic Rifle	5000	500	20	1000	1000	20	7	-2	10	+2	Very Long	6
Shotgun	3750	750	10	1000	150	10	4	-1	9	+1	Very Long	4
Submachinegun	2500	500	30	450	500	20	6	-2	9	+2	Long	5
Laser Carbine	5000	—	—	800	2500	—	6	-3	10	+2	Very Long	8
LC Power Pack	3000	—	50	—	1000	200	—	—	—	—	—	8
Laser Rifle	6000	—	—	1000	3500	—	7	-3	11	+2	Very Long	9
LR Power Pack	4000	—	100	—	1500	300	—	—	—	—	—	9
Telescopic Sights	800	—	—	—	200	—	—	—	—	—	—	6
Electronic Sights	1500	—	—	—	2000	—	—	—	—	—	—	9
Silencer	600	—	—	(+) 200	200	—	—	—	—	—	—	6
Shoulder Stock	1000	—	—	(+) 350	75	—	—	—	—	—	—	5
Folding Stock	500	—	—	(-) 300	100	—	—	—	—	—	—	6

<i>Body Armor</i>	<i>Weight</i>	<i>Price</i>	<i>Description</i>	<i>TL</i>
Nothing	—	—	Standard clothing worn for fashion, comfort, or modesty.	—
Jack	1000*	50	Leather or synthetic jacket/body suit.	1
Mesh	2000*	150	Leather or synthetic body suit reinforced with metal mesh lining.	7
Cloth	2000*	250	Ballistic cloth (bullet-proof) jacket.	6
Reflec	1000*	1500	Reflective material body suit for protection against laser fire.	10
Ablat	2000*	75	Ablative (vaporizing anti-laser) jacket.	9
Vacc Suit	10000*	10000	Personal space suit. Includes communicators, oxygen tanks for six hours, and acts as cloth armor. Requires skill vacc suit-0. Vacc suit weight is reduced 2 kilograms per TL increase (to TL 13, where weight is zero).	8
Combat Armor	6000*	20000	Metal and synthetic array of military-type personal armor. Can be used as personal vacc suit with similar accessories. Requires skill vacc suit-1.	11
Battle Dress	20000*	200000	Acts as combat armor, plus doubled personal strength, unlimited endurance, and DM+2 for surprise. Requires skill vacc suit-1.	13

\*Note: Included in the personal clothing allowance and have no apparent weight. Weights in grams; lengths in millimeters.

## ENCOUNTERS

The referee should work from (but not necessarily reveal) the following background: What? (or Who?), How Many? Why? How? When? and Where?

### SURPRISE

Roll one die for each party and apply DMs. If one roll is 3+ greater than its opponent, the higher roll has surprise.

#### Allowed Surprise DMs

If any member wears Battle Dress. . . +2  
 If any member has leader skill . . . +1  
 If any member has tactical skill . . . +1  
 If any member has military experience (army or marines) . . . +1  
 If any member is in a vehicle . . . -1  
 If group has 8 or more people . . . -1  
 If group has 10 or more animals . . . -1  
 If group consists of pouncer animals . +1

### ENCOUNTER RANGE

Roll two dice for initial encounter range. Apply DMs based on terrain type in which the encounter occurs.

#### Terrain DMs

Clear, Road, Open . . . . . +3  
 Prairie, Plain, Steppes . . . . . +3  
 Rough, Hills, Foothills . . . . . +2  
 Broken, Highlands . . . . . +2  
 Mountain, Alpine . . . . . +3  
 Forest, Woods . . . . . +1  
 Jungle, Rainforest . . . . . -  
 River, Stream, Creek . . . . . +1  
 Swamp, Bog, Marsh . . . . . -4  
 Desert, Dune, Sand Sea . . . . . +4  
 Maritime Surface . . . . . +2  
 Maritime Subsurface . . . . . -1  
 Arctic . . . . . +2  
 City . . . . . -4  
 Building Interior, Cave . . . . . -5

#### Encounter Ranges

Dice	Range
1 . . . . .	Short
2 . . . . .	Close
3 . . . . .	Short
4 . . . . .	Medium
5 . . . . .	Short
6 . . . . .	Medium
7 . . . . .	Medium
8 . . . . .	Long
9 . . . . .	Medium
10 . . . . .	Very Long
11 . . . . .	Long
12 . . . . .	Very Long

Rolls of greater than 12 equal 12; rolls less than 1 equal 1.

## ESCAPE AND AVOIDANCE

Non-player parties which are outnumbered and have surprise avoid on a throw of 7+. Animals flee based on their characteristics and encounter tables.

A party without surprise may escape on 9+; DMs based on range:

Close or short range . . . . . -1  
 Medium range . . . . . +1  
 Long range . . . . . +2  
 Very Long range . . . . . +3

### MORALE

Roll for morale every combat round, once 25% of a party has become unconscious or been killed. Throw 7+ for the group to stand (not flee); DMs allowed:

If military or mercenary unit . . +1  
 If any leader skill present . . . +1  
 If the leader has tactical skill . . +1  
 If casualties (unconscious or dead) exceed 50% . . . . . -2  
 If leader unconscious or dead . . -2  
 (for 2 combat rounds only; then a new leader takes control.)

### WEIGHT LIMITATIONS

**Normal Load:** May not exceed personal strength in kilograms.

**Double Load:** Encumbered, but may carry twice personal strength in kilograms. Strength, dexterity, and endurance reduced by -1 each.

**Triple Load:** Encumbered, but may carry triple personal strength in kilograms. Strength, dexterity, and endurance reduced by -2 each. Individual must be a member of a military unit to carry triple load.

### GRAVITATIONAL EFFECTS

World	Normal	Double	Triple
0	200.0%	400.0%	600.0%
1	187.5%	375.0%	562.5%
2	175.0%	350.0%	525.0%
3	162.5%	325.0%	487.5%
4	150.0%	300.0%	450.0%
5	137.5%	275.0%	412.5%
6	125.0%	250.0%	375.0%
7	112.5%	225.0%	337.5%
8	100.0%	200.0%	300.0%
9	87.5%	175.0%	262.5%
A	75.0%	150.0%	225.0%

This table indicates the allowed physical load for an individual character based on the current world and normal or excess load chosen. World size is explained in Worlds.

## COVER

Targets are considered under cover if they are behind a solid object which a shot cannot penetrate (such as a wall, rock, or heavy bulkhead). A character who has attacked from a covered position is allowed a defending DM of -4 when attacked. If the individual has not attacked from cover, he or she is not visible at the moment, and may not be attacked.

### CONCEALMENT

Targets are considered concealed if they cannot be viewed by an attacker. If fully concealed, a target cannot be attacked.

**Partial Concealment:** A target may be partially concealed by walls, objects, atmospheric conditions, or darkness.

### ZERO GRAVITY

Individuals in zero gravity may lose control; weapons with recoil (all guns but laser carbine and laser rifle) have recoil which may disorient an individual.

Throw 10+ per combat round for loss in control. DM -4 if firing a weapon, 5 if using a handhold, -6 if performing a swing or blow, +2 if dexterity 9+, additional +2 if dexterity 11+. Using a handhold reduces dexterity (for the above DMs, and for advantageous or required dexterity) by -4.

**Loss Of Control:** Throw 10+ per combat round (after losing control) to regain control. DMs allowed as above, but handholds and weapons may not be used.

### DARKNESS

Total darkness restricts engagements to close and short range. Attacks with guns at greater than short range have DM -9.

Partial darkness reduces visibility to medium range; attacks with guns at greater than medium range are subject to DM -6.

Electronic sights eliminate negative DMs due to darkness or poor lighting.

### TYPICAL ACTIONS

The following are typical actions allowed in personal combat.

Run. Walk. Close Range. Open Range. Stand. Evade. Shoot. Switch (semi or full auto). Reload. Throw. Draw. Swing. Hit.

## WEAPONS AND RANGE MATRIX

Attacker's Weapon	Defender's Armor							Range				Very Long	Wound Inflicted
	Nothing	Jack	Mesh	Cloth	Reflec	Ablat	Combat	Close	Short	Medium	Long		
Hands	+1	-1	-4	-4	0	-1	-6	+2	+1	no	no	no	1D
Claws	+3	0	0	+1	-1	-3	-7	+1	+2	no	no	no	2D
Teeth	+2	+1	-1	0	-2	-4	-7	+2	0	no	no	no	2D
Horns	+2	+1	0	-1	+2	-2	-5	-1	+1	no	no	no	2D
Hooves	+3	+3	+2	+2	+3	+2	-6	-1	+2	no	no	no	2D
Stinger	+4	+3	0	+1	+2	0	-6	+4	+2	no	no	no	3D
Thrasher	+7	+7	+4	+4	+7	+4	0	+5	+1	no	no	no	2D
Club	0	0	-2	-3	0	-2	-7	+1	+2	no	no	no	2D
Dagger	0	-1	-4	-4	0	-2	-7	+1	+2	no	no	no	2D
Blade	+1	0	-4	-4	+1	-3	-5	+1	+1	no	no	no	2D
Foil	+2	0	-4	-3	+2	-2	-8	-1	0	no	no	no	1D
Cutlass	+4	+3	-2	-3	+4	-2	-6	-4	+2	no	no	no	3D
Sword	+3	+3	-3	-3	+3	-2	-6	-2	+1	no	no	no	2D
Broadsword	+5	+5	+1	0	+5	+1	-4	-8	+3	no	no	no	4D
Bayonet	+2	+1	0	-1	+2	-2	-6	-1	+2	no	no	no	3D
Spear	+1	0	-2	-2	-1	-3	-6	-2	+1	no	no	no	2D
Halberd	+4	+3	-2	-3	+4	-2	-5	0	+1	no	no	no	3D
Pike	+1	0	-2	-2	-1	-3	-6	-4	+4	no	no	no	3D
Cudgel	0	0	-2	-3	0	-2	-7	0	0	no	no	no	2D
Body Pistol	0	0	-2	-4	-4	-2	-7	+2	+1	-6	no	no	3D
Automatic Pistol	+1	+1	-1	-3	+1	-1	-5	+1	+2	-4	-6	no	3D
Revolver	+1	+1	-1	-3	+1	-1	-5	+1	+2	-3	-5	no	3D
Carbine	+2	+2	0	-3	+2	-1	-5	-4	+1	-2	-4	-5	3D
Rifle	+3	+3	0	-3	+2	+1	-5	-4	+1	0	-1	-3	3D
Automatic Rifle	+6	+6	+2	-1	+6	+3	-3	-8	0	+2	+1	-2	3D
Shotgun	+5	+5	-1	-3	+5	+2	-5	-8	+1	+3	-6	no	4D
Submachinegun	+5	+5	0	-3	+5	+2	-4	-4	+3	+3	-3	-9	3D
Laser Carbine	+2	+2	+1	+1	-8	-7	-6	-2	+1	+1	+1	0	4D
Laser Rifle	+3	+3	+2	+2	-8	-7	-6	-4	+2	+2	+2	+1	5D
Telescopic Sights	—	—	—	—	—	—	—	—	—	—	+4	+4	—
Electronic Sights	—	—	—	—	—	—	—	—	—	—	+4	+4	—
Shoulder Stock	—	—	—	—	—	—	—	-1	-1	+1	+1	—	—
Folding Stock	—	—	—	—	—	—	—	—	—	-1	-1	-1	—

## BASIC THROW TO HIT

**8+** A basic throw to hit of 8+ is required for each blow, swing, or shot. Many DMs are possible.

## COMBAT PROCEDURE

- Determine facts of the encounter.
  - Which party has surprise?
  - Initial encounter range?
  - Escape or avoidance?
- Begin combat round.
  - Individual movement status.
  - Individual targets and attacks.
    - Attacker's DMs.
    - Defender's DMs.
  - If attack succeeds, determine wounds inflicted at end of the round.
  - Roll for morale if unit has taken 25% casualties.
  - Begin new round (go to 2).
- When combat ends, attend to the wounded and regroup forces.

## ALLOWED DIE MODIFIERS

Advantageous strength (with blades).  
 Advantageous dexterity (with guns).  
 Required strength (with blades).  
 Required dexterity (with guns).  
 Attacker's weapons skill.  
 Defender's blade skill (parrying).  
 Armor.  
 Range.  
 Defender evading.  
 Defender under cover.  
 Group hits (by shotgun).  
 Group hits (automatic fire).  
 Weakened blows.  
 Drawing weapons.  
 Thrown blade.  
 Poor vision; darkness.

## Referee's Discretion

The referee may indicate (or apply without informing the players) other die modifiers which influence combat.

## ATTACKS

Attacks are blows, swings, or shots.  
 Blows are inflicted by hands.  
 Swings are inflicted by blades.  
 Shots are inflicted by guns.

## Blows and Swings

**Surprise:** Full strength and unrestricted while the individual retains surprise.

**Combat:** Full strength, but limited by individual endurance.

**Weakened:** Subject to negative DM once combat blows and swings are exhausted, or if selected in order to conserve combat blows and swings.

**Special:** Allowed in situations where strength is not a factor, such as unconscious or unresisting opponents.

## Shots

**Combat:** Ordinary weapons fire.  
**Coup de Grace:** For unconscious or unresisting targets.



## Traveller

### PHYSICAL CHARACTERISTICS

The first three characteristics of the universal personality profile are the physical characteristics:

Strength  
Dexterity  
Endurance

### WOUNDING AND DEATH

Wounds are applied to the physical characteristics, temporarily reducing them for the duration of combat.

Each die rolled for wounds is treated as a group of hits that should not be divided; for example, a 1D result of 5 should be treated as 5 hits to be applied as one group to one of the physical characteristics. Select the first physical characteristic to receive wounds randomly; the wounded player character may select all subsequent physical characteristics to receive wounds.

#### Critical Hits

The first wound received by a character should be applied in its entirety to one (randomly determined) physical characteristic.

#### Minor Wounds

Any wound points applied to a character which do not reduce more than one physical characteristic to zero are considered minor wounds. The character is treated as having the reduced characteristics until medical care or recovery has taken place.

#### Unconsciousness

One characteristic reduced to zero results in unconsciousness for ten minutes. Upon recovery of consciousness, any wounded characteristics are placed midway between their wounded and full levels; round fractions down.

#### Serious Wound

Two characteristics reduced to zero results in a serious wound and unconsciousness for three hours. Upon recovery of consciousness, any wounded characteristics remain at the wounded level (or at 1, whichever is higher) until proper medical attention or recovery procedures are followed.

#### Death

Three characteristics reduced to zero results in death for the character.

## Personal Combat

### Medical Care

**Minor Wounds:** Minor wounds require a medical kit, skill of medical-1, and thirty minutes. Without medical care, recovery requires three days rest.

**Serious Wounds:** Serious wounds require a medical facility (local hospital or aid station, the sick bay of a ship, etc.), skill of medical-3, and from 5 to 30 days. Without medical care, recovery is not possible.

**Recovery:** Recovery returns all characteristics to their original level.

**Drugs:** Medical drug may be used to assist recovery. Medical slow drug may be used to shorten recovery time to about one day.

### RANGES

**Close:** In physical contact; touching.

**Short:** At sword or polearm point; 1 to 5 meters.

**Medium:** At pistol range; 6 to 50 meters.

**Long:** At rifle range; 51 to 250 meters.

**Very Long:** At extreme range; 251 to 500 meters.

**Distant:** Beyond normal contact; from 500 to 5000 meters.

**Very Distant:** Out of sight; from 5 to 50 kilometers.

**Regional:** 50 to 500 kilometers.

**Continental:** 500 to 5,000 kilometers.

**Planetary:** 5,000 to 50,000 kilometers.

### Range Bands

Bands	Range
0	Close or Short
1 - 2	Medium
3 - 10	Long
11 - 20	Very Long

**Note:** On square grids, one square should generally equal 1.5 meters. Other proportional values are also possible.

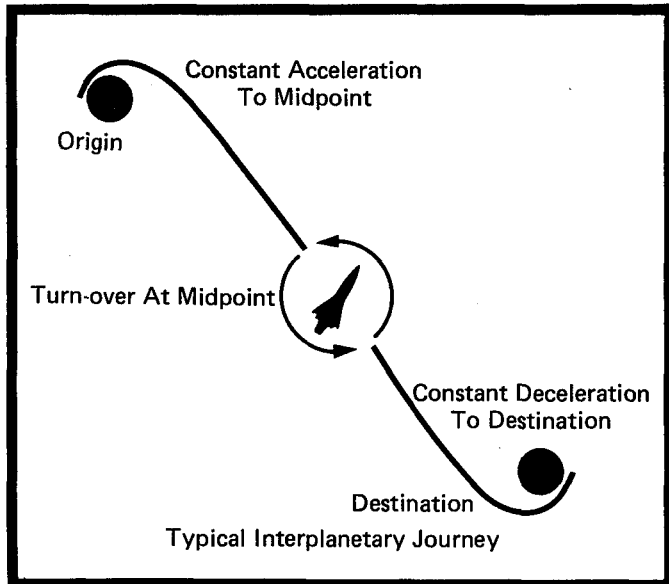
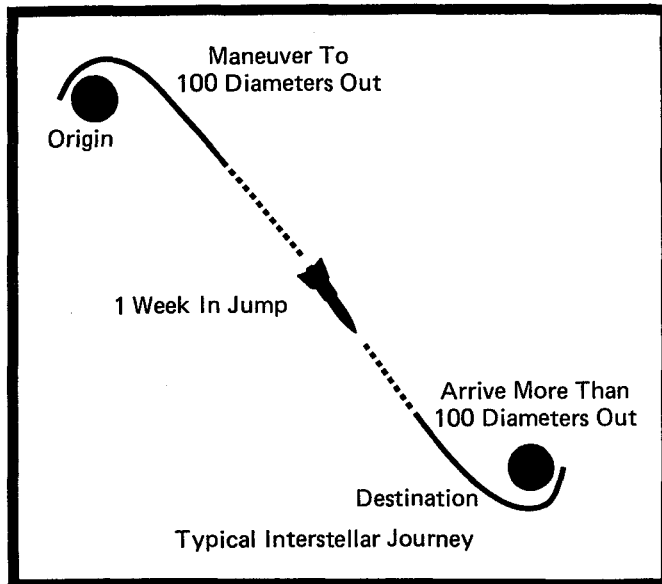
One range band is approximately 17 squares (at 1.5 meters per square).

### Speeds

Speed	Bands	Squares
Stand	0	0
Walking	1	17
Running (double)	2	33
Running (triple)	3	50
Running (quadruple)	4	67

Running at faster than double speed is generally impossible for long periods.

### Range Bands



The three travel formulae assume constant acceleration to midpoint, turnaround, and constant deceleration to arrive at the destination at rest, as shown in the diagram above. There are three variables; if any two are known, the third can be determined using one of the formulae at right. The variables are time (T) in seconds, distance (D) in meters, and acceleration (A) in meters/second<sup>2</sup>. Other units must be converted to these three before using the formulae. For example, suppose a player, using the units in the space combat rules described in the rules book, wishes to determine how long it would take (in 1000-second turns) to travel 30 range bands (or 300,000 kilometers — each range band equals 10,000 kilometers) at 1 G. To get meters from kilometers he multiplies by 1,000 (300,000 km=300,000,000 meters); to get meters/second<sup>2</sup> from Gs he multiplies by 10 (1G=10 meters/second<sup>2</sup>). The formula is then: T(in seconds)= $2 \times \sqrt{(300,000,000/10)}$ , or 10,954. To translate into 1000-second turns, he divides by 1,000 to get about 11 turns.

## TRAVEL FORMULAE

$$T = 2\sqrt{D/A}$$

$$D = AT^2/4$$

$$A = 4D/T^2$$

## TYPICAL TRAVEL TIMES

Kilometers	Acceleration						Typical Use for Distance
	1-G	2-G	3-G	4-G	5-G	6-G	
1,000	633s	447s	365s	316s	283s	258s	Safe jump distance from planetoid.
10,000	2000s	1414s	1155s	1000s	894s	816s	Typical distance world surface to orbit.
100,000	105m	74m	61m	53m	47m	42m	Safe jump distance from size 1 world.
160,000	133m	94m	76m	66m	59m	54m	Safe jump distance from size 2 world.
320,000	188m	133m	108m	94m	84m	76m	Safe jump distance from size 3 world.
480,000	230m	163m	133m	115m	103m	94m	Safe jump distance from size 4 world.
640,000	264m	188m	153m	133m	119m	108m	Safe jump distance from size 5 world.
800,000	316m	210m	172m	149m	133m	121m	Safe jump distance from size 6 world.
960,000	324m	230m	188m	163m	146m	133m	
1,000,000	333m	236m	192m	167m	149m	136m	
1,120,000	348m	246m	203m	176m	157m	144m	Safe jump distance from size 7 world.
1,280,000	372m	264m	217m	188m	168m	153m	Safe jump distance from size 8 world.
1,440,000	396m	282m	230m	200m	178m	163m	Safe jump distance from size 9 world.
1,600,000	420m	294m	240m	210m	188m	172m	Safe jump distance from size A world.
5,000,000	12.4h	8.7h	7.1h	6.2h	5.5h	5.0h	Safe jump distance from small gas giant.
10,000,000	17.6h	12.4h	10.1h	8.8h	7.9h	7.2h	Safe jump distance from large gas giant.
45,000,000	37.3h	26.4h	21.5h	18.6h	16.7h	15.2h	Typical distance to close neighbor world.
100,000,000	55.6h	39.3h	32.1h	27.8h	24.8h	22.3h	
255,000,000	88.7h	62.7h	51.2h	44.4h	39.7h	36.2h	Typical distance to far neighbor world.
600,000,000	136.1h	96.2h	78.6h	68.0h	60.9h	55.6h	Typical distance to close gas giant.
900,000,000	166.7h	117.9h	96.2h	83.4h	74.5h	68.0h	Typical distance to far gas giant.
1,000,000,000	7.3d	5.2d	4.2d	3.7d	3.3d	2.9d	

Times are expressed in the most convenient terms: s=seconds, m=minutes, h=hours, d=days.

## SHIP EXPENSES

**Bank Payment:** Equal to 1/240th of cash price for ship. Payable monthly. Required only if ship is being purchased with installment payments.

**Fuel:** Cr100 per ton for unrefined fuel; Cr500 per ton for refined fuel. Fuel may be purchased at starports. Free from gas giant skim or dipping from oceans.

**Life Support:** Cr2000 per crew member, high, or middle passenger per trip (two weeks). Cr100 per low passenger.

**Maintenance:** One-tenth of one percent (0.1%) of cash price of ship per year, for annual overhaul.

**Salaries:** As indicated on the crew salaries table.

**Berthing Costs:** Approximately Cr100 to land and remain six days. Cr100 per day for each additional day.

## CREW SALARIES

<i>Position</i>	<i>Minimum Skill Level</i>	<i>Monthly Salary</i>
Pilot	Pilot-1	Cr6,000
Navigator	Navigator-1	Cr5,000
Engineer	Engineer-1	Cr4,000
Steward	Steward-0	Cr3,000
Medic	Medic-1	Cr2,000
Gunner	Gunner-1	Cr1,000

Crew members who have skill levels greater than that shown are generally paid an additional 10% per skill level greater than 1.

**Working Passage:** Maximum three jumps at no salary but room and board. Must have requisite skill for position.

## TYPICAL DISTANCES

World Surface to Orbit	10,000 km
Satellite	400,000 km
Close Neighbor World	45,000,000 km
Far Neighbor World	255,000,000 km
Close Gas Giant	600,000,000 km
Far Gas Giant	900,000,000 km

## PASSENGERS

<i>World Pop</i>	<i>Available at World of Origin</i>		
<i>Digit</i>	<i>High</i>	<i>Middle</i>	<i>Low</i>
0	—	—	—
1	—	1D-2	2D-6
2	1D-1D	1D	2D
3	2D-2D	2D-1D	2D
4	2D-1D	2D-1D	3D-1D
5	2D-1D	3D-2D	3D-1D
6	3D-2D	3D-2D	3D
7	3D-2D	3D-1D	3D
8	3D-1D	3D-1D	4D
9	3D-1D	3D	5D
A	3D	4D	6D

**DMs for destination world:**

If population 4-, -3.

If population 8+, +3.

If Red Zone, -12; no middle or low.

If Amber Zone, -6.

**Tech Level:** add (or subtract) difference between origin and destination.

## SHIP REVENUES

Per High Passage	Cr10,000
Per Middle Passage	Cr8,000
Per Low Passage	Cr1,000
Per Cargo Ton	Cr1,000
Mail (if fitted)	Cr25,000

## MALFUNCTIONS

**Drive Failure:** Throw 13+ per week of operation, with the following DMs.

Using unrefined fuel +1

Per missing required engineer +1

Per month past annual maintenance date, if not performed +1

**Misjump:** Throw 13+ each time a ship jumps, with the following DMs.

Within 100 diameters of world +5

Within 10 diameters of world +10

Using unrefined fuel +1

If naval ship -1

If scout ship -2

If result is 16+, ship is destroyed.

If result is 13+, ship has misjumped.

## CARGO

<i>World Pop</i>	<i>Available at World of Origin</i>		
<i>Digit</i>	<i>Major</i>	<i>Minor</i>	<i>Incidental</i>
0	—	—	—
1	1D-4	1D-4	—
2	1D-2	1D-1	—
3	1D-1	1D	—
4	1D	1D+1	—
5	1D+1	1D+2	—
6	1D+2	1D+3	1D-3
7	1D+3	1D+4	1D-3
8	1D+4	1D+5	1D-2
9	1D+5	1D+6	1D-2
A	1D+6	1D+7	1D

**DMs for destination world:**

If population 4-, -4.

If population 8+, +1.

If Red Zone, no cargo.

If Amber Zone, no major cargo.

**Tech Level:** add (or subtract) difference between origin and destination.

## TYPICAL ACTIVITIES

I. Arrive in star system.

A. Scan area for potential danger, problems, and other data.

B. Set course insystem.

C. Possible ship encounter.

II. Local gas giant.

A. Achieve orbit.

B. Refuel.

C. Set course to major world or outsystem.

III. Local major world.

A. Achieve orbit.

B. Proceed to orbital starport (unstreamlined ships) or surface starport (streamlined ships).

C. Arrival onplanet.

1. Unload high passengers.

2. Unload mail.

3. Unload middle passengers.

4. Unload cargo.

5. Unload low passengers.

6. Conclude low lottery.

D. Refit and maintenance.

1. Refuel from starport.

2. Renew ship life support.

E. Commodity activity.

1. Sell speculative cargo.

2. Buy speculative cargo.

F. Ship business.

1. Pay berthing costs.

2. Pay bank payment.

3. Pay maintenance fund.

4. Pay crew salaries.

G. Miscellaneous activity.

1. Patron encounters.

2. Planetary exploration.

3. Local areas of interest.

4. Hire new crew members.

H. Prepare for departure.

1. Load cargo.

2. Load low passengers.

3. Load middle passengers.

4. Load high passengers.

5. Load mail.

6. Collect income for all aspects of current trip.

IV. Departure.

A. Lift-off.

B. Achieve orbit.

C. Set course outsystem.

D. Possible ship encounter.

E. Jump.

**Note:** This list is primarily of interest to merchants, but can govern most ship journeys. Events on this list are explained in Travelling, Starship Economics, Worlds, Encounters, and Trade and Commerce.

## Ship Design and Construction

### STANDARD HULLS

Tons	Main	Drives	MCr	Time
100	85	15	2	9
200	185	15	8	11
400	350	50	16	14
600	515	85	48	22
800	635	165	80	25
1000	835	165	100	27

The hulls listed above are standard sizes, readily available at the reduced prices or times shown. All others must be custom produced at MCr0.1 per ton.

### COMPUTERS

Model	MCr	Tons	Capacity	TL
1	2	1	2/ 4	5
1bis	4	1	4/ 0	6
2	9	2	3/ 6	7
2bis	18	2	6/ 0	8
3	18	3	5/ 9	9
4	30	4	8/15	A
5	45	5	12/25	B
6	55	7	15/35	C
7	80	9	20/50	D

Computer cost is indicated in MCr; tonnage required in tons. TL is the minimum tech level required to produce the equipment. Capacity is used to determine program holding capacity. Model number also indicates the largest jump which the computer can control.

### DRIVES AND POWER PLANTS

Jump Drive		Maneuver Drive		Power Plant	
Mass	MCr	Mass	MCr	Mass	MCr
A	10	10	1	4	8
B	15	20	3	8	16
C	20	30	5	12	24
D	25	40	7	16	32
E	30	50	9	20	40
F	35	60	11	24	48
G	40	70	13	28	56
H	45	80	15	32	64
J	50	90	17	36	72
K	55	100	19	40	80
L	60	110	21	44	88
M	65	120	23	48	96
N	70	130	25	52	104
P	75	140	27	56	112
Q	80	150	29	60	120
R	85	160	31	64	128
S	90	170	33	68	136
T	95	180	35	72	144
U	100	190	37	76	152
V	105	200	39	80	160
W	110	210	41	84	168
X	115	220	43	88	176
Y	120	230	45	92	184
Z	125	240	47	96	192

For each drive letter, this table indicates price in MCr and tonnage required for jump, maneuver and power plant.

## Game Designers' Workshop

### SOFTWARE LIST

Space	MCr	Title
1	2.	Predict-1
2	4.	Predict-2
1	6.	Predict-3
3	8.	Predict-4
2	10.	Predict-5
1	1.	Gunner Interact
1	1.	Target
1	0.5	Select-1
2	0.8	Select-2
1	1.	Select-3
1	1.	Multi-target-2
2	2.	Multi-target-3
4	3.	Multi-target-4
1	2.	Launch
4	4.	Double Fire
1	1.	Maneuver/Evade-1
2	2.	Maneuver/Evade-2
3	3.	Maneuver/Evade-3
4	4.	Maneuver/Evade-4
2	5.	Maneuver/Evade-5
3	6.	Maneuver/Evade-6
1	0.5	Auto/Evade
1	0.5	Return Fire
2	1.	Anti-Missile
3	4.	ECM
1	0.1	Maneuver
1	0.1	Jump-1
2	0.3	Jump-2
3	0.4	Jump-3
4	0.5	Jump-4
5	0.6	Jump-5
6	0.7	Jump-6
1	0.4	Navigation
1	0.8	Generate
1	0.1	Anti-Hijack

**Standard Software Packages:** Each computer comes with a software package of programs for use with the equipment. Because each computer may be put to a different use, this software package consists of a credit in MCr equal to the model number of the computer (treat 1bis and 2bis as 1 and 2 respectively). This credit may not be converted to cash.

### DRIVE POTENTIAL

Hull	Jump Drive, Maneuver Drive, or Power Plant Type																				Build
Tons	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	Time
100	2	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
200	1	2	3	4	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
400	-	1	1	2	2	3	3	4	4	5	5	6	6	-	-	-	-	-	-	-	16
600	-	-	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	24
800	-	-	-	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	5	5	28
1000	-	-	-	-	1	1	1	1	1	2	2	2	2	2	3	3	3	3	4	5	30
2000	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	2	2	32
3000	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	2	34
4000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	35
5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	36

Comparing hull tonnage to drive letter indicates performance of that drive in that sized hull. Use next larger size hull for intermediate tonnages. Performance is Gs acceleration for maneuver drives, jump number for jump drives, and power plant number for power plant.

### WEAPONS AND MOUNTS

Type	Cost (Cr)
Hardpoint	100,000
Single Turret	200,000
Double Turret	500,000
Triple Turret	1,000,000
Pulse Laser	500,000
Beam Laser	1,000,000
Missile Rack	750,000
Sandcaster	250,000

### FITTINGS

Fitting	Tons	Cost (in Cr)
Stateroom	4.0	500,000
Low Berth	0.5	50,000
Emergency Low Berth	1.0	100,000
Small Craft Stateroom	2.0	50,000
Small Craft Couch	0.5	25,000
Cargo	-	as required
Fuel	-	as required

### BRIDGE

Two percent of ship tonnage (minimum: 20 tons). Cost is MCr0.5 per 100 tons of ship.

### ARMAMENTS

Ships are allowed one hardpoint per 100 tons. Each hardpoint can mount one turret and requires 1 ton for fire control.

## Traveller

### CREW REQUIREMENTS

**Pilot** (Cr6,000 monthly): Minimum one per vessel. Ships 100 tons and over require skill pilot-1 or better; small craft (under 100 tons) require ship's boat-1 or better (or may use pilot minus 1).

**Navigator** (Cr5,000 monthly): Minimum one per ship over 200 tons.

**Engineer** (Cr4,000 monthly): Minimum one per 35 tons of drives (jump drive, maneuver drive, and power plant combined). Not required on vessels less than 200 tons. Highest skilled (or oldest) is chief engineer and draws 10% more pay.

**Steward** (Cr3,000 monthly): Minimum one per eight high passengers. Required if high passengers are carried. Highest skilled is chief steward (or purser) and draws 10% more pay.

**Medic** (Cr2,000 monthly): Minimum one per 120 passengers. Required on all starships 200 tons or more. Not necessary on non-starships and small craft. Highest skilled is ship's doctor and draws 10% more pay.

**Gunner** (Cr1,000 monthly): One per turret or per small craft if considered necessary. Highest skilled is chief gunner and draws 10% more pay.

### Additional Notes

**Multiple Crew Positions:** One person may fill two positions, but each is performed at skill level minus 1. Salary for the individual equals 75% of both position salaries.

**Other Positions:** Additional crew positions may be created as necessary.

**Large Ships:** For ships greater than 1000 tons, the crew should include a commanding officer (or captain), an executive officer, and at least three administrative personnel. Ships over 1000 tons should have at least ten crew members per 1000 tons of mass displacement.

### CONSTRUCTION FEES

**Naval Architect:** Charges 1% of final ship cost to prepare design plans in four weeks. A rush job costs 1.5% and takes two weeks.

**Standard Designs:** Off-the-shelf standard design plans for standard ships cost Cr1 00. Such standard design ships cost 90% of normal cost.

**Financing:** 20% cash down payment, plus 1/240th of list price monthly for 480 months.

### FUEL CONSUMPTION

**Jump Drive:**  $0.1MJ_n$ ; M is the ship tonnage,  $J_n$  is jump number executed.

**Power Plant:**  $10P_n$ ;  $P_n$  is power plant number installed. Allows operations for four weeks.

**Small Craft:** Fuel tankage listed in descriptions supports four weeks of operations.

### STARSHIP DESIGN CHECKLIST

Use this checklist to control design and construction of starships.

1. Select hull size.
2. Select drives.
  - A. Jump drive.
  - B. Maneuver drive.
  - C. Power plant.
3. Fuel Tankage.
  - A. Power plant and maneuver fuel. Formula:  $10P_n$ .
  - B. Jump Fuel. Formula:  $0.1MJ_n$ .
4. Bridge (2% of tonnage; minimum 20 tons;  $MCr0.5$  per 100 tons of hull).
5. Computer.
6. Allocate accommodations for passengers and crew.
  - A. Staterooms.
  - B. Low Berths.
7. Armament.
  - A. Hardpoints.
  - B. Turrets.
  - C. Fire Control (1 ton per turret).
  - D. Weapons.
8. Vehicles. Select ship's vehicles and small craft.
9. Allocate cargo capacity.
10. Streamlining ( $MCr1$  per 100 tons).
11. Determine crew.
12. Subtotal ship tonnage and costs.
13. Architect's fees (1% of total cost).
14. Note total price and construction time required.

### STANDARD VEHICLES

Vehicle	Tons	MCr
ATV	10	0.03
Air/Raft	4	0.60
Speeder	6	1.00
GCarrier	8	1.00
Launch	20	14.00
Ship's Boat	30	16.00
Pinnacle	40	20.00
Cutter	50	28.00
Fuel Module	30	1.00
ATV Module	30	1.80
Open Module	30	2.00
Slow Boat	30	15.00
Slow Pinnacle	40	18.00
Shuttle	95	33.00
Fighter	10	18.00

## Starship Construction

### STANDARD SHIP DESIGNS

The following are standard designs:

**A Free Trader.** 200 tons. Jump-1, 1-G. 30 tons fuel. Model/1. 10 staterooms, 20 low. 2 hardpoints. 82 tons cargo. Streamlined. 4 crew.

$MCr37.08$ ; 11 months.

**S Scout.** 100 tons. Jump-2, 2-G. 40 tons fuel. Model/1bis. 4 staterooms. 1 hardpoint (double turret). Air/raft. 3 tons cargo. Streamlined. 1 crew.

$MCr29.43$ ; 9 months.

**R Subsidized Merchant.** 400 tons. Jump-1, 1-G. 50 tons fuel. Model/1. 13 staterooms, 9 low. 2 hardpoints. Launch. 200 tons cargo. Streamlined. 5 crew.

$MCr101.03$ ; 14 months.

**M Subsidized Liner.** 600 tons. Jump-3, 1-G. 210 tons fuel. Model/3. 30 staterooms, 20 low. 3 hardpoints. Launch. 129 tons cargo. Unstreamlined. 9 crew.

$MCr236.97$ ; 22 months.

**Y Yacht.** 200 tons. Jump-1, 1-G. 50 tons fuel (allows two successive jump-1). Model/1. 14 staterooms. 1 hardpoint. ATV, air/raft, ship's boat. 11 tons cargo. Unstreamlined. 4 crew.

$MCr51.057$ ; 11 months.

**C Mercenary Cruiser.** 800 tons. Jump-3, 3-G. 318 tons fuel (48 tons reserve). Model/5. 25 staterooms. 8 hardpoints (8 triple turrets). Air/raft, 2 modular cutters (1 open module, 1 fuel module, 2 ATV modules), 2 ATVs. 80 tons cargo. Unstreamlined. 8 crew.

$MCr445.95$ ; 25 months.

**T Patrol Cruiser.** 400 tons. Jump-3, 4-G. 160 tons fuel. Model/3. 12 staterooms, 4 low berths. 4 hardpoints (2 triple missile turrets, 2 triple laser turrets). Ship's boat, GCarrier. 10 crew.

$MCr221.04$ ; 16 months.

**L Laboratory Ship.** 400 tons. Jump-2, 1-G. 90 tons fuel. Model/2. 20 staterooms. 2 hardpoints. 2 air/rafts, 1 pinnacle. 23 tons cargo. 85 tons lab space. Unstreamlined. 5 crew.

$MCr158.98$ ; 14 months.

**K Safari Ship.** 200 tons. Jump-2, 1-G. 60 tons fuel. Model/1bis. 11 staterooms. 1 hardpoint (double turret). Air/raft, launch. 6 tons cargo. 2 capture tanks; 1 lounge. Streamlined. 5 crew.

$MCr81.08$ ; 11 months.

## ATTACKER'S DMs

Predict-1	+1
Predict-2	+2
Predict-3	+2
Predict-4	+3
Predict-5	+3
Gunner Interact	+gunner skill
Select-1	-2
Select-2	-1
Firing Pulse Lasers	-1

## DEFENDER'S DMs

Maneuver/Evade-1	-¼ pilot skill
Maneuver/Evade-2	-½ pilot skill
Maneuver/Evade-3	-¾ pilot skill
Maneuver/Evade-4	-pilot skill
Maneuver/Evade-5	-pilot skill
Maneuver/Evade-6	-5
Auto/Evade	-2
Range greater than 25 bands	-2
Range greater than 50 bands	-5
Obscuring sand (per band)	-3

## HIT LOCATIONS

Two Dice	Starship	Non-Starship	Small Craft
2	Powerplant	Powerplant	Drive
3	Maneuver	Maneuver	Drive
4	Jump	Maneuver	Drive
5	Fuel	Fuel	Drive
6	Hull	Hull	Cabin
7	Hull	Hull	Computer
8	Hold	Hold	Cabin
9	Computer	Computer	Cabin
10	Turret	Turret	Weapons
11	Turret	Turret	Weapons
12	Critical	Critical	Critical

If no small craft computer, treat as drive.

## CRITICAL HITS

One Die	Starship	Non-Starship	Small Craft
1	Powerplant	Powerplant	Drive
2	Maneuver	Maneuver	Drive
3	Jump	Maneuver	Drive
4	Crew	Crew	Crew
5	Computer	Computer	Computer
6	Explode	Explode	Explode

If no small craft computer, treat as drive.

## SCALES

- Time:** Game turn is 1,000 seconds.
- Space:** One range band equals 10,000 kilometers.
- Thrust:** 1-G vector equals one range band. 1,000 seconds of acceleration at 1-G produces a velocity change of 10,000 kilometers (or one range band).
- Units:** Individual starships, non-starships, and small craft.

## GAME TURN SEQUENCE

## Intruder Player Turn—

*A. Intruder Movement.* The intruder moves his ships using the movement rules. Ordnance (missiles and sand) which he has launched in previous game turns is moved at the same time.

*B. Intruder Laser Fire.* The intruder may fire his ships' laser weaponry at enemy targets, subject to the combat, computer, and other applicable rules. Only laser weaponry may fire in this phase.

*C. Native Laser Return Fire.* The native may return fire with his laser weaponry at enemy ships which have fired on him, provided his return fire computer program is running during this phase, and in accordance with the computer program and combat rules. Anti-missile fire may be performed in this phase if the appropriate computer program is running.

*D. Intruder Ordnance Launch.* The intruder may launch ordnance (missiles and/or sand) at enemy targets or on specific missions, subject to the applicable rules. Ordnance which has contacted enemy ships explodes in this phase. Lifeboats and ship's vehicles are launched in this phase.

*E. Intruder Computer Reprogramming.* The intruder may remove computer programs from his on-board computer, and input other programs in anticipation of their use in later turns.

## Native Player Turn—

*A. Native Movement.* The native moves his ships using the movement rules. Ordnance (missiles and sand) which he has launched in previous game turns is moved at the same time.

*B. Native Laser Fire.* The native may fire his ships' laser weaponry at enemy targets, subject to the combat, computer, and other applicable rules. Only laser weaponry may fire in this phase.

*C. Intruder Laser Return Fire.* The intruder may return fire with his laser weaponry at enemy ships which have fired on him, provided his return fire computer program is running during this phase, and in accordance with the computer program and combat rules. Anti-missile fire may be performed in this phase if the appropriate computer program is running.

*D. Native Ordnance Launch.* The native may launch ordnance (missiles and/or sand) at enemy targets or on specific missions, subject to the applicable rules. Ordnance which has contacted enemy ships explodes in this phase. Lifeboats and ship's vehicles are launched in this phase.

*E. Native Computer Reprogramming.* The native may remove computer programs from his on-board computer, and input other programs in anticipation of their use in later turns.

## Game Turn Interphase—

The end of one game turn is marked. Other miscellaneous activity may also be necessary. The game then proceeds to the movement and combat of the next game turn.

Suleiman (Type S)		
1. M-Drive (A, 2G)	Model/1	
2. J-Drive (A, Jump-2)	CPU = 2	
3. Power Plant (A)	Storage = 4	
4. Fuel (40)		
5. Hold (3 tons, plus Air/Raft)	1-Target	1-Auto/Evade
6. Bridge (Pilot-1)	1-Return Fire	2-Anti-Missile
	1-Launch	1-Jump-1
T-1 (B,M) Gunner-1	1-Predict-1	2-Jump-2
five missiles on board	1-Navigate	1-Library

Ship's  
Data Card  
Example

## COMPUTER SOFTWARE LIST

## SpaceMcr Program Title and Effects

## Offensive Programs—

			Skills	Throw
1	2.	Predict-1; +1 on to hit throw	1, Navig-1	10+
2	4.	Predict-2; +2 on to hit throw	1, Navig-2	10+
1	6.	Predict-3; +2 on to hit throw	1, Navig-3	10+
3	8.	Predict-4; +3 on to hit throw	1, Navig-4	11+
2	10.	Predict-5; +3 on to hit throw	2, Navig-5	10+
1	1.	Gunner Interact; adds gunner expertise	2, Gunnery-2	11+
1	1.	Target; required in order to fire turrets	2, Navig-2	10+
1	0.5	Select-1; allows target selection but -2 to hit	1, Gunnery-2	9+
2	0.8	Select-2; as select-1 but -1 to hit	2, Gunnery-3	9+
1	1.	Select-3; as select-1 but no hit penalty	3, Gunnery-4	9+
1	1.	Multi-Target-2; allows engagement of 2 targets	2, Gunnery-2	9+
2	2.	Multi-Target-3; allows engagement of 3 targets	2, Gunnery-3	10+
4	3.	Multi-Target-4; allows engagement of 4 targets	3, Gunnery-4	8+
1	2.	Launch; allows launch of missiles and sand	1, Gunnery-2	11+
4	4.	Double Fire; allows firing twice	2, Engineer-3	11+

## Defensive Programs—

1	1.	Maneuver/Evade-1; -¼ pilot skill	1, Pilot-2	10+
2	2.	Maneuver/Evade-2; -½ pilot skill	1, Pilot-3	11+
3	3.	Maneuver/Evade-3; -¾ pilot skill	2, Pilot-4	10+
4	4.	Maneuver/Evade-4; - pilot skill	2, Pilot-5	11+
2	5.	Maneuver/Evade-5; - pilot skill	3, Pilot-6	10+
3	6.	Maneuver/Evade-6; -5	3, Pilot-7	11+
1	0.5	Auto/Evade; -2	2, Pilot-4	11+
1	0.5	Return Fire; automatic response if attacked	2, Gunnery-3	12+
2	1.	Anti-Missile; allows laser anti-missile fire	3, Gunnery-3	10+
3	4.	ECM; may explode incoming missiles	4, Electronics-3	9+

## Routine Programs—

1	0.1	Maneuver; allows use of maneuver drive	1, Pilot-1	9+
1	0.1	Jump-1; allows use of jump-1	1, Pilot/Navig-1	10+
2	0.3	Jump-2; allows use of jump-2	2, Pilot/Navig-2	11+
3	0.4	Jump-3; allows use of jump-3	2, Pilot/Navig-3	12+
4	0.5	Jump-4; allows use of jump-4	3, Pilot/Navig-4	11+
5	0.6	Jump-5; allows use of jump-5	3, Pilot/Navig-5	12+
6	0.7	Jump-6; allows use of jump-6	4, Pilot/Navig-6	11+
1	0.4	Navigation; controls use of jump drive	3, Navig-3	10+
1	0.8	Generate; produces flight plans for jump	3, Navig-4	10+
1	0.1	Anti-Hijack; helps prevent hijacking	1, Tactics-1	9+
1	0.3	Library; contains local information	1, no others	4+

**Standard Software Packages:** Each computer comes with a standard software package of programs for use with the equipment. Because each computer may be used differently, this package consists of a credit in MCr equal to the model number of the computer (treat 1bis and 2bis as 1 and 2 respectively). This credit may not be converted to cash.

## SPECIAL RULES

**Missile Detonation:** Missiles inflict 1D (1 to 6) hits when they detonate. From those hits, each hit location and hit effect is determined separately.

**Shifting Fire:** Once a target is designated, a ship which shifts fire to another target in the same turn is subject to a DM of -6 to hit for the remainder of the turn.

## STARSHIP ENCOUNTERS

Two	Starport	Type	
Dice	A	B	C D E X
2	—	—	— — —
3	—	—	— — —
4	—	—	— — K —
5	—	—	— — — L
6	S	A	— L — —
7	A	S	R K — —
8	R	A	A S — —
9	M*	R*	R* SP S T
10	Y	M	TP A A TP
11	T	R	T R TP CP
12	R*	C*	Y M CP C
13	M*	Y*	A Y — —
14	C*	T*	S* TP — —
15	T*	C*	Y* — — —

Roll for starship encounters when entering or leaving a system. Ship types are shown below. The suffix P indicates a pirate vessel; an asterisk (\*) indicates that a small craft encounter occurs in addition.

**DMs:** +2 if naval base in system; +1 if scout base in system.

## Starships—

A 200-ton Free Trader  
K 200-ton Safari Ship  
L 400-ton Laboratory Ship  
C 800-ton Mercenary Cruiser  
M 600-ton Subsidized Liner  
R 400-ton Subsidized Merchant  
S 100-ton Scout/Courier  
T 400-ton Patrol Cruiser  
Y 200-ton Yacht

## STANDARD SMALL CRAFT

Die	Craft
0	20-ton Launch
1	30-ton Ship's Boat
2	30-ton Slow Boat
3	40-ton Pinnace
4	40-ton Slow Pinnace
5	50-ton Cutter
6	95-ton Shuttle
7	10-ton Fighter

**DMs:** +1 if naval base in system; -1 if scout base in system.

## DETECTION

Commercial or privately owned ships can detect other ships up to one-half light-second (15 range bands) away.

Military or scout ships can detect other ships up to two light-seconds (60 range bands) away.

**Tracking:** Once detected, a vessel can be tracked by another ship up to three light-seconds (90 range bands).

## SYSTEM CONTENTS TABLE

Die Roll	Starport	Naval Base	Scout Base	Gas Giant
2	A	no	no	yes
3	A	no	no	yes
4	A	no	no	yes
5	B	no	no	yes
6	B	no	no	yes
7	C	no	yes	yes
8	C	yes	yes	yes
9	D	yes	yes	yes
10	E	yes	yes	no
11	E	yes	yes	no
12	X	yes	yes	no

Roll once for each column.

**Scout Base:** Apply DM -1 if starport C; -2 if starport B; and -3 if starport A. Do not roll if starport E or X.

**Naval Base:** Do not roll if starport C, D, E, or X.

## STARPORT TYPES

Type	Description
A	Excellent quality installation. Refined fuel available. Annual maintenance overhaul available. Shipyard capable of constructing starships and non-starships present. Naval base and/or scout base may be present.
B	Good quality installation. Refined fuel available. Annual maintenance overhaul available. Shipyard capable of constructing non-starships present. Naval base and/or scout base may be present.
C	Routine quality installation. Only unrefined fuel available. Reasonable repair facilities present. Scout base may be present.
D	Poor quality installation. Only unrefined fuel available. No repair or shipyard facilities present. Scout base may be present.
E	Frontier Installation. Essentially a marked spot of bedrock with no fuel, facilities, or bases present.
X	No starport. No provision is made for any ship landings.

## TRAVEL ZONES

Worlds may be classified as travel zones green, amber, or red. Green is usually not noted or stated.

**Green:** No particular danger or problem for travellers.

**Amber:** Caution advised for traveller; local conditions may pose danger or delay.

**Red:** Prohibited to travellers; local conditions can involve death or injury.

## SIZE

Digit	Description
0	Asteroid/Planetoid Belt.
1	1000 miles (1600 km).
2	2000 miles (3200 km).
3	3000 miles (4800 km).
4	4000 miles (6400 km).
5	5000 miles (8000 km).
6	6000 miles (9600 km).
7	7000 miles (11200 km).
8	8000 miles (12800 km).
9	9000 miles (14400 km).
A	10000 miles (16000 km).

**Note:** World sizes greater than A (16,000 km) may be created by the referee and assigned special letter codes. Such worlds may be simply larger, or they may be of special or notable types.

## ATMOSPHERE

Digit	Description
0	No atmosphere.
1	Trace.
2	Very thin, tainted.
3	Very thin.
4	Thin, tainted.
5	Thin.
6	Standard.
7	Standard, tainted.
8	Dense.
9	Dense, tainted.
A	Exotic.
B	Corrosive.
C	Insidious.

**Note:** Atmosphere types may require protective clothing. The precise requirements are given in the text.

## HYDROGRAPHICS

Digit	Description
0	No free standing water.
1	10% water.
2	20% water.
3	30% water.
4	40% water.
5	50% water.
6	60% water.
7	70% water.
8	80% water.
9	90% water.
A	No land masses.

**Note:** Worlds with no water are considered desert worlds if they have atmosphere 2+. Worlds with hydrographic percentage A are water worlds. Worlds with atmosphere 0 or 1 and hydrographic percentage greater than 0 are ice-capped.

## POPULATION

Digit	Description
0	No inhabitants.
1	Tens of inhabitants.
2	Hundreds of inhabitants.
3	Thousands of inhabitants.
4	Tens of thousands.
5	Hundreds of thousands.
6	Millions of inhabitants.
7	Tens of millions.
8	Hundreds of millions.
9	Billions of inhabitants.
A	Tens of billions.

The population digit is an exponent of 10. The actual population of a world may range from the exact equivalent of the population digit to just below the next higher population digit.

## LAW LEVEL

Digit	Description
0	No prohibitions.
1	Body pistols undetectable by standard detectors, explosives (bombs, grenades), and poison gas prohibited.
2	Portable energy weapons (laser carbine, laser rifle) prohibited. Ship's gunnery not affected.
3	Weapons of a strict military nature (machine guns, automatic rifles) prohibited.
4	Light assault weapons (sub-machineguns) prohibited.
5	Personal concealable firearms (such as pistols and revolvers) prohibited.
6	Most firearms (all except shotguns) prohibited. The carrying of any type of weapon openly is discouraged.
7	Shotguns are prohibited.
8	Long bladed weapons (all but daggers) are controlled, and open possession is prohibited.
9	Possession of any weapon outside one's residence is prohibited.
A	Possession of any weapon is prohibited.

Law levels include the restrictions of lower-numbered law levels. Law levels greater than A indicate a higher probability of police harassment.

Law level is also the general throw to avoid harassment by police or other law enforcement agencies. For example, on a world with law level 4, the throw to avoid arrest when encountering an enforcement agent such as a customs official or policeman is 4+.



## GOVERNMENT

*Digit Description*

- 0 No government structure. In many cases, family bonds predominate.
- 1 Company/Corporation. Government by a company managerial elite; citizens are company employees.
- 2 Participating Democracy. Government by advice and consent of the citizen.
- 3 Self-Perpetuating Oligarchy. Government by a restricted minority, with little or no input from the masses.
- 4 Representative Democracy. Government by elected representatives.
- 5 Feudal Technocracy. Government by specific individuals for those who agree to be ruled. Relationships are based on the performance of technical activities which are mutually beneficial.
- 6 Captive Government. Government by a leadership answerable to an outside group; a colony or conquered area.
- 7 Balkanization. No central ruling authority exists; rival governments compete for control.
- 8 Civil Service Bureaucracy. Government by agencies employing individuals selected for their expertise.
- 9 Impersonal Bureaucracy. Government by agencies which are insulated from the governed.
- A Charismatic Dictator. Government by a single leader enjoying the confidence of the citizens.
- B Non-Charismatic Leader. A previous charismatic dictator has been replaced by a leader through normal channels.
- C Charismatic Oligarchy. Government by a select group, organization, or class enjoying the overwhelming confidence of the citizenry.
- D Religious Dictatorship. Government by a religious organization without regard to the needs of the citizenry.

## WORLD GENERATION CHECKLIST

- Determine world occurrence (1D for 4, 5, 6 is standard).
- Check system contents table.
  - Find starport type.
  - Check for naval base.
  - Check for scout base.
  - Check for gas giant.
- Name world.
- Decide if travel zone coded.
- Establish communications routes.
- Generate universal planetary profile for world.
  - Note starport type.
  - Planetary size: 2D-2.
  - Planetary atmosphere: 2D-7 +size. If planetary size is 0, the atmosphere must be 0.
  - Planetary hydrographics: 2D-7 +size. If planetary size is 0 or 1, then hydrographics must be 0; if atmosphere is 0, 1, or A+, then apply a DM of -4.
  - Population: 2D-2.
  - Government: 2D-7+population.
  - Law level: 2D-7+government.
  - Technological Level: 1D+DMs from tech level table.
- Note trade classifications (rules book, page 5) based on world UPP.
- Note statistics for reference.
- Map system on subsector map grid.

## TECH LEVEL TABLE

Star-Digit port	Size	Atm	Hyd	Pop	Govt
0	+2	+1	—	—	+1
1	+2	+1	—	+1	—
2	+1	+1	—	+1	—
3	+1	+1	—	+1	—
4	+1	—	—	+1	—
5	—	—	—	+1	+1
6	—	—	—	—	—
7	—	—	—	—	—
8	—	—	—	—	—
9	—	—	+1	+2	—
A	+6	—	+1	+2	+4
B	+4	—	+1	—	—
C	+2	—	+1	—	—
D	—	—	+1	—	-2
E	—	—	+1	—	—
F	—	—	—	—	—
X	-4	—	—	—	—

Determine DMs from this table and apply them to 1D to find tech level.

Tech level is more fully presented with tables on the next two pages showing achievements at specific levels.

**Note:** Dashes indicate that there is no DM for the given digit; blanks indicate that there is no digit possible in that situation under this generation system.

## TECHNOLOGICAL LEVELS

*Digit Description*

- 0 Stone Age. Primitive.
- 1 Bronze Age to Middle Ages.
- 2 circa 1400 to 1700.
- 3 circa 1700 to 1860.
- 4 circa 1860 to 1900
- 5 circa 1900 to 1939
- 6 circa 1940 to 1969
- 7 circa 1970 to 1979
- 8 circa 1980 to 1989
- 9 circa 1990 to 2000
- A Interstellar community
- B Average Imperial
- C Average Imperial
- D Above average Imperial.
- E Above average Imperial
- F Technical maximum Imperial.
- G Occasional non-Imperial.

Tech levels labels in terms of historical dating are intended as a guide only. Similarly, the tech level rating indicates what is probably a capability for a world at the stated tech level. Also see the tech level charts on the next two pages.

## TRADE CLASSIFICATIONS

**Agricultural:** Atmosphere 4 - 9, hydrographic 4 - 8, population 5 - 7.

**Non-Agricultural:** Atmosphere 3-, hydrographic 3-, population 6+.

**Industrial:** Atmosphere 0, 1, 2, 4, 7, or 9 (vacuum, trace, or tainted), population 9+.

**Non-Industrial:** Population 6-.

**Rich:** Atmosphere 6 or 8, population 6 - 8, government 4 - 9.

**Poor:** Atmosphere 2 - 5, hydrographic 3-.

**Water World:** Hydrographic A.

**Desert World:** Hydrographic 0, atmosphere 2+.

**Vacuum World:** Atmosphere 0.

**Asteroid Belt:** Size 0.

**Ice-capped:** Atmosphere 0 or 1, hydrographic 1+.

**Subsector Capital:** Single most important world in the subsector, especially if the entire sector is under one interstellar government. Assigned by the referee.

**Other Notations:** There are many other possible notations. The referee may elect to note the presence of prison worlds, exile worlds, preserves or reserves for various purposes, and so on.

TECHNOLOGICAL LEVELS

Tech Level Description	TL	Weaponry			Computers	Communications
		Personal	Armor	Heavy		
Stone Age	0	club, cudgel spear				runners
Bronze Age	1	dagger, pike sword	jack	catapult	abacus	heliograph
circa 1400 to 1700	2	halberd broadsword	plate armor	cannon		
circa 1700 to 1860	3	foil, cutlass blade, bayonet				telegraph
circa 1860 to 1900	4	revolver shotgun	ironclad	artillery	adding machine	telephones
circa 1900 to 1939	5	carbine, rifle pistol, SMG	steel plate	sandcasters mortars	Model/1	radio communicators
circa 1940 to 1969	6	auto rifle light machinegun	cloth	missiles missile launchers	Model/1 bis	television
circa 1970 to 1979	7	body pistol	mesh flak jacket	pulse laser grenade launcher	Model/2	
circa 1980 to 1989	8	laser carbine snub pistol	vacc suit	auto-cannon	hand calculator Model/2 bis	
circa 1990 to 2000	9	laser rifle	ablat	beam laser	Model/3 battle computer	
interstellar community	10		reflec		Model/4	holovision
average Imperial	11		combat armor		Model/5 hand computer	
average Imperial	12				Model/6	
above average Imperial	13		battle dress		Model/7	holographic crystals
above average Imperial	14					
maximum Imperial	15		black globe			
			beyond common levels			
	16			disintegrators		
	17				artificial intelligence	
	18	personal disintegrators				
	19					
	20					
	21					

Traveller	TECHNOLOGICAL LEVELS					Worlds
	<i>Water</i>	<i>Land</i>	<i>Transportation</i>	<i>Energy</i>		
	<i>canoes</i>	<i>carts</i>	<i>Air</i>	<i>Space</i>	<i>Sources</i>	<i>Miscellaneous</i>
0	rafts				muscle	
1	galleys	wagons				
2					wind	printing press
3	sailing ships		hot air balloons		water wheel	
4	steamships	trains	dirigibles		coal	anesthetics
5	motorboats	ground cars	airplanes		oil	
6	submersibles	ATV AFV	helicopters		fission	weather prediction
7	-----hovercraft-----			non-starships	solar	
8			air/rafts GCarriers		fusion	weather control
9				drives A - D jump drive		limb regeneration
10	-----grav vehicles-----			drives E - H		
	grav tanks					
11				drives J - K		
12			grav belts	drives L - N		primitive robots
13				drives P - Q		cloning
14				drives R - U		
15				all drives		
	-----beyond common levels-----					
16	-----matter transport-----					
17					anti-matter	self-aware robots
18						
19						
20						
21						

## TERRAIN TYPES

Terrain Type	Terrain Equivalent	Type DM	Size DM
Clear	Road, Open	+3	—
Prairie	Plain, Steppe	+4	—
Rough	Hills, Foothills	—	—
Broken	Badlands	-3	-3
Mountain	Alpine	—	—
Forest	Woods	-4	-4
Jungle	Rainforest	-3	-2
River	Stream, Creek	+1	+1
Swamp	Bog	-2	+4
Marsh	Wetland	—	-1
Desert	Dunes	+3	-3
Beach	Shore, Sea Edge	+3	+2
Surface	Ocean, Sea	+2	+3
Shallows	Ocean, Sea	+2	+2
Depths	Ocean, Sea	+2	+4
Bottom	Ocean, Sea	-4	—
Sea Cave	Sea Cavern	-2	—
Sargasso	Seaweed	-4	-2
Ruins	Old City	-3	—
Cave	Cavern	-4	+1
Chasm	Crevasse, Abyss	-1	-3
Crater	Hollow	—	-1

## ENCOUNTER COLUMNS

Die	Category	Die	Category
2 S	Scavenger	1 S	Scavenger
3 O	Omnivore	2 H	Herbivore
4 S	Scavenger	3 H	Herbivore
5 O	Omnivore	4 H	Herbivore
6 H	Herbivore	5 O	Omnivore
7 H	Herbivore	6 C	Carnivore
8 H	Herbivore		
9 C	Carnivore		
10 E	Event		
11 C	Carnivore		
12 C	Carnivore		

These two encounter column formats are suggestions; other such columns with different arrangements may also be used if desired. Construct one table for each terrain type of each world.

## Animal Sizes and Weaponry

Roll once for size/hits/wounds and once each for weapons and armor. If the result is (+6), roll again with DM of +6. If +6 is rolled again, just reroll.

**Animal Size DMs:** From special attributes and terrain types tables. If planetary size 8+, DM -1; if planetary size 4-, DM +1.

**Animal Weaponry DMs:** Carnivore, +8; Omnivore, +4; Herbivore, -3.

**Animal Armor DMs:** Carnivore, -1; Scavenger, +1; Herbivore, +2. Flyers and triphibians never have armor.

## ANIMAL TYPES

Die	Herbivore	Omnivore	Carnivore	Scavenger
0	Filter (1D)	Gatherer	Siren	Carrion-eater (1D)
1	Filter	Gatherer	Pouncer	Carrion-eater (2D)
2	Filter	Eater	Siren	Reducer (1D)
3	Intermittent	Gatherer	Pouncer	Hijacker (1D)
4	Intermittent	Eater (2D)	Killer (1D)	Carrion-eater (2D)
5	Intermittent (1D)	Gatherer	Trapper	Intimidator (1D)
6	Intermittent	Hunter	Pouncer	Reducer
7	Grazer	Hunter (1D)	Chaser	Carrion-eater (1D)
8	Grazer (1D)	Hunter	Chaser (3D)	Reducer (3D)
9	Grazer (2D)	Gatherer	Chaser	Hijacker
10	Grazer (3D)	Eater (1D)	Killer	Intimidator (2D)
11	Grazer (2D)	Hunter (1D)	Chaser (2D)	Reducer (1D)
12	Grazer (4D)	Gatherer	Siren	Hijacker
13	Grazer (5D)	Gatherer	Chaser (1D)	Intimidator (1D)

Throw two dice on this table (as modified by the type DMs in the terrain types table) to determine the animal type for a specific encounter column entry.

## ANIMAL ATTRIBUTES

Die	Beach	Marsh	River	Sea	Swamp	Other
2	S +1	S -6	S +1	S +2	S -3	—
3	A +2	A +2	A +1	S +2	A +1	—
4	A +2	A +1	—	S +2	A +1	—
5	—	—	—	A +2	—	—
6	—	—	—	A	—	—
7	—	—	—	S +1	—	—
8	—	—	—	S -1	—	—
9	—	—	—	T -7	—	—
10	—	—	—	T -6	—	F -6
11	F -6	F -6	F -6	F -6	F -6	F -5
12	F -5	F -5	F -5	F -5	F -5	F -3

Roll 2D to determine special attributes and size DM for the specific animal type. DMs: planetary size 9+, -1; 5 or 4, +1; 3-, +2; atmosphere 8+, +2; 5-, -1. The abbreviation shows attribute, if any. Number is a size DM used in addition to the DM from the terrain types table (for flyers the DM from this table is the only one used). A= Amphibian, F= Flyer, S= Swimmer, T= Triphibian.

## ANIMAL SIZES AND WEAPONRY

Die	Weight	Hits	Wounds	Weapons	Armor
1	1	1D/0	-2D	hooves and horns	(+6)
2	3	1D/1D	-2D	horns	—
3	6	1D/2D	-1D	hooves and teeth	—
4	12	2D/2D	—	hooves	jack
5	25	3D/2D	—	horns and teeth	—
6	50	4D/2D	—	thrasher	—
7	100	5D/2D	—	claws and teeth	—
8	200	5D/3D	+1D	teeth	—
9	400	6D/3D	+2D	claws	—
10	800	7D/3D	+3D	claws	jack
11	1600	8D/3D	+4D	thrasher	—
12	3200	8D/4D	+5D	claws and teeth	(+6)
13	(+6)	(+6)	(+6)	claws+1	mesh+1
14	6000	9D/4D	x2	stinger	cloth+1
15	12000	10D/5D	x2	claws+1 and teeth+1	mesh
16	24000	12D/6D	x3	teeth+1	cloth
17	30000	14D/7D	x4	as blade	combat+4
18	36000	15D/7D	x4	as pike	reflec
19	40000	16D/8D	x5	as broadsword	ablat
20	44000	17D/9D	x6	as body pistol	battle

## Animal Characteristics

This table indicates the behavior which may be expected by any specific animal. Determine animal category and type. Roll once in each column (to attack, to flee, and typical speed); the result is the throw (on two dice) that that specific animal type must make to attack or flee (otherwise the animal does nothing). The number for speed is the multiplier times ordinary speed.

For example, for a grazer, roll to determine attack; one die is rolled, with a result of 6 (+2=8), so the animal will attack on a roll of 8+ when encountered. To determine the throw to flee, one die is rolled, for a 3 (-1=2), so the animal will flee on a roll of 2+. The speed die roll is a 4 (-2=2), so the animal has double ordinary speed.

Note that the rolls to determine these numbers use one die, but in all cases, they then represent two-dice rolls when used on the animal encounter tables.

**Formatting:** Each roll is generally a single digit, and should be followed by the letter A (for attack), F (for flee), or S (for speed). For example, A6 F7 S2 indicates an animal that will attack on 6+, flee on 7+ if it has not already attacked, and will have a speed of double ordinary.

In some cases (where phrases are given above) animals will behave according to the situation. The number used should be 0 to indicate a special case.

*If possible* indicates that a filter will attack if it possibly can.

*If surprise* indicates that the animal will attack if it has surprise.

*If surprised* indicates that the animal will flee if surprised.

*If more* indicates that the animal will attack if there are more of it than there are potential prey.

**Herbivores:** Most animals will attack before they flee, so the order of codes should be A F S; herbivores will probably flee first, so they should be coded F A S.

## ANIMAL CHARACTERISTICS

Category Type	To Attack	To Flee	Typical Speed
Herbivore			
Filter	If possible	1D+2 (3-8)	1D-5 (0-1; minimum 0)
Intermittent	1D+3 (4-9)	1D+3 (4-9)	1D-4 (1-2; minimum 1)
Grazer	1D+2 (3-8)	1D-1 (0-5)	1D-2 (2-4; minimum 2)
Omnivore			
Gatherer	1D+3 (4-9)	1D+2 (3-8)	1D-3 (1-3; minimum 1)
Hunter	1D+0 (1-6)	1D+2 (3-8)	1D-4 (1-2; minimum 1)
Eater	1D+0 (1-6)	1D+3 (4-9)	1D-3 (1-3; minimum 1)
Carnivore			
Pouncer	If surprise	If surprised	1D-4 (1-2; minimum 1)
Chaser	If more	1D+3 (4-9)	1D-2 (2-4; minimum 2)
Trapper	If surprise	1D+2 (3-8)	1D-5 (0-1; minimum 0)
Siren	If surprise	1D+3 (4-9)	1D-4 (0-2; minimum 0)
Killer	1D+0 (1-6)	1D+3 (4-9)	1D-3 (1-3; minimum 1)
Scavenger			
Hijacker	1D+1 (2-7)	1D+2 (3-8)	1D-4 (1-2; minimum 1)
Intimidator	1D+2 (3-8)	1D+1 (2-7)	1D-4 (1-2; minimum 1)
Carion-Eater	1D+3 (4-9)	1D+2 (3-8)	1D-3 (1-3; minimum 1)
Reducer	1D+3 (4-9)	1D+2 (3-8)	1D-4 (1-2; minimum 1)

## TYPICAL ANIMAL ENCOUNTER TABLE

The table below is a typical table, showing the format for presentation of the information and for easy use of the encounters. The table is clearly headed with the type of terrain, and with the world on which the terrain occurs. Headings for the individual columns make use of the material easier.

## CLEAR Terrain

Regina (A788899-A)

Die	Animal	Weight	Hits	Armor	Wounds & Weapons
2	1 Hijacker	200kg	18/11	jack	11 teeth A5 F7 S2
3	2 Hunters	12kg	3/ 7	none	4 claws A5 F4 S1
4	1 Reducer	12kg	7/ 8	none	6 horns A8 F4 S2
5	1 Flying Gatherer	3kg	1/ 3	none	1 claws A4 F4 S1
6	8 Grazers	400kg	25/15	none	14 hooves F1 A7 S4
7	7 Flying Grazers	6kg	5/ 7	none	1 teeth F4 A8 S2
8	1 Grazer	1600kg	33/11	cmbt+4	21 thrasher F5 A5 S2
9	1 Chaser	50kg	11/ 9	none	6 claws+1 A0 F7 S2
10	Event— Howling Carnivores. Out of sight, animals (die roll 11 below) are heard howling continuously. If the party spends the night nearby, they may attack (roll 7+).				
11	6 Chasers	25kg	6/11	jack	9 teeth+1 A0 F5 S2
12	1 Killer	200kg	21/12	none	17 as pike A1 F9 S1

## ENCOUNTER TABLE GENERATION CHECKLIST

Use this checklist to create unique encounter tables for individual terrain situations on different worlds.

- Determine UPP and terrain types appearing on world in question.
- For each terrain type, generate an encounter table.
  - Determine type DM and size DM for terrain from terrain type table.
  - Select encounter column format or generate a different one.
  - Determine animal type and quantity using animal type table.
  - Determine special attributes (if any) for each animal type.
  - Determine specific details of animal.
    - Note weight and hits.
    - Note weapon used and wounding as altered by wound alteration.
    - Note animal armor.
    - Determine animal characteristics.
- Apply common sense as required.

## ENCOUNTERS

Encounters occur constantly, and represent the primary means of player-character interaction with others.

There are seven basic types of encounters:

Routine  
Random  
Rumor  
Legal  
Patron  
Adventure  
Animal

## ROUTINE ENCOUNTERS

Ordinary people, performing their routine jobs, form the routine encounters to be expected. Examples are clerks in stores or offices. Routine encounters generally have no effect on characters' activities.

Routine encounters occur when necessary.

## LEGAL ENCOUNTERS

Characters may expect to be harassed or bothered by local law enforcement officials in direct relation to the local law level.

Throw local law level or greater once per day to avoid an interview with a law enforcement official protecting local society.

## ANIMAL ENCOUNTERS

Characters may expect, when outside of urban areas, to encounter examples of local animal life.

Animal encounter tables are generated under the rules provided in the animal encounter chapter.

Throw twice per day as directed by the animal encounter table for the local terrain type and world.

## ADVENTURE ENCOUNTERS

Characters, in the course of their adventures, may encounter individuals who are part of the events of the adventure. Such individuals may be guards for an estate being invaded, a professor in a laboratory being clandestinely observed, a financier being rescued from kidnappers, or the kidnappers themselves.

Encounters which are direct parts of a scenario or adventure are managed by the referee in accordance with his or her determinations of actions, motivations, and preferences.

## ENCOUNTER CHECKLIST

Encounters take place on a recurring basis. The following checklist is a guide to their frequency.

**Routine:** As necessary.

**Adventure:** As necessary.

**Legal:** Daily throw law level or greater to avoid legal harassment.

**Random:** Daily throw 5+ (on 1D) for a random encounter to take place.

**Animal:** Daily throw as directed on animal encounter table for terrain and world type.

**Patron:** Weekly throw 5+ (on 1D) for patron to be encountered.

**Rumor:** Weekly throw 7+ (on 2D) for a rumor to be encountered.

## PATRON LIST TWO

11 Naval Officer  
12 Scout Administrator  
13 Marine Officer  
14 Hunter  
15 Starport Warden  
16 Naval Officer  
21 Reporter  
22 Technician  
23 Doctor  
24 Rogue  
25 Noble  
26 Government Official  
31 Barbarian  
32 Scout Pilot  
33 Pirate  
34 Researcher  
35 Writer  
36 Professor  
41 Underworld Leader  
42 Scientist  
43 Belter  
44 Naval Architect  
45 Steward  
46 Financier  
51 Navigator  
52 Swindler  
53 Broker  
54 Arms Merchant  
55 Doctor  
56 Pilot  
61 Merchant  
62 Rogue  
63 Embezzler  
64 Belter  
65 Bureaucrat  
66 Diplomat

## Patron Encounter Matrix DMs:

**1st Die Roll:** If naval character, DM

-1. If merchant character, DM +1.

**2nd Die Roll:** If streetwise-1+, DM

-1. If admin-1+, DM +1.

## PATRON ENCOUNTERS MATRIX

2nd Die	1	2	3	4	5	6
1	11	12	13	14	15	16
2	21	22	23	24	25	26
3	31	32	33	34	35	36
4	41	42	43	44	45	46
5	51	52	53	54	55	56
6	61	62	63	64	65	66

Before consulting this matrix, determine which patron list (list one or list two below, or a distinct specially generated list) will be used to determine the specific patron to be encountered. Implement the appropriate DMs from the list to be used.

## PATRON LIST ONE

11 Arsonist  
12 Cutthroat  
13 Assassin  
14 Hijacker  
15 Smuggler  
16 Terrorist  
21 Crewmember  
22 Peasant  
23 Rumor  
24 Clerk  
25 Soldier  
26 Shopkeeper  
31 Shipowner  
32 Tourist  
33 Merchant  
34 Police  
35 Scout  
36 Rumor  
41 Diplomat  
42 Courier  
43 Spy  
44 Scholar  
45 Governor  
46 Administrator  
51 Mercenary  
52 Naval Officer  
53 Marine Officer  
54 Scout  
55 Army Officer  
56 Mercenary  
61 Noble  
62 Playboy  
63 Avenger  
64 Emigre  
65 Speculator  
66 Rumor

## Patron Encounter Matrix DMs:

**1st Die Roll:** If merchant DM -1. If noble (social standing 11+), DM +1.

**2nd Die Roll:** If other DM -1. If army or marine character, DM +1.

## Traveller

### RANDOM ENCOUNTERS MATRIX

2nd Die	1	2	3	4	5	6
1	11	12	13	14	15	16
2	21	22	23	24	25	26
3	31	32	33	34	35	36
4	41	42	43	44	45	46
5	51	52	53	54	55	56
6	61	62	63	64	65	66

Consult this matrix daily on a throw of 5+ (on 1D) in any circumstance which would allow an encounter with other people.

### RANDOM ENCOUNTER LIST

Qty	Type	Remarks
11	1D Peasants	-3
12	2D Peasants	-2
13	2D Workers	-1
14	3D Rowdies	L
15	2D Thugs	L
16	4D Riotous Mob	-1
21	2D Soldiers	+1 LGA
22	2D Soldiers	LGAV
23	1D Police Patrol	+1 GA
24	2D Marines	LGA
25	3D Security Troops	+1 GA
26	2D Soldiers on Patrol	LGA
31	1D Adventurers	+2 GAV
32	2D Noble with Retinue	LGAV
33	2D Hunters and Guides	+1 LGV
34	2D Tourists	+2
35	1D Researchers	+3 V
36	1D Police Patrol	VG
41	1D Fugitives	-2
42	2D Fugitives	V
43	3D Fugitives	G
44	2D Vigilantes	G
45	3D Bandits	L
46	3D Ambushing Brigands	LGA
51	1D Merchants	+1 LA
52	2D Traders	GV
53	2D Religious Group	
54	1D Beggars	L
55	5D Pilgrims	A
56	3D Guards	A
61		
62		
63		
64		
65		
66		

**Remarks:** All encountered individuals have necessary survival equipment such as vacc suits, filter masks, or respirators, regardless of local tech level (equipment may be assumed to be imported if necessary). Unless otherwise stated, all individuals are armed with blades (not guns), unarmored, and are on foot.

Abbreviations indicate special equipment levels for the encounter. L: a leader is present; he or she will have the best possible equipment for the tech level. G: the group is armed with guns. A: the group wears armor. V: the group has a vehicle consistent with local tech level (vehicle includes riding animals). -N (where N is any number): tech level for the group is that number lower than local tech level. +N (where N is any number): tech level for the group is that number greater than local tech level.

### RUMORS MATRIX

2nd Die	1	2	3	4	5	6
1	A	B	C	D	E	F
2	G	U	U	W	W	H
3	I	U	Y	Y	W	J
4	K	X	Z	Z	V	L
5	M	X	X	V	V	N
6	O	P	Q	R	S	T

Consult this matrix weekly on a throw of 7+ (on 2D). Also consult this matrix if rumor is a patron encounter result.

### RUMOR LIST

Specific Rumors
A Background information
B Minor fact
C Major fact
D Partial (potentially misleading) fact
E Veiled clue
F Information leading to trap
G Location data
H Important fact
I Obvious clue
J Completely false information
K Terminology
L Library data reference
M Helpful data
N Location data
O Reliable recommendation to action
P Major fact
Q Background information
R Minor fact
S Veiled clue
T Misleading clue
General Rumors
U Broad background information
V Misleading background information
W Reference to library data
X General location data
Y Specific background data
Z Misleading background data

### Rumor Matrix DMs

The referee, when constructing a rumor matrix, must take into account the possible differences in character types and their predisposition to receiving specific types of rumors.

Specific DMs on the matrix may be established.

## Encounters

### REACTIONS

Die	Reaction
2	Violent. Immediate attack.
3	Hostile. Attack on 5+.
4	Hostile. Attack on 8+.
5	Hostile. May attack.
6	Unreceptive.
7	Non-committal.
8	Interested.
9	Intrigued.
10	Responsive.
11	Enthusiastic.
12	Genuinely friendly.

Throws of 2 and 12 (exactly on the dice) are not subject to DMs. Modified results of less than 3 are 3 and more than 12 are 12. DM +1 if character served 5+ terms in army, navy, scouts, or marines. DM-1 if world population is 9 or greater.

### AVAILABLE WEAPONS BY TL

Tech	Weapons	Armor
0	club, cudgel, spear	
1	dagger, pike, sword	jack
2	halberd, broadsword	
3	foil, cutlass, blade, bayonet	
4	revolver, shotgun	
5	carbine, rifle, pistol, SMG	
6	automatic rifle	cloth
7	body pistol	mesh
8	laser carbine	vacc suit
9	laser rifle	ablat
10		reflec
11		combat armor
12		
13		battle dress

### PROHIBITED WEAPONS BY LL

Law	Weapons Prohibited
0	none
1	body pistol, bombs, grenades
2	laser rifle, laser carbine
3	automatic rifles
4	submachineguns
5	pistols, revolvers
6	rifles, carbines
7	shotguns
8	all blades but dagger
9	all weapons outside the home
A	all weapons

## Trade and Commerce

### TRADE AND SPECULATION

Die	Trade Goods	Base Price	Purchase DMs	Resale DMs	Quantity
11	Textiles	3,000	A-7, NA-5, NI-3	A-6, NA+1, R+3	3Dx5
12	Polymers	7,000	I-2, R-3, P+2	I-2, R+3	4Dx5
13	Liquor	10,000	A-4	A-3, I+1, R+2	1Dx5
14	Wood	1,000	A-6	A-6, I+1, R+2	2Dx10
15	Crystals	20,000	NA-3, I+4	NA-3, I+3, R+3	1D
16	Radioactives	1,000,000	I+7, NI-3, R+5	I+6, NI-3, R-4	1D
21	Steel	500	I-2, R-1, P+1	I-2, R-1, P+3	4Dx10
22	Copper	2,000	I-3, R-2, P+1	I-3, R-1	2Dx10
23	Aluminum	1,000	I-3, R-2, P+1	I-3, NI+4, R-1	5Dx10
24	Tin	9,000	I-3, R-2, P+1	I-3, R-1	3Dx10
25	Silver	70,000	I+5, R-1, P+2	I+5, R-1	1Dx5
26	Special Alloys	200,000	I-3, NI+5, R-2	I-3, NI+4, R-1	1D
31	Petrochemicals	10,000	NA-4, I+1, NI-5	NA-4, I+3, NI-5	1D
32	Grain	300	A-2, NA+1, I+2	A-2	8Dx5
33	Meat	1,500	A-2, NA+2, I+3	A-2, I+2, P+1	4Dx5
34	Spices	6,000	A-2, NA+3, I+2	A-2, R+2, P+3	1Dx5
35	Fruit	1,000	A-3, NA+1, I+2	A-2, I+3, P+2	2Dx5
36	Pharmaceuticals	100,000	NA-3, I+4, P+3	NA-3, I+5, R+4	1D
41	Gems	1,000,000	I+4, NI-8, P-3	I+4, NI-2, R+8	1D
42	Firearms	30,000	I-3, R-2, P+3	I-2, R-1, P+3	2D
43	Ammunition	30,000	I-3, R-2, P+3	I-2, R-1, P+3	2D
44	Blades	10,000	I-3, R-2, P+3	I-2, R-1, P+3	2D
45	Tools	10,000	I-3, R-2, P+3	I-2, R-1, P+3	2D
46	Body Armor	50,000	I-1, R-3, P+3	I-2, R+1, P+4	2D
51	Aircraft	1,000,000	I-4, R-3	NI+2, P+1	1D
52	Air/raft	600,000	I-3, R-2	NI+2, P+1	1D
53	Computers	10,000,000	I-2, R-2	NI+2, P+1, A-3	1D
54	All Terrain Vehicles	30,000	I-2, R-2	NI+2, P+1, A+1	1D
55	Armored Vehicles	70,000	I-5, R-2, P+4	NA-2, A+2, R+1	1D
56	Farm Machinery	150,000	I-5, R-2	A+5, NA-8, P+1	1D
61	Electronics Parts	100,000	I-4, R-3	NI+2, P+1	1Dx5
62	Mechanical Parts	70,000	I-5, R-3	NI+3, A+2	1Dx5
63	Cybernetic Parts	250,000	I-4, R-1	NI+4, A+1, NA+2	1Dx5
64	Computer Parts	150,000	I-5, R-3	NI+3, A+1, NA+2	1Dx5
65	Machine Tools	750,000	I-5, R-4	NI+3, A+1, NA+2	1Dx5
66	Vacc Suits	400,000	NA-5, I-3, R-1	NA-1, NI+2, P+1	1Dx5

Use this table to determine goods and prices for goods available for trade. Die indicates two consecutive die rolls. Base price is the unaltered value of the goods. Purchase DMs alter this value based on the world where purchased. Resale DMs alter this value based on the world where offered for resale. Quantity is the amount of goods in the available lot. Items 11 through 46 and 61 through 66 are expressed in tons; items 51 through 56 are expressed per each single item.

Abbreviations: A= Agricultural World, NA= Non-agricultural World, P= Poor World, R= Rich World, I= Industrial World, NI= Non-industrial World.

## Game Designers' Workshop

### ACTUAL VALUE

Dice Roll	Percentage Value
2	40%
3	50%
4	70%
5	80%
6	90%
7	100%
8	110%
9	120%
10	130%
11	150%
12	170%
13	200%
14	300%
15	400%

Results of less than 2 are treated as 2; results of greater than 15 are treated as 15.

### TRADE AND SPECULATION DMs

**Brokers:** Four types of brokers are available:

DM	+1	5% commission
DM	+2	10% commission
DM	+3	15% commission
DM	+4	20% commission

**Character Skills:** Bribery skill and admin skill may be used as a DM at the level of the skill.

**World Types:** Trade classifications for worlds may be used to influence transactions as indicated on the trade and speculation table.

**Agricultural:** Atmosphere 4-9, hydrographics 4-8, population 5-7.

**Non-Agricultural:** Atmosphere 3-, population 6+.

**Industrial:** Atmosphere 0-2, 4, 7, or 9, population 9+.

**Non-Industrial:** Population 6-.

**Rich:** Atmosphere 6 or 8, population 6-8, government 4-9.

**Poor:** Atmosphere 2-5, hydrographics 3-.



**Traveller**
**Vehicles**
**PERSONAL EQUIPMENT**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Respirator	5	—	100
Filter Mask	3	—	10
Combination	5	—	150
Oxygen Tanks	5	5	500
Refill	5	—	20
Underwater Air Tanks	5	5	800
Refill	4	—	20
Artificial Gill	8	4	4,000
Swimming Equipment	3	1	200
Protective Suit (jack)	5	5	700
Protective Suit (cloth)	5	7	1,400
Vacc Suit	8	10	10,000
Vacc Suit	9	8	10,000
Vacc Suit	10	6	10,000
Vacc Suit	11	4	10,000
Vacc Suit	12	2	10,000
Vacc Suit	13	—	10,000
Cold Weather Clothing	1	2	200
Cold Weather Clothing	10	—	800
Survival Bubble	9	3	600

**SENSORY AIDS**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Binoculars	3	1.	75
Infrared Goggles	6	—	500
Light Intensifier Goggles	7	—	500
Torch	1	.25	1
Electric Torch	5	.5	10
Gas or Oil Lamp	2	.5	10
Refill of Gas or Oil	2	—	2
Cold Light Lantern	6	.25	20
Voice Recorder	6	.5	100
Recording Tape	6	—	1
Recording Crystal	13	—	1
Video Recorder	8	1.2	900
Recording Tape	8	—	2
Recording Crystal	13	—	2
Text Recorder	10	1.	1,200
Recording Tape	10	—	3
Recording Crystal	13	—	3

**TOOLS**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Carpentry Tool Set	2	25	300
Metalwork Tool Set	4	50	1,500
Mechanical Tool Set	5	20	1,000
Medical Kit	7	10	1,000
Electronic Tool Set	7	5	2,000
Lockpick Set	4	—	10

**Notes:** TL is the minimum technological level at which the item is available. Kg is kilograms; ton is 1,000 kg. Cr is credits; KCr is kilocredits (Cr1,000); MCr is megacredits (Cr1,000,000).

Availability also depends on local law level and industrial capacity.

**COMMUNICATORS**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Short Range	5	20.	225
Short Range	8	.1	75
Medium Range	5	70.	750
Medium Range	10	.4	250
Medium Range	13	.1	250
Long Range	5	150.	1,500
Long Range	9	1.2	500
Long Range	14	.5	500
Continental Range	5	300.	15,000
Continental Range	9	1.5	5,000
Continental Range	12	5.	5,000

**PERSONAL DEVICES**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Magnetic Compass	3	—	10
Inertial Locator	9	1.5	1,200
Metal Detector	6	1.	300
Radiation Detector	5	1.	250
Bull-Horn	5	.5	120
Hand Calculator	7	.1	10
Hand Computer	11	.5	1,000
Artificial Psi Shield	8	1.	4,000
Handcuffs	2	.3	25
Wrist Watch	4	—	100

**VEHICLES**

<i>Description</i>	<i>TL</i>	<i>tons</i>	<i>KCr</i>
Primitive Biplane	5	1	20
Fixed Wing Aircraft	6	5	1,000
Helicopter	6	1	100
Air/Raft	8	4	600
GCarrier	8	8	1,000
Speeder	8	6	1,000
Grav Belt	12	10	100
Ground Car	5	2	4
Wheeled ATV	6	10	30
Tracked ATV	6	10	30
Motor Boat	5	60	60
Submersible	6	500	2,000
Hovercraft	7	8	200

**SMALL CRAFT**

<i>Description</i>	<i>TL</i>	<i>tons</i>	<i>MCr</i>
Launch (or Lifeboat)	8	20	13.0
Ship's Boat	8	30	16.0
Slow Boat	8	30	15.0
Pinnace	8	40	20.0
Slow Pinnace	8	40	18.0
Modular Cutter	8	50	28.0
ATV Module	8	30	1.8
Fuel Module	8	30	1.0
Open Module	8	30	2.0
Shuttle	8	95	33.0
Fighter	8	10	18.0

**WEAPONRY**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Club	0	1.	—
Dagger	1	.25	10
Blade	3	.35	50
Foil	3	.5	100
Cutlass	3	1.25	100
Sword	1	1.	150
Broadsword	2	2.5	300
Bayonet	3	.25	10
Spear	0	2.	10
Halberd	2	2.5	75
Pike	1	3.	40
Cudgel	0	1.	10
Body Pistol	7	.25	500
6 rds ammo	7	.05	20
Automatic Pistol	5	.75	200
15 rds ammo	5	.25	10
Revolver	4	.9	150
6 rds ammo	4	.1	5
Carbine	5	3.	200
10 rds ammo	5	.125	10
Rifle	5	4.	200
20 rds ammo	5	.5	20
Auto Rifle	6	5.	1000
20 rds ammo	6	.5	20
Shotgun	4	3.75	150
10 rds ammo	4	.75	10
Submachinegun	5	2.5	500
30 rds ammo	5	.5	20
Laser Carbine	8	5.	2,500
LC Power Pack	8	3.	1,000
Recharge	8	—	200
Laser Rifle	9	6.	3,500
LR Power Pack	9	4.	1,500
Recharge	9	—	300
Telescopic Sights	6	.8	200
Electronic Sights	9	1.5	2,000
Silencer	6	.6	200
Shoulder Stock	5	1.	75
Folding Stock	6	.5	100
Accessories	—	10% of price	

**BODY ARMOR**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Jack	1	1	50
Mesh	7	2	150
Cloth	6	2	250
Reflec	10	1	1,500
Ablat	9	2	75
Combat Armor	11	6	20,000
Battle Dress	13	20	200,000

**SHELTERS**

<i>Description</i>	<i>TL</i>	<i>Kg</i>	<i>Cr</i>
Tarpaulin	1	2	10
Tent	2	3	200
Pressure Tent	7	25	2,000
Pre-Fab Cabin	6	4tons	10,000
Advance Base	8	6tons	50,000

## PSIONIC SKILL SUMMARIES

## THE PSIONIC INSTITUTE

## Level Name/Description

Time Required Cost

## Telepathy

1	Shield	constant	0
1	Life detection	60 seconds	1+Range
2	Telempathy	60 seconds	1+Range
4	Read surface thoughts	60 seconds	2+Range
5	Send thoughts	120 seconds	2+Range
9	Probe	600 seconds	8+Range
10	Assault	2 seconds	10+Range

Experience: Throw 8+ per month to increase one level. Initial level is 1.

## Clairvoyance

2	Sense	15 seconds	1+Range
3	Direction	constant	0+Range
5	Clairvoyance	15 seconds	2+Range
5	Clairaudience	15 seconds	2+Range
9	Combined	15 seconds	2+Range

Experience: Throw 8+ per month to increase one level. Initial level is 1.

## Telekinesis

1	Move 1 gram	60 seconds	1+Range
2	Move 10 grams	60 seconds	2+Range
3	Move 100 grams	60 seconds	3+Range
5	Move 1 kilogram	60 seconds	5+Range
8	Move 10 kilograms	60 seconds	8+Range
10	Move 100 kilograms	60 seconds	10+Range

Experience: Throw 8+ per month to increase one level. Initial level is 1.

## Awareness

2	Suspended animation	7 days	3
4	Psionically enhanced strength	60 minutes	1/point
5	Psionically enhanced endurance	60 minutes	1/point
9	Regeneration	60 seconds	1/point

Experience: Throw 10+ per month to increase one level. Initial level is 1.

## Teleportation

5	Personal, unclothed	—	0+Range
7	Personal, clothed	—	0+Range
9	Personal, with equipment	—	0+Range

Experience: Throw 12+ per month to increase one level. Initial level is 5.

## PSIONIC TALENTS

## PSIONIC RANGES

Telepathy	5+
Clairvoyance	6+
Telekinesis	6+
Awareness	7+
Teleportation	9+
Special	9+

	Talent				
	Range	Tele- pathy	Clair- voyance	Tele- kinesis	Tele- port
Close	0	0	0	1	
Short	1	1	1	2	
Medium	2	1	2	3	
Long	3	2	4	3	
V Long	3	2	9	3	
Distant	4	3	—	4	
V Distant	4	3	—	4	
Regional	5	4	—	5	
Continent	5	4	—	5	
Planetary	6	4	—	5	

Roll two dice for each talent in succession; they may be rolled in any order of the player's choice. Apply a DM of -1 on the first throw, -2 on the second throw, through -6 on the sixth throw.

Throw 11+ for a branch of the Psionic Institute to exist on any world with population 9+; DM +1 for each level of population above 9.

Throw 9+ to locate the Institute after one week of search; DM +1 per level of streetwise and +1 per level of admin skill. Character gives up search after one week if not successful.

**The Examination:** For Cr5,000, a two week examination can be administered. Throw 10+ for a free exam for the truly indigent.

**Psionic Strength Ratings:** Throw 2D; DM -1 per four-year term of service after age 18.

**Maximum Activity Level:** A character may not perform any activity unless his or her psionic strength rating (unenhanced by drugs) is equal to or greater than the required level for that activity.

**Available Strength Points:** PSR indicates the number of points available for performance of any activity. Psi-drugs may increase these points.

**Aging:** Untrained characters have their psionic strength rating reduced by -1 every four years. Trained characters are not subject to any reductions in PSR.

**Deterioration:** No character may have a PSR greater than the sum of strength, dexterity, endurance, and intelligence; if such a situation occurs, then PSR is reduced to that amount.

## RANGE DESCRIPTIONS

**Close:** In physical contact; touching.

**Short:** at sword or polearm point; approximately 1 to 5 meters.

**Medium:** At pistol range; from 6 to 50 meters.

**Long:** At rifle range; from 51 to 250 meters.

**Very Long:** At extreme range; 251 to 500 meters.

**Distant:** Beyond normal contact; from 500 to 5000 meters.

**Very Distant:** Out of sight; from 5 to 50 kilometers.

**Regional:** 50 to 500 km.

**Continental:** 500 to 5,000 km.

**Planetary:** 5,000 to 50,000 km.

**Penalties for Psionics:** If an individual with psionic power and training is discovered by the public or the authorities, throw 2D for possible penalties. Throw 12+ for lobotomy, 10+ for lynching, 8+ for tarring and feathering, 6+ for imprisonment, and 4+ for deportation.

# SUBSECTOR MAP GRID

Indicate adjacent subsectors at boundaries of this map grid.

1. Subsector Name

2. Date of Preparation

0101		0301		0501		0701	
	0201		0401		0601		0801
0102		0302		0502		0702	
	0202		0402		0602		0802
0103		0303		0503		0703	
	0203		0403		0603		0803
0104		0304		0504		0704	
	0204		0404		0604		0804
0105		0305		0505		0705	
	0205		0405		0605		0805
0106		0306		0506		0706	
	0206		0406		0606		0806
0107		0307		0507		0707	
	0207		0407		0607		0807
0108		0308		0508		0708	
	0208		0408		0608		0808
0109		0309		0509		0709	
	0209		0409		0609		0809
0110		0310		0510		0710	
	0210		0410		0610		0810
0111		0311		0511		0711	



