

ADVANCED LASERBURN & ALIENS



More comprehensive character development
Advanced firing and Combat rules
& FIVE ALIEN RACES

by Tony Ackland

LASERBURN

Advanced Rules and Five Alien Races

This set of rules before you are in no way intended to replace the original LASERBURN rules by Bryan Ansell. The purpose is to broaden the application of the original system.

You may find some of the rules in this volume overly complicated at first sight, but they are in the main extensions of the original systems. All the systems and rules in this volume are in fact compatible with those of the original, and certain of the tables in that volume will be required for use with this volume (HIT EFFECT, and FAILED PENETRATION being two examples).

The aspects that these rules set out to cover were such things as:- Encounters with Aliens, Interaction with technological devices, and Robotics. As it was necessary to increase the detail in Combat and Firing sections to take these things into account, certain material has been added for the benefit of completeness anyway.

Written and Illustrated by Tony Ackland.

© Copyright TABLETOP GAMES and
TONY ACKLAND January 1983.



INDEX

Advanced Rules Aliens

SECTION	PAGE No	SECTION	PAGE No
Character Generation	2	Aliens	39
Endurance & Fatigue	4	Language	40
Regeneration	5	FROOGS	41
Technological & Cultural Background	6	SZITHKS	44
Equipment Capability	7	MRURZ	47
Special Skills	8	THULGS	50
Xenological Difference Chart	9	CENTALONS	53
Weapon-Combat-Initiative	10		
Constriction & Reach	11		
Combat	12		
Firing	16		
Reaction	18		
Weapons & Equipment (Human)	20		
Personal Defence	22		
Artillery	23		
Electro Sensors	25		
Computers & Robots	26		
Medikit	27		
Vehicles	27		
Random Course Indicator	29		
Dhaon 'EXCALIBRE' Jetcycle	29		
General Products 6 x 6 Utility	30		
BMC Strider (AASV)	32		
Androids	33		
Maintenance & Guard Droids	34		
Human Variants	35		
The Collapse of the Empire	37		
Appendix	38		



Introduction

Many of the rules in this volume are intended only for use when widely different life forms are being used, or special types of equipment are being employed. When this is not the case either the original rules or an interim mixture of both sets should be used. An example of the latter would be to generate an Alien unit using these rules, and then opposing them to a Human unit generated by the original rules.

There are a great many factors and rules which are intended for use in campaigns only, so if you are interested in battles or quick adventures only these may be ignored.

Some of you may find the sections on Robots, Vehicles etc., somewhat incomplete. The purpose here was to create a framework on which others could design their own types. Although the section on Aliens is much more complete the same is basically true. You will find that a study of the system used, and the examples given will make this not too difficult a task.

If there should be sufficient demand, then a volume on flying and flying creatures, and non-intelligent life forms may follow.

My thanks to Bryan Ansell for his permission to develop his original concept, to Bob Connor for the patience he has shown in waiting for them to be completed.

TONY ACKLAND

SCI-FI FIGURES AVAILABLE

TABLETOP GAMES

15mm Laserburn figures, 15mm Alien figures and 25mm Alien and Human figures.

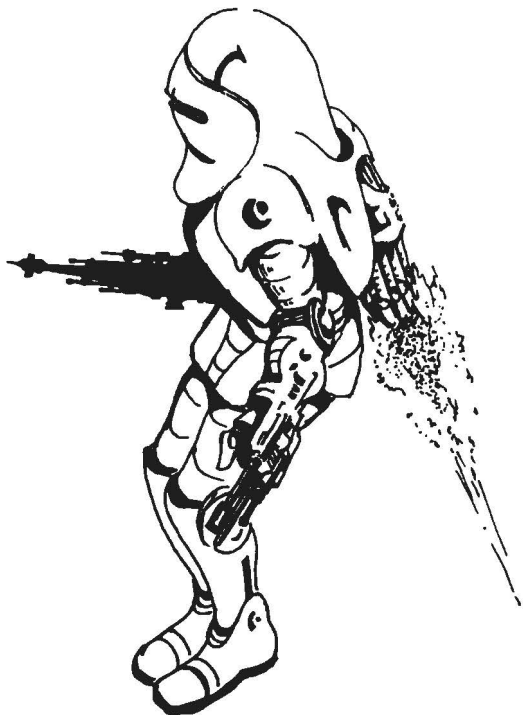
CITADEL

15mm Traveller figures and 25mm Spacefarer figures as well as a large range of Fantasy figures.

ASGARD

15mm Human and Alien figures, 25mm Troopers and some Aliens.

Figures of different scales may be mixed to increase the number of Alien types. 15mm Aliens can be used to good effect alongside 25mm human figures. You will of course have to adjust the rules for this, but the framework and examples will not make this difficult. Fantasy and historical figures can also be used, if a little care and imagination is used in the choosing. If you possess any skill in converting figures then the possibilities open to you are almost endless.



Advanced Rules

Character Generation

The principal purpose of this section is the creating of characters. But it can also be used to create average types, and is in this respect essential when creating ALIEN units. All figures except CHARACTERS and SPECIALISTS should have identical factors within a unit.

The first aspects to be dealt with are the CHARACTER CAPABILITY FACTORS. These are the things which determine just how good a being is at coping with various situations. They will from this point on be referred to in their abbreviated form CCF.

The determinations below are for normal Human types.

CCF

A) INTELLIGENCE:- The ability to logically think out a problem, and find the answer.

Throw one D6 CCF is equal to score.

B) INTUITION:- Guessing right, thoughts flowing in unison with the universe, etc.

Determine as above.

NOTE if character throws a 6 for both the above, throw D10 and adjust:

2,3,4,5 Deduct one from CCF, A

6,7,8,9 Deduct one from CCF, B

1 or 10 No deduction from either

CCF,C DEXTERITY

Nimbleness of fingers, steadiness of hands, and general manipulative ability - D6 No Modifiers

CCF,D AGILITY

More than just suppleness of body. The almost physical awareness of the immediate environment. A sense of the space surrounding without actually touching or seeing. Giving that ability to dodge out of trouble instinctively
D6 No Modifiers

CCF,E VISION

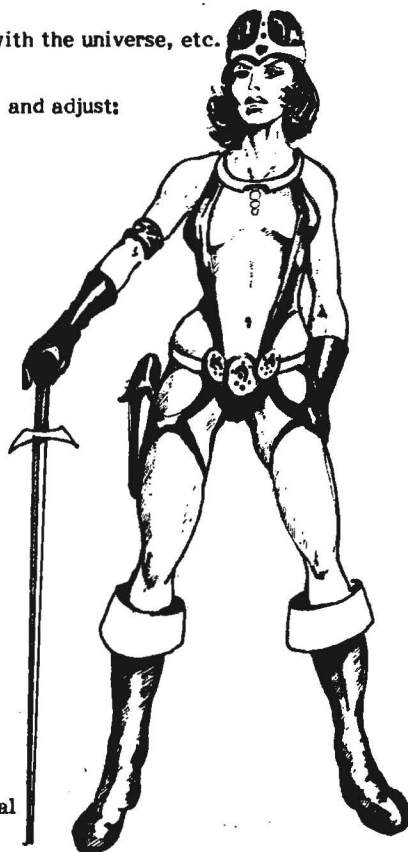
Need no explanation, except to remind you that not all aliens have the same visual spectrum that humans do -
D6 No Modifiers

CCF,F ENDURANCE

How long an entity can go without rest, see endurance and fatigue section - D6 Modify as for Regeneration

CCF,G REGENERATION RATE

The speed at which an organism repairs itself without medical aid - D6 Modify as over



	1,2	- 2	Regeneration Rate	
Score	3,4	- 3	"	"
	5,6	- 4	"	"

See regenerative capacity section

CCF,H STRENGTH

Needs no explanation - D6 Modify as below:

		SCORE					
		1	2	3	4	5	6
Male	CCF, H of	2	3	4	4	5	6
Female	" "	2	2	3	3	4	4



MASS

With beings of the same race this is largely related to size. But certain creatures who displace a great deal of volume may have quite a low mass. This applies particularly to creatures with the capacity of flight. The reverse can of course be true of other types of being. D6 Modify as below:

		SCORE					
		1	2	3	4	5	6
Male	mass	4	5	5	5	5	6
Female	mass	4	4	4	4	5	5

POWER

To determine the power of an organism, multiply the strength of an individual by the mass of an individual.

When the result is less than 1 the power will be taken as 1

When the result is 1 to 5 power will be taken to be 1.5

Above those results power increases by .5 at multiples of 6 gained by the mass x strength result. The table below shows this:

Mass x Strength Result Below 1	Power
1- 5	1.5
6- 11	2
12- 17	2.5
18- 23	3
24- 29	3.5
30- 35	4
36- 41	4.5
42- 47	5
48- 53	5.5
54- 59	6
60- 65	6.5
66- 71	7
72- 77	7.5
78- 83	8
84- 89	8.5
90- 95	9
96-101	9.5
102-107	10

Certain items of equipment will also have power ratings, but these will be determined directly.

The ratings of power armour (PA) and dreadnought armour (DA) are shown below (Human type only):

To take into account qualitative differences due to manufacture, throw D10-

	SCORE	POWER
PA	1,2	10
	3 - 8	12
	9,10	14
DA	1,2	20
	3 - 8	24
	9,10	28

All figures in a unit must have armour of same rating except officers (or characters) who may have higher rated equipment.

NOTE: PA and DA power ratings are not added to the figures own rating. They become that figures rating while he is wearing it.

Endurance & Fatigue

This section is mainly for use in campaign situations. A characters CCF,F is used on the tables below to assess how long he can go without tiring and how fast he can recover when tired.

CCF,F	ENDURANCE TABLE							Fatigue Level
	1	2	3	4	5	6	7	
	200	225	250	250	275	300	350	0
	100	125	150	150	175	200	225	1
	50	50	75	75	85	100	110	2
	40	40	50	50	60	70	80	3
	20	30	35	40	45	50	55	4
	10	10	10	15	15	20	25	5

ENDURANCE TABLE

This shows the number of turns a character can go for at any fatigue level, before moving up to the next fatigue level.

6~ Out like a light

CCF,F	RECUPERATION TABLE							Fatigue Level
	1	2	3	4	5	6	7	
	400	350	300	300	250	225	200	6
	300	225	200	200	175	150	125	5
	200	150	125	125	100	75	60	4
	100	75	65	60	50	45	40	3
	60	45	40	35	30	25	20	2
	25	20	15	15	15	10	7	1

RECUPERATION TABLE

This shows the number of turns a character must rest to drop from one fatigue to the next lowest fatigue level.

0~ Bright eyed and bushy tailed

AFFECT OF WOUNDS ON ENDURANCE

	ENDURANCE TIME DECREASED BY	RECUPERATION TIME INCREASED BY
First light wound	5%	5%
Each subsequent light wound	10%	10%
First serious wound	30%	30%
Each subsequent serious wound	50%	50%

AFFECT OF FATIGUE LEVELS

Deduct one from CCFs A,B,C,D,E, and H. When any of these become negative, reduce the characters percentage chance of performing any task* to which that CCF apertains by 10% for each -1

Reduce movement as below:

Fatigue Levels	1	Movement - 10%
	2	" - 20%
	3	" - 40%
	4	" - 60%
	5	Figure may crawl at 2% max move distance
	6	No movement

Figures wearing PA or DA may of course continue moving at full rates, but at fatigue level 5 a figure may only change direction up to a maximum of 5%.

At fatigue level 6 figure will move in random manner. Determine as for vortex

All movement deductions are cumulative with any deductions for wounds.

*i.e. Firing weapon, combat etc.

Regeneration

The main purpose again is for campaign situations.

REGENERATIVE CAPACITY

This is the extent to which an organism may repair itself without medical care. This capacity is graded as follows:

- RC 1 Light wounds heal completely, serious wounds heal partially.
- RC 2 Serious wounds heal completely.
- RC 3 Ends of appendages completely regenerate (to us, fingers, etc.)
- RC4 Complete regeneration of limbs.
- RC5 Organism can regenerate itself from single cell.

NOTE: Human types come under RCG1.

REGENERATIVE RATE

The following applies to creatures of RC 1. Other RC's are however related (see higher regenerative capacities).

REGENERATION RATE TABLE

	CCF, G						
	1	2	3	4	5	6	7
Light Wound	800+ (D10x60)	700+ (D10x50)	600+ (D10x50)	500+ (D10x50)	400+ (D10x50)	300+ (D10x40)	200 (D10x30)

The above table gives the number of turns required for a light wound to heal completely, given absolute rest. A light wound will heal to a functional level in 30% of this time. But for every turn stress is put on it there is a 10% chance of it reverting to its original condition.



SERIOUS WOUNDS

The number of turns it takes a serious wound to heal is $(D6+3) \times$ the number of turns a light wound takes to heal. A serious wound untreated will not return to normal and will leave the affected part with a light wound disability.

DISABLING WOUNDS

Take the same time to heal as a serious wound but leave the affected part with a double light wound disability unless treated.

HIGHER REGENERATIVE CAPACITIES

NON-DISABLING WOUNDS

- RC2 - Wounds take 75% of the time required of RCG1 wounds.
- RC3 - Wounds take 50% of the time required of RCG1 wounds. Regeneration of appendage tips requires the same time as a light wound does to heal at RCG1.
- RC4 - Wounds take 30% of the time required of RCG1 wounds. Regeneration of appendage tips requires 75% of RCG3 time. Regeneration of limbs requires the same time as light wound does to heal at RCG1.
- RC5 - Applies only to certain exotic non-intelligent types. Data will be found with creature descriptions in the appropriate supplements.

Technological & Cultural Background

The technical level and cultural nature of the various societies that characters find themselves in will of course vary a great deal. Scenario creators may use the following table using the chance factors or may simply pick one at their discretion. Players wishing to pick a character from the same must use the chance factors. If a culture does not apply to the species the player is using then he must throw again.



			DEFENCE ← AGGRESSION					Definitions of technical
1	2	3	A	B	C	D	E	States of development (or parallel to)
1-20	1-25	1	1-20	21-40	41-60	61-80	81-100	Paleolithic
	26-50	2	1-25	26-55	56-85	86-95	96-100	Neolithic
	51-75	3	1-25	51-80	81-95	81-95	96-100	Copper - early Bronze Age
	76-100	4	1-25	26-50	51-75	76-90	91-100	Bronze Age
21-40	1-25	5	1-25	26-45	46-55	56-75	76-100	Iron Age 1. Circular arch in architecture
	26-50	6	1-30	31-45	46-55	56-70	71-100	Iron Age 2. Elliptical arches in architecture. Early firearms
	51-75	7	1-15	16-30	31-45	46-65	66-100	Development of printing
	76-100	8	1-30	31-60	61-70	71-85	86-100	Immediate pre-industrial age
41-60	1-25	9	1-25	26-40	41-50	51-80	81-100	Widespread use of steam power
	26-50	10	1-30	31-45	46-55	56-70	71-100	Internal combustion engine aircraft
	51-75	11	1-35	36-65	66-80	81-95	96-100	Controlled fission power computers
	76-100	12	1-35	36-65	66-80	81-90	91-100	Controlled fusion power
61-80	1-25	13	1-15	16-35	36-50	51-75	76-100	Colonization of own solar system
	26-50	14	1-10	11-20	21-40	41-65	66-100	The first stellar explorations
	51-75	15	1-15	16-30	31-40	41-65	66-100	Early stellar colonization
	76-100	16	1-30	31-60	61-70	71-80	81-100	Pan stellar government
81-100	1-25	17	1-20	21-40	41-60	61-80	81-100	Advanced non-human cultures
	26-50	18	1-20	21-40	41-60	61-80	81-100	
	51-75	19	1-20	21-40	41-60	61-80	81-100	
	76-100	20	1-20	21-40	41-60	61-80	81-100	

COLUMN 1 - Throw D100. COLUMN 2 - Throw D100.

COLUMN 3 - Level of technical development (TD).

COLUMNS A to E - Social defence, aggression (SDA) - Throw D100.

NOTE: The imperium is rated TD.16, SDA.A
The trading empires are rated TD.16 - SDA.E

SDA RATINGS

- A. Societies of this type have a 50% chance of taking hostile action against any stranger approaching their territory. This rises to 75% when actually entering their territory. The chances of gaining such societies co-operation (getting information etc.) is only 5%.
- B. Societies of this type will take hostile action on a 40% chance of stranger approaching their territory. On entering the territory this rises to 65%. Chances of gaining their co-operation 20%.
- C. Chance of this type taking hostile action 15% under any circumstance. Chance of gaining co-operation 50%.
- D. This type will take hostile action on sight of strangers on a 60% chance. However, if they do not attack there is a 60% chance of gaining their co-operation.
- E. This type will take hostile action on sight of strangers on a 80% chance. If they do not attack, there is a 80% chance of gaining their co-operation.

Various degrees of coercion or bribery may of course be used to gain the co-operation of subdued societies. It is up to the umpire to modify the percentages taking into account the precise nature of those societies and the incentives used.

CHARACTERS FROM BACKGROUNDS OF PRE TD-16 LEVEL

Pre TD-8 (SDA-D and E) add 10% to their combat factors when using weapons other than force or power type.

Pre TD-4 (All SDA) have 80% chance of adding one to their CCF-B.

TD-1 to 12 add one to their OC when using equipment from their own TD.

Equipment Capability

Any piece of equipment requires certain degrees of skill and knowledge to operate it. It requires different skills and knowledge to repair and maintain it. To design and modify equipment requires extra skills and deeper knowledge.

These skills can be summarised as follows:

Operational capability	-	(OC)
Maintenance	"	- (MC)
Design	"	- (DC)

Each piece of equipment has a minimum capability factor for each of the aspects shown above. These are summarised below :-

Operational difficulty factor	-	(ODC)
Maintenance	"	" - (MDC)
Design	"	" - (DDC)

These factors can be a positive or negative number. When this is a negative number, this reduces the TD level by the amount of that number. For example, a device from TD-16 with an ODC of -8 would bring that device within the average operational capability of individuals from TD-8. Individuals from lower TDs than that from which a device originates must add the difference of TDs to the devices difficulty factors. For example, an individual from TD-9 trying to operate a device with an ODC of 6 from TD14 would be facing an actual ODC of 11. When trying to use devices of an alien culture, add to the difficulty factor the xenological difference factor.



DETERMINATION OF CHARACTERS OC, MC, AND DC

OC = CCF-A + CCF-B + CCF,C +D6-14

MC = (CCF, A x 1.5) + (CCF,B x 1.5) + CCF,C - 14

DC = (CCF,A x 2.5) + (CCF,B x 1.5) - 14

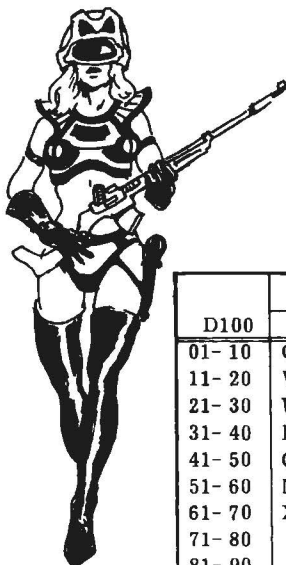
To find the chance of an individual's success with any piece of equipment, subtract the relevant capabilities of the individual from the relevant difficulties of the device. If the result is a negative number or zero, there is no chance of success. If the result is positive then there is a 10% chance for each unit, eg. Result 5 = 50% chance of success.

Penalties for failure may be imposed at the umpire's whim.

Special Skills

If character qualifies for special skills (see original rules), throw for skills on charts below:

D100	CHART A SKILL
01- 10	Weapon Skill
21- 20	Lightning Reactions
21-25	Fast Draw
26- 30	Survival instinct
31- 35	Nerves of Steel
36- 40	Ambidexterity
41- 45	Sniper
46- 50	Martial skill
51- 55	Leadership
56- 60	Streetwise
61- 65	Jetpack
65- 70	Jetcycle
71- 75	Driving Skill
76-100	Re-throw, use Chart B



D100	CHART B SKILL
01- 10	Computers
11- 20	Vehicular
21- 30	Weapons systems
31- 40	Electrosensors
41- 50	Communications
51- 60	Medical
61- 70	Xeno Technology General
71- 80	" " Weaponry
81- 90	" Biology Medicine
91-100	" Linguistics

SKILLS GAINED ON CHART A are fundamentally the same as those in the original rules, but with the following exceptions:

SNIPER - as original, plus 35% chance addition when utilizing target size rules.

JETCYCLE - as original, except when using advanced vehicle rules, adds one to his capability for these vehicles for every skill level attained to a maximum of 5.

DRIVING SKILL - as for jetcycle in advanced vehicle rules, but may spread his maximum of five over five vehicles or concentrate them on one (or anywhere in between).

SKILLS GAINED ON CHART B. The top six skills on this chart are different in nature to the bottom four. The application is as below.

SKILLS 1 TO 6 (ALL SKILLS MAX 10 LEVELS)

The extra levels of skill are applied to that technical capability which is the character's highest, but the extra capability may only be used in his specialist field.

EXAMPLES. Character has OC of 7, MC of 5 and a DC of 6 and gains one skill level in computers. This increase is OC to 8 in operating computers.

Character has OC of 5, MC of 8 and DC of 4 and gains two vehicular skills. This raises his MC to 10 in repair of vehicles.

NOTE: Vehicular skill when OC is the same as driving skill on Chart A but may rise to 10 levels.

SKILLS 7 TO 10 (ALL SKILLS MAX 20 LEVELS)

All extra skills in this section are applied to characters DC. Each level attained is deducted from the xenological difference factor (XDF) when dealing with aliens. The number of levels may be divided amongst the number of alien cultures he wishes to know about.

EXAMPLE. Xenological skill level 20
 1 alien with XDF of 20
 or 1 alien with XDF of 15 and 1 alien with XDF of 5
 or 4 aliens with XDF of 5

Xenological Difference Chart

The XDF between any two races is simply measured in the following way.

Count the number of points they are away from each other on the same radial arm, and then count the number of points away from each other the radial arms are, multiply this figure by 2 then add this to the first figure.

EXAMPLES

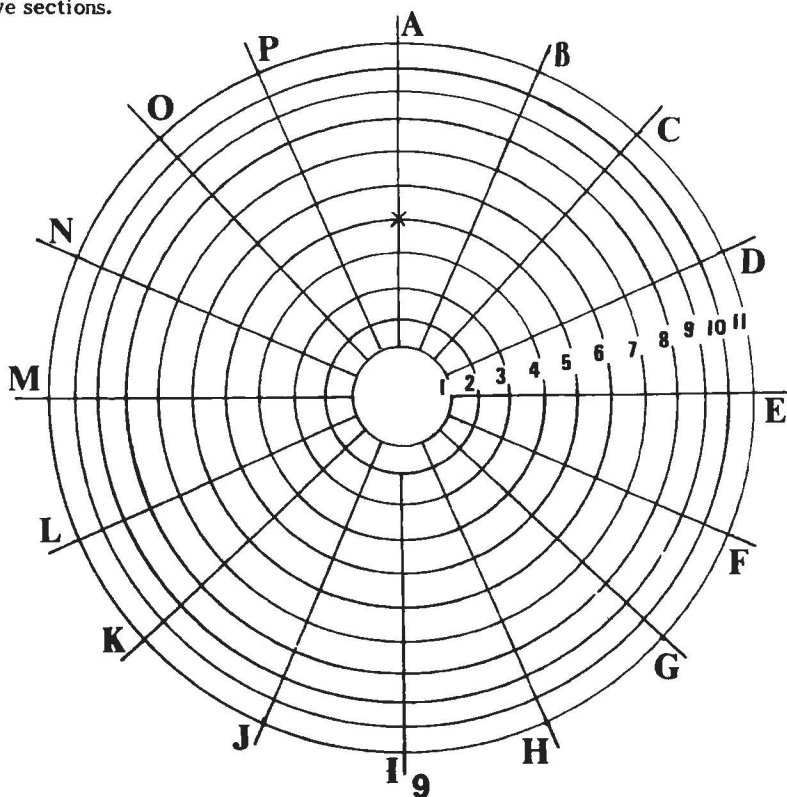
A Race on A5 and A Race on A10 would have an XDF of 5

" " " " " " " " " B10 " " " " " " 7

" " " " " " " " " B5 " " " " " " 2

" " " " " " " " " E1 " " " " " " 12

The human race is positioned at A5 (didn't you guess). Other alien races co-ordinates will be found in their respective sections.



Weapon~Combat~Initiative

The determination of these differs from the original rules in that the CCF's replace the random D6 throws. However, the nature of the CCF's is such that comparable results are achieved.

CLASS

		WEAPON SKILL	COMBAT SKILL	INIATIVE LEVEL
A	Conscripts Raw Recruits	$(A+B+C+E-4) \times 8$	$(B+D+H-3) \times 5$	$\frac{B+D}{2} + 2$
B	Regular Soldiers	$(A+B+C+E-3) \times 10$	$(B+D+H) \times 5$	$B+D+(2D6)-1$
C	Elite Soldiers	$(A+B+C+E-1) \times 10$	$(B+D+H) \times 6$	$B+D+(D6)+2$
D	Veterans	$(A+B+C+E+1) \times 10$	$(B+D+H-6) \times 10$	$B+D+(2D6)+1$
E	Outlaws Pirates	$(A+B+C+E-1) \times 10$	$(B+D+H) \times 8$	$B+D+(2D6)$
F	Heroes	$(A+B+C+E+[2D6-3]) \times 10$	$(B+D+H) \times 10$	$B+D+(3D6)+2$

NOTE: Disregard any sum which is less than 1 within the brackets. A minimum of 1 is the lowest level permitted.

For those who wish to choose class types randomly the table below should be used:

D100	1- 5	CLASS F
	6- 15	" C
	16- 30	" B
	31- 80	" A
	81- 90	" D
	91-100	" E

The random chances above are for use with humans only. When scenarios are being created the umpire/gamemaster may alter the odds to suit as appropriate.

When creating human characters there should be a 15% chance of them being left handed (LEFT HANDED PLAYERS ALWAYS HAVE THE OPTION OF USING LEFT HANDED CHARACTERS)

MOVEMENT RATE (MR)

This is the speed at which an object moves. An MR of 1 is equal to a speed of 10 metres per turn.

Thus human walking rate is MR1,

and human running rate is MR2. A human diving is considered to be at an MR of 3 although he may only cover 5 metres of ground.

NOTE ON GROUND SCALE

No ground scale is sacrosant, and as long as proportions are adjusted correctly, any ground scale may be used.



For those who favour a ground scale that is equal to the figure scale, for today's oversize 25mm figures (the averages is now 28mm) a ground scale of 15mm to the metre is just about right. 10mm to the metre for 15mm figures is not too far out, as most of these tend to be 18mm to 19mm tall.

NOTE ON COMBAT SKILL

The following deductions from agility (CCFD) should be made when determining combat skill.

Wearing back pack -1, wearing full light armour -2, using or carrying heavy weapon -1.

Not cumulative with the above are wearing PA -3, wearing DA -4.

Constriction & Reach

CONSTRICTION PENALTY FACTOR (CPF)

This need only be considered when opponents of different size (and/or shape) meet in combat in an enclosed environment.

The CPF is a limiting effect on the combat ability of the participants.

To keep this as simple as possible, a set of standardized body size factors (BSF) have been prepared for each species. Those for humans are listed below. If you wish to vary these for individuals, work in minimums of .1 of a metre.

	MALE	FEMALE
BSF 1 Manipulative limb (arms) span	2 metres	1.8 metres
BSF 2 Overall height	2 "	1.8 "
BSF 3 Overall Length	-	-
BSF 4 Horizontal Reach	1.5 "	1.2 "
BSF 5 Vertical Reach	2.6 "	2.3 "

BSF4 is not used directly in CPF determination. BSF3 only applies to creatures with heavy tails or to such types as Centauroids. For further detail see the appropriate alien supplements.

CPF DETERMINATION

For every 10% a creature's BSF 1 is greater than the width or length of the space it is in a CPF of 1 results. If it exceeds both the space in both width and length multiply by 2.

EXAMPLES: Human male in corridor 1.5 metres wide - CPF 2.5

" " " room 1.5 metres square - CPF 10

For every 10% a creature's BSF2 is greater than the height of the space it is in, a CPF of 1 results. This factor is added to and multiplied by in the same way as the previous one.

EXAMPLES: Human male in corridor 1.5 metres wide by 1.5 metres high - CPF10

" " " room 1.5 metres square by 1.5 metres high - CPF 22.5

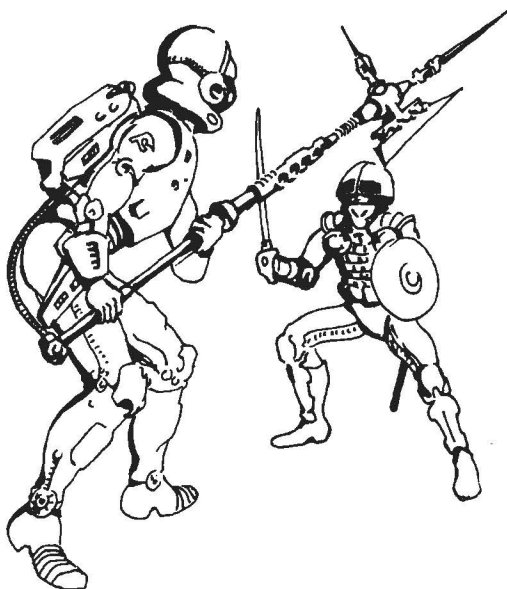
The effective weapon length of all combat weapons (except thrusting weapons) should be added to a creature's BSF1, when a combatant is using axes, double handed swords, and picks, their effective length is added to its BSF5 and this factor is used in place of BSF2. Thrusting weapons require a distance equal to their effective length plus creatures BSF1, plus half as much again to have any combat value.

REACH UNITS (RU)

This is simply a creature's BSF 4* plus the effective length of the weapon being used. Reach units are measured in lengths of 10 centimetres. i.e. 30 centimetres=3RU All weapons in the weapons section have their lengths given in RU.

* Special circumstances may of course mean using.

Combat



Combat takes two forms. These are maximum distance combat and close combat. The first occurs when figures come into maximum striking distance. The second occurs when figures have closed in to each other. Both these forms may take place simultaneously, for instance a third figure may strike from maximum distance at a figure in close combat with another figure.

Figures may of course elect to keep combat at a maximum distance. This is determined by the winner of the previous combat turn, who has the choice of pushing opponent back, keeping to maximum distance combat, or moving to close combat. If the turn has been one of close combat the winner may elect to move combat to maximum distance or stay close.

Wins and hits are determined in the same manner as the original rules with the following exceptions. A set of values has been added to the combat tables. The chance of obtaining a hit is modified by the hit chance modifier tables.

COMBAT TABLES

COMBAT TABLE 1 (Max. Distance) 1 (MAX DIST)		
WEAPON TYPE	ATTACK	DEFENCE
All Swords	+30	+60
Single handed axes/picks	+25	+40
Double handed swords, axes & picks	+40	+80
Halberds	+50	+90
Spears & pikes	+45	+75
Power Gloves	+15	+30
Knives and Daggers	+20	+10
Armoured Fist	+10	0
Bare Fist	-50	-100
COMBATANTS PHYSICAL STATE		
Each Light Wound	-20	-20
" " " on Weapon Hand	-40	-40
" " " " Legs	-30	-30
" Serious Wound	-60	-60
" " " " Legs	-100	-100
GENERAL FACTORS		
For each reach unit	+5	+5
Each opponent above one	-50	-50
Using two weapons offensively	-30	
Using wrong hand (single handed weapons)	-30	-20

HIT CHANCE MODIFIERS

Weapon Used:	
Dagger/Knife	-30
Broadsword/Sabre	- 5
Rapier	0
Falchion	-10
Single handed axe/pick	-15
Two handed sword	+10
Two handed axe	+ 5
Two handed pick	0
Halberd	+15
Spear/Pike	0
GENERAL	
Using two weapons	-30
For each MR unit when moving into combat	-5

GENERAL FACTORS (cont)

Moving into combat for each unit of MR above 1	+10	
Attacking from behind	+50	
Using Shield	+30	+80
Higher than opponent	+20	+40
Winner of preceding combat round	+40	+80
Opponent using power weapon	-40	-60
For each CPF point	-10	-5
Agility Factor 6	+10	+15
Agility Factor above 6, less than 10	+15	+20
Agility Factor above 10	+20	+25
CHANCE OF FIRING BEFORE CONTACT		
Attempting to fire handgun		+30
Attempting to fire shoulder arm		+20
Attempting to fire Hvy Weapon		+10
MODIFIERS		
Attempting to fire a weapon	x .5	
Using two weapons offensively	x .5	
Using two handed weapon single handed	x .5	
Wearing full light armour *	x 1.5	



*Multiply by times greater a combatants power factor is greater than opponents.

COMBAT TABLE 2 (CLOSE)

WEAPON TYPE	ATTACK	DEFENCE
All Swords	+100	+150
Single handed axes/picks	+50	+75
Double handed swords/axes/picks	5	+5
Halberds	0	0
Spears & pikes	-10	-20
Power Gloves	+60	+90
Knives and daggers	+70	+70
Armoured Fist	+30	+45
Bare Fist	-100	-50
COMBATANTS PHYSICAL STATE		
Each light wound	-20	-20
" " " on weapon hand	-40	-40
" " " " legs	-30	-30
" Serious wound	-60	-60
" " " on legs	-80	-70
GENERAL FACTORS		
For each reach unit	-5	-5
" " opponent above one	-50	-50
Using two weapons offensively	-60	
Using wrong hand (single handed wpn)	-30	
Attacking from behind	+100	
Using shield	+75	+100
Winner of preceding combat round	+40	+80
Opponent using power weapon	-40	-60
For each CPF point	-10	-5
Agility Factor 6	-5	+10
Agility Factor above 6, less than 10	+10	+15
Agility Factor above 10	+15	+20

HIT CHANCE MODIFIERS

Weapons Used:

Dagger/Knife	+15
Broadsword/Sabre	+5
Rapier	0
Falchion	+10
Single handed Axe/Pick	-5
Two handed sword	-10
" " axe	-15
" " pick	-20
Halberd	-25
Spear/Pike	-30

GENERAL

Using two weapons	-30
-------------------	-----



MODIFIERS

Using two weapons offensively x .25

Using two hand weapon single

handed x.25

Wearing light armour x1.5

Multiply by times greater combatants power factor is than opponents then multiply by 1.5.

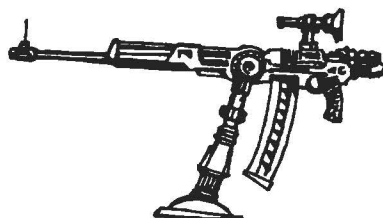
COMBAT WEAPON PENETRATION TABLE

WEAPON			ARMOUR			
			DA	PA	LA	FM
Standard	Normal	Knife/butt of shoulder arm	-100	-60	-50	-40
		improvised blunt instrument	-50	-30	-20	-10
		Broadsword Sabre	-50	-30	-15	+5
		Falchion/Single handed axe	-40	-25	-10	
	Heavy	Rapier/Dagger/Light war pick	-50	-30	-10	+10
		Double handed swords & axes	-40	-20	-5	+15
Monomolecular Edges & points	Normal	Double handed picks/Halberds/ Pikes				
		Broadsword/Sabre Knife		+10	+20	+25
		Falchion/Single handed axe		+15	+25	+30
	Heavy	Rapier/Dagger/Light war pick		+10	+20	+35
		Double handed swords & axes		+20		+40
		Double handed picks/Halberds Pikes		+25		+40
Force	Normal	Broad Sword/Sabre/Knife	+30	+40	+40	+40
		Falchion/Single handed axe	+40	+50	+50	+60
		Rapier/Dagger/Light war pick	+30	+40	+40	+65
	Heavy	Double handed swords & axes	+40	+55	+55	+70
		Double handed picks/halberds/ Pikes	+50	+60	+60	+75
Power	Normal	Falchion	+50	+60	+60	+75
		Glove	+40	+50	+50	+40
	Heavy	Double handed swords & axes	+90	+90	+90	+90
		Double handed picks/Halberds				
		Pikes	+110	+110	+110	+110

For every 5% that a force or power weapon exceeds its required penetration, a blade will cut 10mm beyond the armour, and a spike or point will penetrate 25mm beyond the armour. For effect see Conversion Field/Beam Wound table.

Non penetrating blows by heavy weapons excluding pikes will have effects the same as those of the projectile types below (see original rules).

COMBAT WEAPON TYPE	EQUIVALENT PROJECTILE TYPE
Standard-Monomolecular	Slug
Force	Dum-Dum
Power	Gyrobolt



CONVERSION FIELD/BEAM WOUND CHART (FORCE & POWER WPNS)

TARGET	WOUND DEPTH IN mm						SEVERITY OF WOUND
	10	20	30	50	80	100	
Head	1						Light
	2,3,4,5	1,2					Severe
	6	3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	Killed
Body	1,2,3,4,5	1,2,3	1,2				Light
	6	4,5,6	3,4	1,2,3	1		Severe
			5,6	4,5,6	2,3,4,5,6	1,2,3,4,5,6	Killed
Arm	1,2	1					Light
	3,4,5,6	2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5	1,2,3,4,5	1,2,3,4	Severe
				6	6	5,6	Killed
Leg	1,2,3	1,2					Light
	4,5,6	3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5	1,2,3,4	Severe
					6	5,6	Killed

Modify weapons effects before using table as follows:

Pike, Picks deduct 10mm off their penetration.

40mm Conversion Beams treble their penetration

When a force or power blade strikes an arm a 80mm depth of wound will sever that limb. A 100mm depth of wound strike on a leg will sever that.

BARE FIST/BLUNT WEAPONS ON UNARMoured TARGETS

The table below gives the probability of knocking down an opponent.

RATIO OF STRIKERS POWER TO TARGETS POWER	% CHANCE OF KNOCKDOWN
.5	5
.75	10
1.00	20
1.5	35
2	50
2.5	75
3	100
3.5	125
4	150
4.5	175
5	200

% MODIFIERS

Blow to Head	x2
Blow to Legs	x1.5*
Blow to Arms	x .5
Target as Agility above 5	x .75
Blow is by Armoured Fist or similar	x2
Blow is from Rifle Butt or similar	x2.5
*Bipeds only, quadrupeds are .5 for blow to legs & have the basic chance modified to .75	

Chance of a KO is equal to 15% of the modified chance

" " Light Wound 10%

" " Serious Wound 7%

" " Kill 5%

Blows to the head double the above chances

KO and Kill are halved when blow lands on limb.



Firing

The original purpose of introducing target size as a factor, was simply to take into account the varying area of possible targets. It may however be used to pinpoint specific areas within a larger target, such as the wheels of vehicles or the doors of buildings, or even various parts of life forms. If used for the latter, the Deviation Table below should be used in place of the Hit Location Tables.



TARGET HEIGHT	% CHANCE OF HIT
50mm+	100
50mm-40mm+	70
40mm-30mm+	35
30mm-20mm+	0
20mm-10mm+	-35
10mm- 5mm+	-70
Under 5mm	-100

TARGET WIDTH	% CHANCE OF HIT
25mm+	100
25mm-20mm+	70
20mm-15mm+	35
15mm-10mm+	0
10mm- 5mm+	-35
Under 5mm	-70

MISSED SHOTS TABLE

If part of the target is still within the distance scored on the table, throw a D6, even scores hit odd scores miss. Example: A miss of 21-30mm is scored on the table. The target projects 5mm into this zone. A D6 turns up 2. The shot has hit the target.

When using 15mm figures and models, multiply all distances by .6 rounding up all fractions.

A firer may elect to fire at a specific part of any target. If such a shot should miss, use the table below to determine direction and distance the shot misses by.

MISSED SHOTS TABLE

% Score Shot Misses by	Up	Down	Left	Right	D8
35%	6-10				1-2
		6-10			3-4
			6		5-6
				6	7-8
70%	11-20				1
		11-20			2
			7-10		3
				7-10	4
	6-10		6		5
	6-10			6	6
		6-10	6		7
		6-10		6	8
100%	21-30				1
		21-30			2
			11-15		3
				11-15	4
	11-20		7-10		5
	11-20			7-10	6
		11-20	7-10		7
		11-20		7-10	8
140%	31-40				1
		31-40			2
			16-20		3
				16-20	4
	21-30		11-15		5
	21-30			11-15	6
		21-30	11-15		7
		21-30		11-15	8

STANDARD TARGET SIZES

Rather than measure every figure and model on the table it is better to simplify the shape and give each similar type a standard size. For example, 25mm figure human targets (when standing) can be treated as upright rectangles 28mm tall by 13mm wide.

When not using target size rules to hit a specific part of target rules, use the firing table and hit location tables.

Use the following guidelines for human targets (umpires may use similar ideas for alien types).

HUMAN KNEELING OR CROUCHING

Use two throws for hit location. If on the first throw the legs are hit, treat this as a miss. If however a hit is located on any other part of the body, throw again to find the actual hit location. This time treat the whole of the target as available.

HUMAN PRONE

Use a similar method as above. On the first throw only those limbs and parts of the body nearest the firer counting as available targets. For example, a prone human facing firer would only have head, upper body and arms available as targets.

HIT LOCATION TABLE

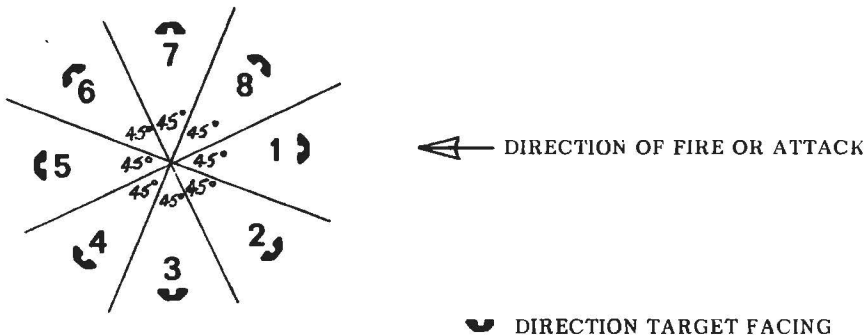
This is used when no specific part of the anatomy has been singled out as a target for fire purposes. It is always used for locating combat hits. Most entities have their own hit location table. Some races are so alike that they share common tables, eg. humans and frogs.

TARGET ANGLE FACTOR

This was originally created for use with creatures other than tailless, wingless, bipedal, upright walking, two armed beings with a sensory mass attached to the top of their bodies. But it can be used to add variety to hits on these creatures if disregarding angle factor. Take all hits as being at angle factor 1 when using hit location table.

When being in a blast area throw a D8 for each hit to ascertain angle factor or use factor 1.

TARGET ANGLE FACTOR DIAGRAM



When a target is firing a hand gun or attacking with a single handed weapon that figure will be assumed to be leading with that side of his body. This will place the target at angle either 2 or 8 depending whether it is left or right handed. A target defending only and using a shield or a target using a pike or shoulder arm will be assumed to be leading with the opposite side of its body. Reversing the former angles. Targets fighting several opponents will throw D8 to find at what angle blows are taken.



HIT LOCATION TABLE (HUMAN)

Gives % chance of location at different angles factors

LOCATION	TARGET ANGLE FACTORS				
	1 and 5	2 and 4	3	7	6 and 8
Head	01-10	01-10	01-10	01-10	01-10
Right Arm	11-20	11-17	11-14	11-29	11-23
Left Arm	21-30	18-30	15-33	30-33	24-30
Upper Body	31-40	31-40	34-40	34-40	31-40
Middle Body	41-55	41-55	41-55	41-55	41-65
Lower Body	56-70	56-70	56-70	56-70	56-70
Right Leg	71-85	71-82	71-78	71-92	71-88
Left Leg	86-100	83-100	79-100	93-100	89-100

When hits are received by hand guns at point blank range or by thrusting weapons in combat, the percentage may be modified by +20% to -20% to bring the point of impact on a level with the striker/firer's own mid body level.

Reaction

Before any figure can respond to certain events a reaction throw must be made. To do this throw 1-D10 x 3. A successful result is when the throw is less than the figure's initiative level.

Events requiring reaction throws are:

1. Target not visible for previous turn.
2. Target disappearing before half turn is complete.
3. Target is more than 60° outside arc of facing, but less than 120° outside arc of facing.

MODIFIERS

Events 1 and 2: Target is within arc of facing -5 off score.

All Events: -2 off score for every level of "lightning Reaction" ability (up to a maximum of 8).

(See original rules and special skills)



FIRING VARIATIONS TABLE

FIRERS CONDITION	VARIATION
Stunned during action	-15
Dazzled	-45
Each serious wound	-40
Each light wound	-15
Light wound on gun hand firing hand gun	-30
Light wound on gun hand firing shoulder arm Or HVV Weapon	-15
Light wound on supporting arm firing Shoulder arm or HVV Weapon	-10
Shaken	-5
Leaderless	-5
Under Fire	-15
For each additional fire received from over 30° arc from original	-20
Wearing power armour	-15
Wearing dreadnought armour	-30
Performing any action	-20
Immediately after jet pack jump	-40
Immediately after rolling or diving	-30
Using two weapons	-15
Using shoulder arm one handed	-30
Using heavy weapon one handed	-100
Using rapid fire support weapon	-20
Using rapid fire support weapon without mount	-40
Using mounted weapon	+20
Resting weapon	+10
Using AP or dum dum ammo	-10
Using slug gun or SMG	-15
Using unguided missile or grenade 2.5xMR launches at moving targets deduction	
Using auto ranger for direct fire	+10
Using auto ranger for indirect fire	-20

OTHER VARIATIONS

Smoke -15 for every 3 metres.

Target Size - See charts in section.

Movement - See MR Table

Elevation - See table.

Automatic Fire -10 for first and every
successive shot.

Semi Automatic Fire -6 for first
and every successive shot.

FIRING MODIFIERS

Firing at individuals in combat

Using wrong hand

Firing before initiative call

Appearing or disappearing target

Halve final firing
chance

MOVEMENT AND FIRING

MR	DEDUCTIONS	
	FIRER	TARGET
.5-1	-15	-10
+1 to 2	-35	-25
+2 to 3	-55	-40
For each successive unit of MR	-15	-10

If target weaving or
zigzagging x 1.5

If firer weaving or
zigzagging x 2.5

TARGET ELEVATION

ELEVATION	HANDGUN	SHOULDER ARM	HVV WEAPON OR RAPID SUPPORT
+30° to 45°	-20	-30	-40
+46° to 60°	-30	-50	-60
+61° to 90°	-50	-80	-100
-30 to 45°	-50	-10	-20
-46 to 60°	-25	-20	-30
-61 to 90°	-35	-30	-40

HVV AA Mount for HVV
weapon and raid support
weapon +50

NOTE: For rapid fire support weapons throw as for fully automatic fire but treble all hits.

Reductions in initiative level for using the following weapons at point blank and close range:

	Point Blank	Close
Shoulder Arms - Heavy weapons	-25	-15
Rapid Fire Support	-30	-20

These penalties are not applied if firer was engaging same target in previous turn.

Weapons and Equipment (Human)

WEAPONS, FIRING, HAND HELD

All but one of the weapons in this category are treated identically to the way they are in the original rules and the scenario 'Assault on Bunker 17'. The exception is the conversion beam projector, the details of the differences are shown below. The operating level of these weapons is extremely simple (designed to be used by the average moron) so the ODC of these devices need not concern us. The MDC and DDC are given in a special section along with all other pieces of equipment.

CONVERSION BEAM PROJECTOR

The difference between the way this weapon is treated here from the way it is treated in the original is that here the depth of matter penetrated is on a simple progression, see scales below.

Range in metres	100	150	200	250	300	350	400	450	500	550	600
Depth Penetration mm	1	2	3	4.5	6	8	10	12.5	15	18	21
Range in metres	650	700	750	800	850	900	950	1000	1050	1100	1150
Depth Penetration mm	24.5	28	32	36	40.5	45	50	55	60.5	66	72
Range in metres	1200	1250	1300	1350	1400	1450	1500	MAX PENETRATION			
Depth Penetration mm	78	84.5	91	98	105	112.5	120	350mm			

NOTE: To cause a malfunction in powerarmour, penetration must be at least 1.5mm.

For dreadnought armour, penetration must be 2.5mm.

COMBAT WEAPONS

These are treated in more detail than the original rules. As in the previous section the ODC of these need not be taken into account. The MDC and DDC will be found in the same section as those above.

WEAPONS

Most weapon types are either of the cutting or thrusting type but some may be used for both.

SWORDS

The following types are those most commonly encountered.

BROADSWORD

Double edged cutting weapon, the most common type in use, effective weapon length (EWL) 6 to 10.

SABRE

Single edged cutting weapon, EWL 6 to 8.

RAPIER

The gentlemen's weapon, primarily a thrusting weapon, but may be used as a cutting weapon. When used in this manner treat as a Broadsword -10 for penetration, EWL 9 to 11.

FALCHION/DUSACK

Meat cleavers by any name. Short heavy cutting weapon. EWL 4 to 6.

DOUBLE HANDED SWORD

Double edged cutting weapon. EWL 10 to 14.



KNIVES AND DAGGERS

DAGGERS

Short thrusting/stabbing weapon. May be used as a parrying device in conjunction with a sword.
EWL 2 to 3.

KNIFE

Cutting stabbing weapon. EWL 2 to 3.

AXES

SINGLE HANDED AXE

EWL 6 to 8.

DOUBLE HANDED AXE

EWL 9 to 16.

All axes may have double or single blades. If double bladed add 10% to combat variations but -5% to hitting chances, increase cost 10%.

WAR PICKS (POLE AXES)

SINGLE HANDED PICK

Piercing weapon used in same manner as axe. EWL 6 to 8.

DOUBLE HANDED PICK

Heavier version of above. EWL 9 to 16.

A pick head may be fixed as a backspike to an axe, cost/availability of such a weapon as a pick, add 5% to combat variations. No deduction on hit chances.

PIKES AND SPEARS

Simple thrusting weapons may be used as lances by some of the more insane jetcycle riders.

EWL 10 to 25.

HALBERDS

Combination spear, axe and pick. EWL 10 to 19.

POWER GLOVES

See original rules.

NOTE: All double handed weapons -5 off initiative levels. An additional -5 off halberds and pike with an EWL of over 15. All power weapons (except glove) -3 off initiative levels.

COMBAT WEAPONS COST AND AVAILABILITY

WEAPON TYPE	STANDARD		MONOMOLECULAR		FORCE		POWER	
	A	B	A	B	A	B	A	B
Broadsword/Sabre	5	100%	40	100%	100	70%		
Rapier	10	100%	60	100%	120	60%		
Falchion	2	100%	30	100%	80	60%	700	25%
Two Handed Sword	20	70%	90	50%	500	30%	1000	15%
Knife/Dagger	1	100%	20	100%	60	70%		
Single Handed Axe	4	100%	35	100%	90	75%		
Double Handed Axe	15	100%	80	100%	450	40%	1000	20%
Single Handed Pick	4	80%	35	80%	90	65%		
Double Handed Pick	15	80%	80	80%	450	35%	1000	15%
Spear (Max EWL 14)	3	100%	30	100%	80	60%	800	15%
Pike (EWL 15 to 25)	8	100%	70	80%	120	50%	1200	25%
Halberd	25	60%	100	40%	600	30%	1500	10%
Power Glove							180	10%

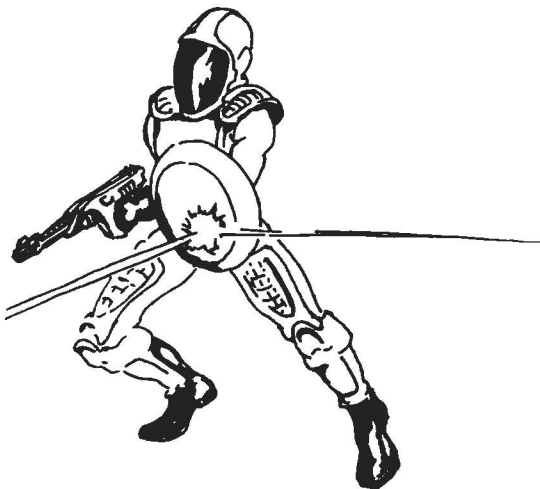
A= Cost in credits B= Percentage availability



Personal Defence

FORCE FIELDS AND BUBBLES

In all but one aspect treat as in original rules. That difference is that in these rules force fields and bubbles are only effective against high velocity projectiles, directed energy bolts and conversion beams. They do not project against relatively slow moving objects like combat weapons although they do to some extent dissipate the effects of conversion fields. When a force weapon is used against a force bubble reduce its penetration to that of a standard weapon. For a power weapon reduce penetration to that of a force weapon. Treat power gloves as armoured fists.



SHIELDS

There are three types of shield in normal use:

ARMOURPLAS SHIELD See original rules.

SCF SHIELD

(Superconductor faced shields). This shield has a layer of superconductive material backed by a layer of superinsulator material on its outer face, this is connected by a cable (of superconductor sheathed in superinsulator) to a backpack containing a power storage unit (this device has a slow energy release system to prevent overloads). The effect of the shield is to absorb energy which comes into contact with it.

All energy beams are absorbed and material objects are reduced to an inert powder.

There is of course a volume of intense cold in front of this device, the effects on living tissue are: within 5cm of shield, tissue destroyed, serious Wounds, death if head or upper body, within 15cm, light wounds, and a 50% chance of blindness if head comes within.

If in combat and the umpire thinks it likely that some part of body may have contacted, throw D6 to check for proximity. Score 1,2,3,4-15cm/Score 5,6-5cm.

Determine area by using hit location chart.

Only power and dreadnought armour give protection from the above. However, should they make contact (within 5cm) their energy will be drained off. Power armour will be drained in 2 turns.

Dreadnought armour in 4 turns. Any partial drain will give chance of malfunction, see original rules.

Any combat weapon striking the shield will be broken. Also the striker has a 10% chance of receiving a serious wound to his hand, and 40% chance of receiving a light wound. This is of course unless wearing power or dreadnought armour.

There is of course a good chance that the carrier of such a shield may well do himself some injury, especially as these devices cannot be switched off.

There is a base chance of 5% per turn of self injury occurring. This is multiplied by 3 if figure is running and by 5 if rolling or diving. If injury occurs throw for location on hit location chart at a target angle of 1 and throw for proximity as above.

Cost 1000 credits, availability 5% classed as heavy weapon.

NOTE: It is a good idea to stick some cotton wool or similar material to a figure's shield to represent the devices affect on the atmosphere in front of it (also shows other players that one is being used).

DME SHIELD

A direct molecular energisation field is projected 5cm in front of the shield. The effect of this field is to force the molecules of solid matter apart causing almost instant vapourization. These shields offer no protection other than their armourplass backing against directed energy weapons. If a hit is scored by such a weapon there is a 10% chance it will explode as a HE micro grenade. However, the non explosive vapourizing effect of the shield does give complete protection against solid objects entering it.

If part of combatant is caught in field treat as conversion beam damage of 10cm depth. The field does have an effect on conversion beams and fields. A conversion beam entering the field will be dispersed harmlessly. But force and power weapons may suffer a power feed back. The chance of this is 75% . If this does occur throw D100 again and consult table below.

WEAPON		EFFECT
FORCE	POWER	
1- 33	1- 25	Weapon suffers power failure
34- 66	26- 50	Weapon overheats before failure, light wounds to unarmoured hands
67-100	51- 75	Similar to above, but more severe. Unarmoured hands, serious wounds, Armoured hands, light wounds.
	76-100	Energy back pack explodes as HE grenade.

Cost 300 credits, availability 50% standard battery gives 75 turns.

The percentage chances of a hit landing on any type of shield are shown below:

Target Hit on Location Chart	Hits from Fire and When Attacker in Combat	Defender in Combat
Head	5%	10%
Upper Body	25%	40%
Middle Body	30%	60%
Lower Body	25%	50%
Shield Arm	90%	100%

Artillery

Only light artillery is considered in these rules. Artillery will not normally be encountered in most skirmish encounters. For this reason the coverage here will be brief, and mostly concerned with general principles

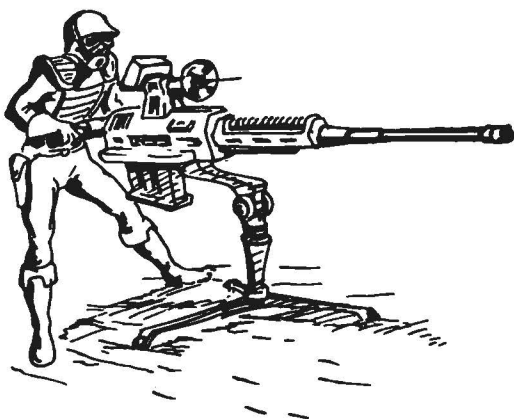
Light artillery can be divided into two types. The first consists of multiple barrelled heavy weapons and rapid fire support weapons mounted on special platforms to eliminate the problems of vibration and increased mass. Such weapons will have the same range limitations and penetration capabilities as

their single barrelled relatives.

The second type consists of heavier calibre single barrelled weapons. 95% of these are projectile firing types. The advantages of firing a solid projectile (along a reasonably flat trajectory) which may have a HE or atomic warhead or may incorporate a conversion field in it, are far greater than any (except for the most expensive) that a directed energy weapon can offer.

By its very nature, artillery will always be fixed on some type of mount. The nature of this will determine the degree of traverse and elevation available to the gun.

Most pieces of the period will be capable of operation by a single individual, some will be able to be operated from a distance by remote control, and yet others may be fully independent operated by their own built in computer.



The following range factors apply to all single barrelled light artillery pieces.

RANGE

0 to 20 metres - Point blank
 20 to 100 " - Close range
 100 to 500 " - Medium range
 500 to 1000 " - Long range
 1000 + - Extreme range

Range Variations Chart/Deductions per 5 metres

Laser cannon -1
 Bolt cannon -2
 Slug cannon -4

The following factors affect all artillery fire.

FIRING VARIATIONS

These are to be used with the normal firing variations table.

Moving Targets at Close range - x2 Standard MR deductions
 " " " Point blank - x3 " " "
 Aimed and fired by remote control - -25

When firing at elevation treat as HVY weapon on AA mount if applicable.

TO DETERMINE ARTILLERY SKILL

Take figures weapon skill. If figure is professional artillerist, his artillery skill will be the same as his weapon skill was. However, his weapon skill will drop to 75% of its original level. For all others artillery skill will be 60% of their weapon skill, computer operated guns have their own skill level.

When multi-barrelled artillery hits a target, multiply the number of hits scored by half the number of barrels.

Artillery is the last thing to be considered in any turn whatever the initiative level of the operator. Initiative levels are only considered between artillery crews. Fire may be reserved for a turn to give initiative to the gun on the following turn.

Because of the wide variety of artillery types, when guns and mounts are considered, only the specifications for two types are given in these rules, one here and one in the section on robots. However, if there is enough demand a full list will be published.

IMPERIAL BOLT CANNON M3 ON M2 MOUNT

The M2 mount is a static platform giving 360° traverse and +30° to -15° elevation. The gun is moved by direct pressure, the hydraulic systems making the gun seem light and manoeuvrable. The left hand grip (attached to the rear of the gun) can be used to lock the barrel in position.

The M3 cannon is a 50mm gyrobolt weapon capable of firing the following ammunition - AP, DB and FB. [AP - Armour piercing; DB - Directed blast; (similar to 20th Century hollow charge).

FB - Force bolt, incorporates conversion field.]

PENETRATION

TYPE OF ROUND	RANGE					ARMOUR			
	Point Blank	Close	Medium	Long	Extreme	DA	PA	FF	FB
AP		+5	-5	-10	-15	+80	+85		
DB						+60	+60		
FB	+5		-5	-10	-20	+90	+90	-5	-10

All other forms of armour than those listed will be automatically penetrated, hits on head and body are automatically fatal, limb will be amputated and there will be a 60% chance of death from shock.

NON PENETRATING HITS

Knock down is automatic.	DICE SCORE	6	5,6	3,4,5,6
Throw D6 to check for KO.	ARMOUR	DA	PA	FB

All penetrating shots cause malfunction in DA and PA . Non penetrating shots have 50% chance of causing malfunction.

The M3 takes a magazine of 12 rounds (takes 2 turns to load). Fire is semi-automatic or single shot. The gun may traverse 45° per turn and elevate or depress 45° in the same time.

The structure of the gun can be regarded as being of light armour.

Price 1000 credits (with 300 mixed rounds), not available to general public.

Electro Sensors

All machines when in operation radiate energy. Organisms radiate energy all the time. A variety of devices were devised to detect these emissions and also any energy that an object might reflect. The most commonly used device of this nature is the PMS or Portable Multi-Sensor. This piece of equipment although not having any advantage over the human eye in regard to detecting organisms, does much better when in regard to detecting vehicles and similar objects.

It is because of the difficulty of separating life form emissions from each other, that some individuals use animals as a means of getting about.

It is one thing to detect an emission and another to identify its source and the further one is away the more difficult identification becomes.

Emission Range (ER) varies of course from device to device. The basic chance of identifying the source of any emission is shown below.

PERCENTAGE OF MAXIMUM DISTANCE ER FROM SOURCE							MAX
SOURCE	10%	20%	30%	40%	50%		
PERCENTAGE CHANCE	100%	90%	75%	50%	20%	5%	

To this percentage add the operational success chance of the operator -100%

The ER of various weapons when discharged is given below:

WEAPON	ER IN METRES
Laser rifle, autolaser	4,000
Heavy laser, RFS laser	5,000
Laser Pistol	2,000
Bolt Rifle	2,500
Heavy Bolt Rifle, RFS Bolt Gun	3,500
M3 Bolt Cannon	6,000
Bolt Pistol	1,500
Grenade Launcher	2,000
Missile Launcher	3,500
Needle Weapons	1,000
Sun Gun/Combat Weapons	
Force Type, Power Glove	7,000
Conversion Beam Projector	
Other Power Weapons	15,000

THE ER OF VARIOUS DETONATIONS AND VARIOUS PIECES OF EQUIPMENT

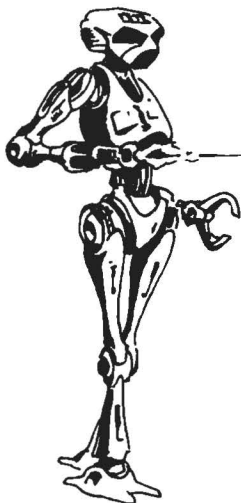
Type	ER in Metres		ER in Metres
Distortion Field	6,000	Dreadnought Armour	10,000
Vortex	15,000	Power Armour	8,000
Atomic	50,000	Light jet pack	5,000
		Heavy jet pack	7,000
		Force Bubble	15,000
		Force Field 3 metres radius	45,000
		For each additional metre radius	20,000
		DME Shield	5,000
		Price 400 credits; 85% Availability	

Computers and Robots

The average computer of our period is simple enough to be operated by almost anybody.

The functions of computers are as follows: 1. Calculation 2. Information, storage and retrieval, and 3. Operating Robots. The possible variations in computer design are almost endless and no particular type will be described here. But the basic principles to bear in mind are given so that scenario creators may design their own.

The main parts that computers will play in game situations are - running security systems, storing information that some character wants to get hold of, and giving navigational information.



BASIC OPERATION

Computers may be communicated with via keyboards or in some cases by verbal means. The latter does leave a lot of room error. Naturally in machines in which one wants to store secret information or secret information is critical to the needs of their program, the operational difficulty of the machine can be set a higher level than normal.

OC/MC/DC IN RELATION TO COMPUTERS

OC Relates to programming abilities, the ability to retrieve information or to place information using standard procedures.

MC Ability to repair machine given parts and equipment.

DC Ability to bypass normal interface procedures. To have the knowledge of which unlikely bits of machinery may hold parts that could be used for repair purposes (scenario creator should list these before game starts).

When setting ODC, MDC and DDC values, keep in mind the purpose and complexity of the machine involved.

ROBOTS

Are simply machines controlled by a computer, programmed to carry out fixed tasks in response to set stimuli. When a player wishes to give a machine a fresh program, he must write it out and show it to the umpire who will then make the most of any flaws he can find. Only one robot is given as an example.

THE IMPERIAL M5 ROBO-CANNON

This gun is mainly used to defend positions. Traverse and elevation are electric. A mass of sensors are mounted giving the computer better than human perception. A manual override is provided by a keyboard and video-sight, these can also be used to identify target types to the computer.

The basic artillery skill of the system is 100.

The gun can traverse 60° in a turn (30° on manual)

" " " elevate-depress 45° in a turn (30° on manual)

Max traverse 360° Max elevation +90° -15°

Calibre 20mm

The gun is a modified gyrobolt weapon. The ammunition tip is a 7.5cm spike with a monomolecular point. Fire is fully automatic.



PENETRATION

RANGE				ARMOUR			
Point Blank	Close	Long	Extreme	DA	PA	LA	FM
+5		-5	-5	+50	+60	+60	+40

Effect of hit as gyrobolt modified by -1

Failed penetration as for gyrobolt +1 on D6

Price 2500 Credits; Not available to general public.

Medikit

(REPLACES THE AUTOMEDIC)

This device will give its operator all the information he requires to treat injuries and wounds. It also contains the equipment and drugs that will be needed for treatment. For every 10% that an operator's capability is higher than the requirement to operate the equipment, reduce the natural healing time by 10%. If the operator has a design capability with this device add each 10% excess requirement to the operational requirement.

EXAMPLE: Character has 110% chance of operating equipment and his design chance is 120%, then this will reduce patient's healing time by 30%.

Any successful operation of equipment will prevent permanent injury unless wound is an amputation. Cost 200 credits; 100% Availability.

LC.A. GOGGLES

(Image Correction and Amplification Goggles)

Worn to offset the refractive effects of force fields and bubbles. All have anti-glare properties built in. Without these anyone in any force bubble loses 100% on his hitting ability whether fire or combat. Sold as integral part of force bubble equipment.

All vehicles using force fields either have correcting visual display units, or correcting units in their windows.

ODC, MDC and DDC equipment ratings not in main text. All items are product of TD16 culture.

WEAPONS		MDC	DDC
Lasers		1	2
Bolt Guns		-6	-3
Slug Guns		-8	-5
Grenade Launchers		-5	-2
Missile Launchers		-5	-2
Conversion Beam & Field Weapons		4	10
Needle Guns		-5	-2
Sun Gun		-4	-2
EQUIPMENT		MDC	DDC
Force Fields	-8	2	8
PA and DA Armour	-6	1	2
Autoranger Equipment	-8	2	2
Jetpacks	-10	-4	-2
Portable Multi-Sensor	-3	3	6
Medikit	-3	4	6

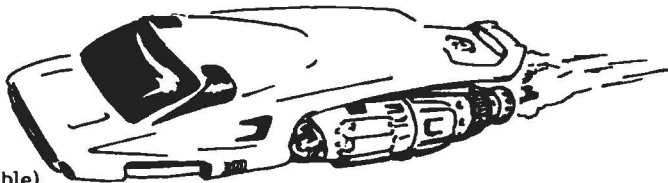
Note only character with a positive DC may alter or modify equipment.

Vehicles

Variety is endless. The combinations of power plant, transmission, final drive etc. are vast. Over the page are listed the major types of elements which go into vehicular design.

POWER PLANTS & SOURCES

Internal Combustion Engines
Steam Engines and Turbines
Fission Reactors
Fusion Reactors
Reaction Motors (Rockets, Jets)
Chemical Batteries (Rechargeable)
Chemical Batteries (Non Rechargeable)
Atomic Batteries (Non Rechargeable)



TRANSMISSIONS

Mechanical
Hydraulic and Hydrostatic

FINAL DRIVE (VERTICAL)

Direct Thrust
Rotors (Propellers)
Air Cushion Limited height
Pressor Field only
Natural life may be used in
conjunction with horizontal
drive eg. wings

FINAL DRIVE (HORIZONTAL)

Wheels
Caterpillar Track
Legs
Direct Thrust (Rockets, Jets)
Propellers (Fans, etc)

BRAKING and **STEERING** systems would be normally based on the final drive system.

When vehicles are being used in campaigns, a reliability factor for all the above should be allocated. This should give the percentage chance of a breakdown for a given amount of kilometres travelled. For any vehicle that is likely to be prominent in a game, make a sketch showing the distribution of the following:

Fuel Storage
Power Plant/s
Main Transmission
Braking If separate from final drive
Steering which should show anyway
Control Centre
Occupants
Any Weapons Systems
Any Sensor Systems



When a penetrating hit is received, use the target size and missed shot table to determine hit location. If a specific part of the vehicle was not designated as a target assume a man size target in the centre of the vehicle has been aimed at. The umpire may decide what the effect of a hit is, or make a list of effects of hits on difference parts of the vehicle.

DO NOT FORGET TO LIST THE FOLLOWING SPECIFICATIONS:

MAX SPEED/ACCELERATION/DECELERATION/MIN TURNING CIRCLE/CLIMB RATE

The vehicles ER should be noted.

The vehicles ODC, MDC and DDC should be noted.

Characters with OC excess (over 100% chance of operating) gain 1 driving skill point for each 10% of excess. For the first skill point a plus* of 5% in any one of the performance specs may be obtained, but each successive point must apply to a different performance specification. Up to three skill points can be used to add 5% each to firing from the vehicle.

* This of course is a minus quantity when applied to the turning circle.

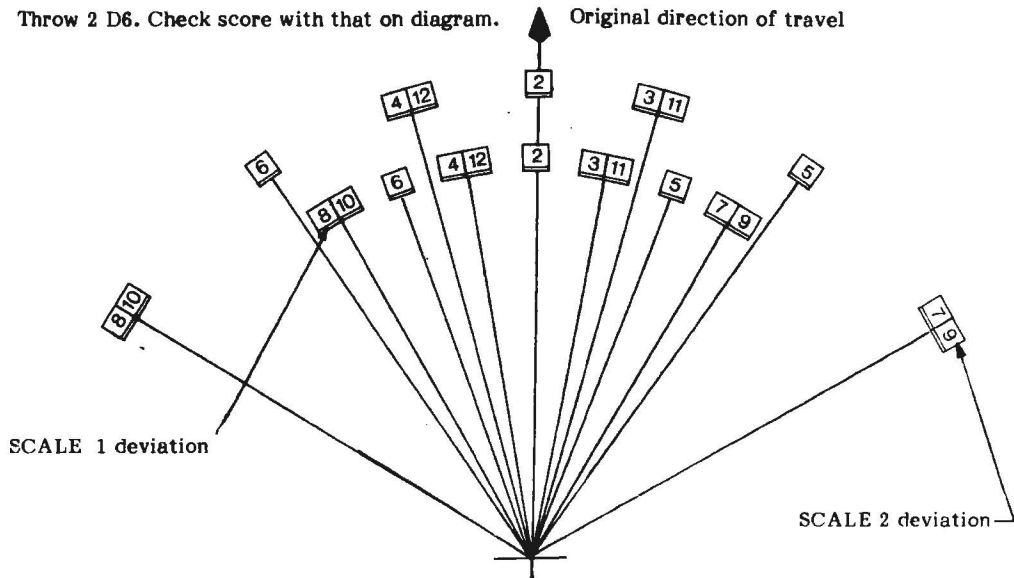
Only shots that would kill a human target [(with a body location hit) see original rules] will have any effect on a vehicle. This is unless otherwise stated.

Three vehicle examples are listed.

Random Course Indicator

Throw 2 D6. Check score with that on diagram.

Original direction of travel



Note on fire from vehicles. The driver of any vehicle is assumed to be performing two actions for fire purposes.

DHAON, 'EXCALIBUR' JETCYCLE

POWER PLANT Two Orion chemical rockets.

IGNITION by low power laser.

BATTERY A Standard atomic decay type.

STEERING Vented thrust

BRAKING Vented thrust

ACCELERATION From standstill 1.5 MR in first turn, speed doubles each subsequent turn.

RATE OF CLIMB May not climb till a speed of

4MR has been attained, from that point on maximum climb is equal to the horizontal speed. However, horizontal speed at a maximum climb is halved. The general proportions of climb to speed are shown in the examples below.



Climb	0	30 metres *	20 metres	10 metres
Max Speed for that turn	6MR	3 MR	4 MR	5 MR

* Max Climb

MAX SPEED 40MR

DIVING Vehicles losing height will accelerate horizontally an equal amount to the height lost (less any deceleration that may be applied).

DECELERATION 3MR per turn

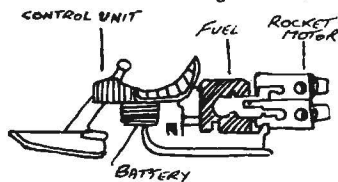
LANDING SPEED 3MR

RANGE 100 Kilometres

ODC, -2 / MDC, 1 / DDC, e / ER 10,000 metres

Breakdown chance 15% for every 50 kilometres.

For price and availability, see original rules.



MINIMUM TURNING CIRCLE No turns below 4MR, basic turning circle 20 metres + 5 metres per additional 2 MR.

EFFECTS OF HIT

FUEL TANK, D100: 1 to 60 tank explodes inner area 5 metres diameter, outer area diameter 7 metres. The effects in these areas are the same as the inner and outer areas of a sun gun blast. 61 to 80 the fuel tank will drain in D6 + 3 turns. 81 to 100 fuel tanks self sealing system works - no effect.

BATTERY, D100: 1 to 40 battery explodes as HE grenade (check fuel tank). 41 to 100 engine stops controls dead.

POWER PLANT, D100: 1 to 25 cycle catches fire, any occupant takes one hand flamer hit whilst on board. 26 to 50 as above, but decelerates at maximum rate also. 51 to 100 explodes as HE grenade.

CONTROLS OR DRIVER, D100

1- 10	1 Locked on course
11- 20	2 Moves on random course (scale 1)
21- 25	4 Accelerates at maximum rate
26- 30	5 Decelerates at maximum rate
31- 40	6 Locked at current speed
41- 45	7 Climbs at maximum rate
46- 50	8 Dives at maximum rate
51- 55	9 Combination of 1 and 4
56- 60	10 " " 1 and 5
61- 65	11 " " 1 and 6
66- 70	12 " " 2 and 4
71- 75	13 " " 2 and 5
76- 80	14 " " 2 and 6
81- 85	15 " " 7 and 9
86- 90	16 " " 7 and 12
91- 95	17 " " 8 and 9
96-100	18 " " 8 and 12

Occupant damage in crashes:

1 D6 - 2 Slug gun hits per 5MR

+ 1 D6 - 2 Slug gun hits for every 15 metres descent per turn

GENERAL PRODUCTS 6 x 6 CROSS COUNTRY UTILITY TRANSPORT

POWER PLANT One D1000 fusion unit driving X15 generator, feeding six D3A electric motors* (one mounted in each wheel).

STEERING Electric-hydraulic on front wheels.

ACCELERATION Max speed at end of each turn, from start 1 - 3MR/2 - 9MR/3 - 18MR

DECELERATION 33% of current speed at 12 MR+

66% of " " " 6 to 11 MR

100% of " " " 5 MR

MAX SPEED 25 MR

MINIMUM TURNING CIRCLE 20 metres

RANGE 3,000 Kilometres

* Braking via Motors.

GENERAL CONSTRUCTION Armourplac combined hull and chassis.

ODC = 2, MDC = 4 DDC = 6 / ER = 40,000 metres

Chance of breakdown 5% per 500 kilometres.

EFFECT OF PENETRATING HITS

POWER PLANT (Note this is heavily shielded, count a DA). Any shot that penetrates one of these units will cause an explosion similar to a mininuke, but diameter of effect is doubled.

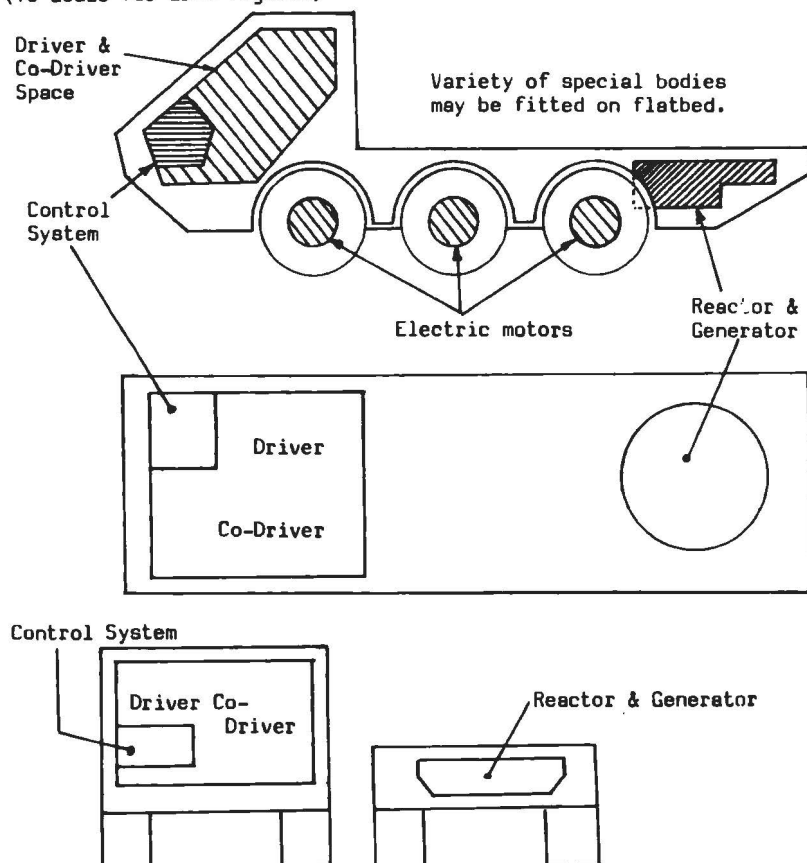
CONTROLS OR DRIVER Any shot hitting the lower third of the hull, a 5% chance of hitting a control connection.

D100	EFFECT
1- 10	1 Vehicle locked on course
11- 20	2 Vehicle moves on random course (scale 1)
21- 30	3 Vehicle overturns*
31- 40	4 Loss of braking vehicle maintains present speed
41- 50	5 Vehicle accelerates
51- 60	6 Vehicle decelerates
61- 70	7 Vehicle stops*
71- 75	8 Combination of 1 and 4
76- 80	9 " " 1 and 5
81- 85	10 " " 1 and 6
86- 90	11 " " 2 and 4
91- 95	12 " " 2 and 5
98-100	13 " " 2 and 6

* Occupants take D6 -2 slug gun hits for every 5 MR of vehicles speed, plus 1 D6 if vehicle was accelerating when hit, minus 1 D6 if vehicle was decelerating when hit.

CRITICAL TARGET AREAS - 6 x 6 Cross Country Utility.

(To scale for 25mm figures)



HITS ON WHEELS

Reduce speed by 30% for each wheel hit.

Left front wheel hit:
Minimum turning circle x 3 when turning right,
Minimum turning circle x 2 when turning left.

Right front wheel hit:
Opposite effect to left front wheel hit.

Any front wheel hit:
10% chance per 5 MR of overturning.

Front and adjacent middle wheel hit:
25% chance per 5 MR of overturning.

Even if both front wheels are hit, the vehicle may turn a 10 x minimum turning circle using its brakes.

Umpires should adjust overturning chances due to wheel damage according to the terrain the vehicle is travelling over.

Cost 2,500 credits
Availability 85%

B.M.C. STRIDER MKI AASV (AMBULATORY ATTACK AND SCOUT VEHICLE)

POWER PLANT One GE-X700 fusion unit, driving M7 generator, each limb is equipped with a system of motors and hydraulics co-ordinated by a computer built into the control system. This computer is also connected to system of sensors and balances which keep it informed of the vehicle stability. The weapons systems are also connected to the computer, so that it may compensate for vehicle movement when they are fired. (Deduct only a quarter of the normal deductions for firers MR, ignore deduction for negative elevation.)

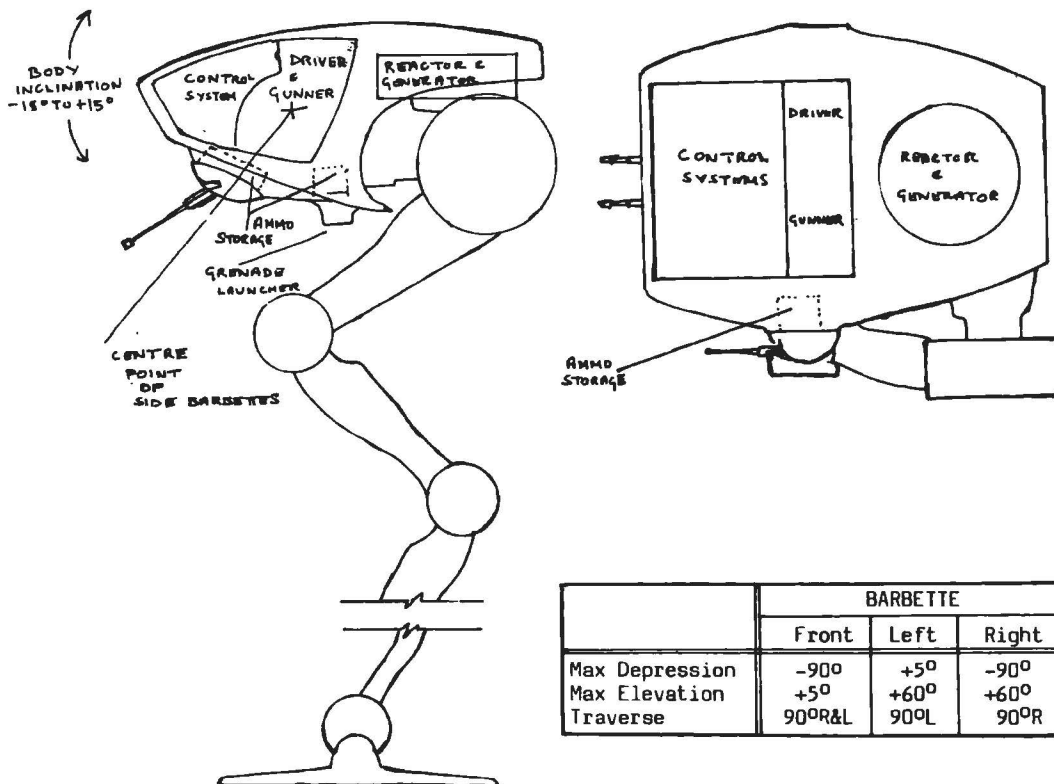
ACCELERATION From standstill to 5 MR in one turn, from 5 MR to its maximum of 15 MR in the second turn.

DECELERATION May lose 10 MR a turn.

MINIMUM TURNING CIRCLE 10 metres.

RANGE 2,000 Kilometres.

GENERAL CONSTRUCTION Legs -dreadnought armour. Body - power armour at rear, sides and top. Body - dreadnought armour front and underbelly. Weapon barbettes - dreadnought armour.



ARMAMENT 2 rapid fire support gyro guns in front barbette. 2 gyro rifles modified to full automatic in each side barbette. One six barrelled grenade launcher mounted in the underbelly firing directly downwards (loaded with HE).

Ammunition for front barbette 2,000 rounds

" " side barbettes 4,000 rounds

For arcs of fire of barbettes see drawing. Note, side barbettes take full remote control deduction for firing. Front barbette takes only quarter of remote control deduction.

Breakdown chance 10% per 400 metres.

ODC - 5, MDC - 8, DDC 10 / ER 50,000 metres

EFFECTS OF HITS

Fusion unit. This like all fusion units is shielded, A DA in this case. Therefore to penetrate one first has to penetrate the hull and then the shielding. In the unlikely event of this happening, it will behave like all penetrated fusion units.

AMMUNITION STORAGE

Crew killed, controls destroyed, vehicle topples over.

LEGS Vehicle topples over.

CONTROLS As above

WEAPONS As hit on weapon in original rules.

A falling vehicle should use random course indicator (scale 2).

If vehicle moving use direction of current movement as centreline.

If vehicle stationary use distortion grenade template.

Crew of falling strider, take 2 D6 -3 slug gun hits.

Cost 25,000 credits : Not available to general public.

Androids

The basic points of android design are dealt with here, and a couple of examples are given.

Androids (referred to as droids from herein) are machines operated by a true artificial brain, as distinct from a computer.

Many if not most droids had information fed into their brain (at the time of activation) which would give them the precise motivations that their creators desired them to have.

The effect being something akin to instant conditioning on a human, but now more droids are being created with free will. Even so, it is a fact that the functions a droid's body was designed for, do tend to colour its personality. Besides learning from experience they may obtain information from computer program tapes and the like.

All droids have the following:

1. Artificial brain.
2. Power cells (Rechargeable).
3. Effectors (the tools it requires to fulfil its function eg. manipulative devices).
4. Mobility units (wheels, tracks, legs, etc.)
5. Sensor units (these can visual, audio, thermal, etc.)

All droids have a CCF A of 8 and CCF B of 1.

The CCF D is D6-3. There are no CCFs for G. All other CCF ranges vary widely from type to type.

All droids have ER 6,000 per power pack. Maintenance droids may be given arbitrarily high MC ratings for use in the fields they are specifically programmed for.

Hit location for non humanoid droids is best carried out in the same way it is for vehicles.

The vast majority of droids have armourplated exoskeletons.

When throwing for CCFs for droids, only use those CCFs that are applicable to its function.

Cost - droids should be costed as humans with power armour. Adjustments should be made for extra power and size, droids may be used as characters (5% chance of doing so).

PENETRATING HITS ON DROIDS

Use the human hit effects chart and apply to the following:

1. ARTIFICIAL BRAIN (Treat as human head)

Human Result

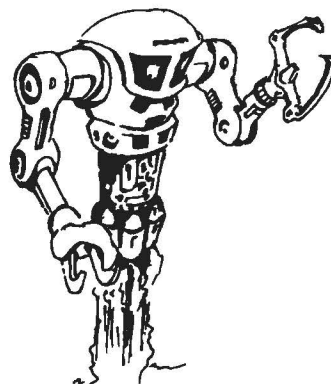
Kill

Any injury

Effect on Droid

Ceases to function

Moves and fires (if applicable) at random
(Scale 2) .



2. MAIN SENSOR UNITS (Treat as Human Head)

Human Result	Effect on Droid
Kill	Ceases to function
Blinded	
Any injury	Shuts down until repaired

3. MOBILITY UNITS (Treat as Human Limb)

Human Result	Effect on Droid
Kill or Serious wound	Immobilized
Light wound	Half speed

4. DIRECTIONAL UNITS (Treat as Human Limb)

Human Result	Effect on Droid
Kill or Serious wound	Immobilized
Light wound	Moves at random (Scale 1)

NOTE 3. and 4. may of course be the same unit.

5. EFFECTORS :- Any penetrating hit will cause these to cease to function.

6. POWER CELLS (Treat as Human Body)

Human Result	Effect on Droid
Kill	Explodes as HE missile
Serious wound	Cease to function
Light wound	Half speed

ACME C3 GENERAL MAINTENANCE DROID

This droid may select any program tape it desires for information on any device it is repairing or servicing (these give it a 150% chance of success). It may use its general purpose effectors to change its own special purpose effectors. There are sensory inputs connected to the special purpose effector connections to allow for direct input from probes, etc. When in motion this droid is supported by a pressor field. Mobility is provided by small air jets. Direction of travel is also effected by this means.

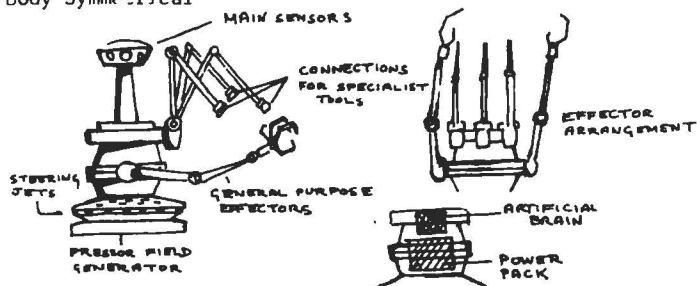
These droids do have a tendency to go around repairing and adjusting equipment whether they have been ordered to or not.

Speed NR1

1 Standard power pack.

MAINTENANCE DROID (25mm)

Main Body Symmetrical



IMPERIAL CYBERNETICS M8 GUARD DROID

This droid is basically a small tracked tank with a will of its own. It is a construction of power armour type and has a force field generator. Its effectors are simply 2 semi-automatic gyro rifles with 50 rounds each.

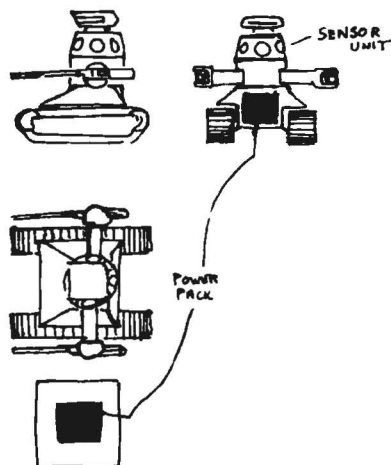
Mobility is provided by electrically driven tractor units.

When throwing for weapon skill, treat as a veteran with an additional D6.

Speed MR 2.5.
1 Standard Power pack.

GUARD DROID (25mm)

The artificial Brain is not concentrated in a single mass, most is distributed between the sensors and the guns.



Human Variants

MUTANTS

The chances of a positive mutation is 2% (much less in reality). If a player wishes to use a mutant having scored the above, roll D100.

SCORE	CCF ABILITY INCREASED
1 to 10	A Intelligence +3
11 - 20	B Intuition +3
21 - 35	C Dexterity +3
36 - 50	D Agility +3
51 - 55	E Vision 1 normal +3
56 - 60	E Vision 2 immunity to being dazzled
61 - 65	E Vision 3 +10 through smoke
66 - 75	G Regeneration, healing rate doubled
75 -100	H Strength +1



CYBORGS

Any character who has lost or has had a limb severely damaged may have a prosthetic replacement made.

Replacement arm costs 500 credits, availability 100%
" leg " 400 " " "

These units are no stronger than the organic original.

The following disadvantages accrue: CCF,C -2 per arm, CCF,D -2 per leg, -1 per arm.
The maximum amount of prosthetic replacement that could take place would be to place the recipient's brain in a complete humanoid android body.

Players who wish to create cyborg characters from scratch (5% chance of doing so) must keep the following in mind. Although the strength of a prosthetic limb is only limited by the power that can be supplied to it, the effective strength can be never greater than that part of the body to which it is attached. All limbs that have more than normal strength require an external power source.

Non standard prosthetics should be submitted to the umpire for permission to use.

DWUVS

Humanoids living on heavy gravity planets evolved to a form resembling the dwarves of terrain mythology. Strength was increased, limbs became heavier and shorter. Eventually the word dwarf was corrupted to Dwuf and this is the name they are now known by.

Dwuf hand weapons tend to be of heavier calibre, but shorter length than those used by most humanoids. This suits their build and strength. The following table should be used with dwuf weaponry.

Weapon	PENETRATION											
	RANGE					ARMOUR						
	Point Blank	Close	Medium	Long	Extreme	DA	PA	LA	FM	FB	FF	UA
Laser Rifle	+10		-5	-10	-15				-10	-20	-15	+25
Laser Pistol	+10		-25	-30	-40				-10	-20	-15	+25
Autolaser	+10		-10	-15	-20				-10	-20	-15	+25
Hvy Laser	+10	+10	+5		-5	+10	+15	+15	+5	+20	+10	+50
Gyro Rifle					-5	+25	+35	+35	+20			
Gyro Pistol			-5	-15	-20	+25	+35	+35	+20			
Hvy Gyro Assault Rifle					-5	+40	+50	+50	+30			
Rifle	+10					-5	-5					
Slug Pistol	+10		-10	-20	-40	-5	-5					
Machine Pistol	+10		-15	-30	-45	-10	-10	-5				
Armour Piercing Dum-Dum	+15	+5				+30	+35	+40	+30			
						-20	-20	-20	-15			

For accuracy, deduct 1 per metre more than standard equivalent weapon.

All other effects same as standard equivalents.

If a normal human is using a Dwuf weapon, he deducts 10 from his weapon skill if firing a shoulder arm or Hvy weapon and 20 if firing a hand gun.

Dwuvs firing standard weapons deduct 5 and 10 respectively.

DWUF CCFs and MASS

A,B,C,E,F and G as normal human

D normal -2, H normal +1, Mass normal +2

DWUF BSF - Male and female equal.

- 1 2 metres
- 2 1.5 metres
- 3
- 4 1.2 metres
- 5 1.8 metres

DWUF HIT LOCATION TABLE

TARGET ANGLE FACTORS

Location	1 and 5	2 and 4	3	7	6 and 8
Head	01- 15	01- 15	01- 15	01- 15	01- 15
Right Arm	16- 24	16- 21	16- 18	16- 33	16- 26
Left Arm	25- 32	22- 32	19- 36	34- 36	27- 32
Upper Body	33- 48	33- 48	37- 50	37- 50	33- 48
Middle Body	49- 64	49- 64	51- 64	51- 64	49- 64
Lower Body	65- 80	65- 80	65- 80	65- 80	65- 80
Right Leg	81- 90	81- 87	81- 84	81- 93	81- 96
Left Leg	91-100	88-100	85-100	94-100	97-100

The Collapse of the Empire

It was not the activities of the red redemption, nor such upheavals as the great droid war that eventually brought about the downfall of the Empire.

It was the pure logistic problems of keeping such a large centralized organisation supplied with raw materials that led to its demise. Earth, and many of the inner worlds, were to become barely inhabitable.

As Earth weakened its grip, the Lord Knights became more independant and established their own kingdoms.

The officials of the Inquisition either joined forces with the local Lord Knight or became leaders of highly efficient mercenary armies. The red redemption had divided into so many sects that it was unable to take advantage of this general collapse. Indeed the various sects of the redemption tended to fight each other more bitterly than they ever did against the Empire.



It was left to the merchant organisations of the frontier worlds to begin a new period of expansion. The near monopoly of raw materials which these organisations held was a powerful factor in their success. It was through this control of supply that they were often able to blackmail those, such as the Lord Knights, into doing their bidding. Competition between the various groups was often violent. Also it is a fact that a great deal of the transactions carried out by these companies was done so at gunpoint. Eventually through takeovers and amalgamations, the number of these companies dropped to nine major organisations.

When these groups had divided the old Empire into reasonably stable (if contentious) spheres of influence, they began to expand outwards into the unknown Universe.

Unfortunately, it was then that the major alien civilizations began to make their presence felt.

THE NINE MAJOR TRADING ORGANISATIONS

Most of these bodies are known by the name of the parent company. All, whatever their title, are general trading organisations. Those that were originally involved with manufacture, got into trade through their franchising organisations. This process was accentuated when barter became the main force of trade, during the rise of the Lord Knights. Some organisations do still have fields of specialisation, but one of the major activities of all of them is selling protection.

THE NINE (ALL ARE MOST COMMONLY KNOWN BY THEIR INITIALS)

General Products Organisation	G.P.O.
Dhaon Vehicular Co.	D.V.C.
Beldon Manufacturing Consortium	B.M.C.
Karwel Synthetic Products	D.S.P.C.
Halliwell Computers and Cybernetics	H.C.C.
Interstellar Export and Import Syndicate	I.E.I.S.
Ahnzel Armaments Corporation	A.A.C.
Allied Trading Federation	A.T.F.
Universal Mercantile Association	U.M.A.

The first three are equal in size and power. They are approximately each twice the size and power of any of the others.

APPENDIX

FORCES OF THE LORD KNIGHTS AND THE COMPANIES

The basic technology of warfare had changed little since the heyday of the Imperium. The Lord Knights and the companies both employed a number of dreadnought and power armoured troops. However, the cost of maintaining such soldiery insured that their numbers were never great. The mainstay of most regular forces were the full light armoured infantry. The heraldic devices of the Lord Knights, or the company symbol, could usually be found emblazoned somewhere on their armour.

Some forces had attached to them units of unarmoured troops for the purposes of scouting, infiltrations, and sneak attacks. Mercenaries, bounty hunters and general hit men were employed by everybody.

REGULAR UNITS

Dreadnought and power armoured troops may be found in the same unit. In cases where this occurs the dreadnought troops will always be the officers and N.C.O's.

Light armoured troops are never mixed with any other type within the unit.

The general proportion of different types within any arm is as follows:

Dreadnought Armour	1
Power "	9
Full light "	40
Unarmoured	5

The larger the army the less the percentage of dreadnought and power armoured types.

As time when on the companies began to supplant their dreadnought and power armoured types with various kinds of wardroids. The number of wardroids was usually double that of the types they replaced.



Aliens

These rules contain only sufficient data for players to use in playing relatively simple games. Those of you who like comprehensive backgrounds must make up their own, or wait until a supplement can be published.

Weaponry is generally similar in nature to that used by humanity. However, it will differ in appearance and intensity of effect. Also sights designed for use by one race will always be unsuitable for use by any other. Method of operation will not always be apparent to any being unfamiliar with it (which is the safety catch and which is the trigger, for instance).

Things which motivate one race are not necessarily the same as those which motivate another. This is something that all players utilising Aliens must bear in mind (and something umpires must always bear in mind).

Below are the basic notes on background and behaviour on the five races covered in this volume.



FROOGS

These are physically the weakest of the major races of the known Galaxy. They are however the most technically advanced. Individuals do not differ greatly from each other physically or mentally.

Basically they appear to be quite placid, but there is a streak of xenophobia in their make-up, and this coupled with their instinct for survival led them to develop the most powerful weaponry of any of the spacefaring races. It was also this characteristic that led (after a long and fruitless war) to an alliance with the Szithk.

Froogs are physical cowards (at least to the human viewpoint). For this reason their weaponry tends towards that of a long range nature. Pistols are sometimes carried as a last resort defence weapon, but such things as carbines and sub-machine guns and their equivalents have no place in the Froog arsenal. Their forte is in the deployment of light artillery and heavy infantry weaponry. They never carry any personal combat weapons of any nature.

SZITHK

These beings are the total opposite in nature to their Froog allies (the alliance coming about by the lack of ability of one to destroy the other, coupled with an even greater mutual distrust of all other races they have met). Szithk society is based on the warrior clan, and great importance is attached to personal acts of bravery. Like similar societies, great stress is also laid on the concept of honour. By their nature close in personal combat is the preference of the Szithk. The younger and more inexperienced members of this race are difficult to restrain in combat situations, such things as taking cover having to them the taint of cowardice.

The weapons favoured by this race tend to consist mainly of short range small arms and a variety of force and power blades. Szithk small arms usually have a high rate of fire and a devastating effect on impact, and are marred only by the fact that they are woefully inaccurate.

The above two races when encountered outside their home systems will invariably be acting as a part of their military organisation, and both races will always be present.

MRURZ

Not a great deal is known about this race. They are usually encountered as small scientific research teams on unexplored planets, or sometimes as mercenaries in various armies (ingroups of not less than three, and not more than eight). These beings always carry weapons of their own manufacture whatever force they are serving with. They will, however, only serve with any force for a specific period, and when that period is up they will go their own way. This fact does not deter people from hiring them for they are in combat considered worth at least equal to five of any other race.

The two races below are beings less technically developed than the humans, and the three above. They may be encountered acting in various roles for the more developed races - bodyguards, mercenaries bounty hunters, etc.

CENTULONS

These creatures may be encountered as mercenaries in the employ of humans, usually in the role of scouts. The odd individual may also be found in the company of parties of Mrurz. Centulon weapons are of human or Mrurz manufacture specially adapted for their own use.

THULGS

In human societies, Thulgs are usually found doing the work of bounty hunters and bodyguards. Some Thulgs may even have official status as lawmen. The occasional solitary Thulg may be found in Szithk/Froog military parties. They prefer to use Szithk weapons adapted to their own use, but are more often encountered using adapted Human weapons.

FURTHER NOTE ON WEAPONS

For every point of XDF there is between the manufacturer of a weapon's race and the race of the user, deduct 5% off the chance to hit. This rule does not apply if it is one of those adapted for use by a specific race as above.

Language

It is assumed that the above races have been in contact long enough for a percentage of the population of each race to be able to speak at least one language of the others. Umpires may devise methods of their own for determining the linguistic abilities of individuals.

No points or costs have been set out for Aliens or their weapons. Experience up to yet has shown direct numerical ratios between races are the most practical. Some of those that I have found that work generally well are: a mixed Froog/Szithk force is equal to the same quantity of regular human types (energy ball projector should be equivalent to 1 conversion beam project + 1 missile launcher). Mrurz should be outnumbered by at least 3 to 1 when opposing humans of same class.

Centulons are roughly equivalent to 2 humans of same class.

Thulgs can be either an asset or a liability, but 1 per 3 humans seems right.

The thing that must be born in mind, however, is that the setting in which a game takes place alters the usefulness of both creatures and weapons greatly. In the final analysis it is the responsibility of the creator of any scenario to achieve balanced forces. By experimenting with various mixes of forces you will no doubt find the balance of types that suit you.

Aliens as Characters

When Aliens are being used as characters, the chart for randomly choosing human class types should be used, or alternatively they should be classed as raw recruits.

Non-Intelligents

The full rules for these will be published in a supplement, but for those who wish to use them, the following guideline should be used.

Use the same structure as for intelligent forms, but use the intelligence factor on a more basic level. Make this a non random factor, and use it as a scale for judging such things as the ability to recognise individuals of other species and the level to which it can be trained.

No non-intelligent may have weapon skill, but those that fire projectiles which are part of their structure* should use the combat skill plus one D6.

* Such things as quills or pods.

FROOGS

SPECIAL RULES AND TABLES

BEHAVIOUR

Before a Froog can advance towards an enemy a score of 35% or less (D100) is required. If the opportunity to take cover occurs when advancing then a score of 50% or less is required for them not to take advantage of such cover. If the distance between them and the enemy is less than 30 metres then the percentages are reduced by 10%. The above rule does not apply if Power Armour is being worn, or if they are in an AFV.

WEAPONS & EQUIPMENT

Power Armour - Froog Power Armour is superior to Human Dreadnought Armour.

Power Rating	35
Basic chance of being penetrated	minus 25%
Chance of malfunction	25%

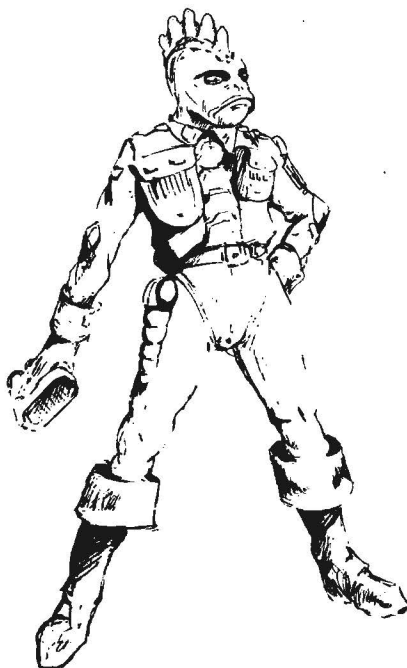
WEAPONS

Froog weaponry is similar in nature to Human weaponry, but is superior in accuracy and effect. The following additions should be made to all Froog fire.

All aimed fire	+10%
Artillery and Infantry Heavy support fire	+10%
Snap shots	-15%
+5% on penetration at any range	

One weapon unique to the Froogs is the Energy Ball Projector. This weapon is classed as a Heavy Support Weapon (classed as heavy Gyro for basic accuracy).

The weapon fires a sphere that when 7.5 metres from the projector emits radiant heat. Any object that is within 1 metre of the sphere is affected in the same way as an object caught in the inner area of a Sun Gun burst.



Any object within 1.5 metres of the sphere takes D6 Hand Flamer hits. The sphere travels in a straight line on a flat trajectory, at a rate of 35 metres a bound. The weapon carries 5 shots and takes 3 bounds to reload. Rate of fire when loaded is 1 per bound. When sphere contacts solid matter it explodes with effects of a mininuke but with half the diameters of the burst circle of that weapon.

FROOG UNIFORM

The material from which these are made has certain energy absorbing properties. For the purposes of penetration this material should be treated as Light Armour, but for all other purposes as ordinary dress. For failed penetration hits on froogs wearing uniform, use the failed penetration table in the original Laserburn rules, but add 3 to the D6 result. Froogs in Power Armour do not have to check for failed penetration hits, as they are unaffected.

ENCOUNTERS

Froogs will be classed as regular soldiers (whatever their occupation) with every tenth member having a 10% chance of being a veteran, this chance is cumulative, i.e. the twentieth member having a 20% chance of being a veteran. Veterans may also be specialists.

COLOUR

Froog skin varies from blue-grey to grey-green.

UNIFORM

Colour is light grey with differently coloured collars showing which arm of service they belong to:

Black	Infantry
Blue	Artillery
White	Engineers
Power Armour	Grey or camouflage pattern

A variety of rank badges are worn, the majority of which are dull red in colour.

FROOG TABLES

CCF's	
A) Intelligence	D6 Score 1 2 3 4 5 6 Factor 6 6 6 7 7 8
B) Intuition	D6 Score 1 2 3 4 5 6 Factor 1 1 1 2 3 4
C) Dexterity	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
D) Agility	D6 Score 1 2 3 4 5 6 Factor 1 1 2 3 4 4
E) Vision	D6 Score 1 2 3 4 5 6 Factor 2 2 2 3 3 4
F) Endurance	Same modifier as G)
G) Regenerative Rate (Regenerative Capacity 1)	D6 Score 1 2 3 4 5 6 Factor 1 1 1 1 2 2
H) Strength	D6 Score 1 2 3 4 5 6 Factor 1 1 2 2 3 3
I) Mass	D6 Score 1 2 3 4 5 6 Factor 2 3 3 3 3 4

Society Type:

TD 18 SDA B

Xenological Chart Position - J8

BSF 1 2 Metres

" 2 2 "

" 3 NA "

" 4 1.5 "

" 5 2.6 "

Movement: Walk - 7.5 Metres

Run - 10 Metres

EFFECT OF HIT CHART (THROW D10)

Weapon	Dice Score	Head	Body	Limb
Lasers • Outer Blast Areas. Other Melee Weapons	1	Dead	Dead	Serious
	2			
	3			
	4	Blinded	Serious	Light
	5			
	6	Serious		
	7			
	8			
	9			
	0	Light	Light	
Slug- Throwers. Heavy Lasers. Inner Blast Areas. Mono- Blades	1	Dead	Dead	Serious
	2			
	3			
	4			
	5			
	6	Blinded	Serious	Light
	7			
	8	Serious		
	9			
	0		Light	
Incend- iaries. Gyrobolts. Force Blades Hand Flamers	1	Dead	Dead	Dead
	2			Serious
	3			
	4			
	5			
	6	Serious	Serious	Light
	7			
	8		Serious	
	9			
	0	Light		

MODIFIERS

Uniform Penetrated +2
Power Armour
Penetrated +6

FAILED PENETRATION MODIFIERS

+3 on all hits
(except PA, this is unaffected by non-penetrating hits on this table)

HIT LOCATION TABLE

FROOG (AS HUMAN CHART)

Location	TARGET ANGLE FACTORS				
	1 & 5	2 & 4	3	7	6 & 8
Head	01- 10	01- 10	01- 10	01- 10	01- 10
Right Arm	11- 20	11- 17	11- 14	11- 29	11- 23
Left Arm	21- 30	18- 30	15- 33	30- 33	24- 30
Upper Body	31- 40	31- 40	34- 40	34- 40	31- 40
Middle Body	41- 55	41- 55	41- 55	41- 55	41- 55
Lower Body	56- 70	56- 70	56- 70	56- 70	56- 70
Right Leg	71- 85	71- 82	71- 78	71- 92	71- 88
Left Leg	86-100	83-100	79-100	93-100	89-100

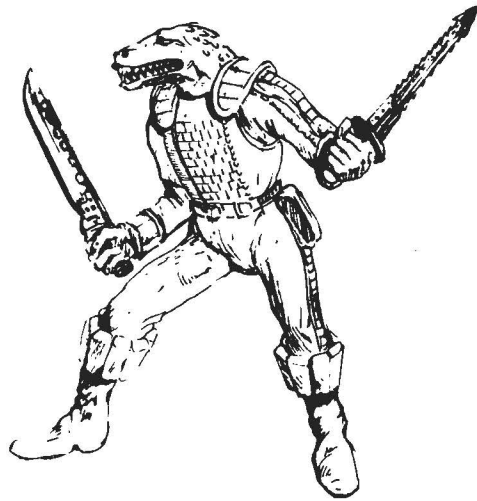


SZITHKS

SPECIAL RULES AND TABLES

BEHAVIOUR

Each Szithk not in view of a unit commander must score 65% or less (D100) not to advance in the direction of the enemy. For a Szithk not in view of a unit commander to hide behind cover, a score of 45% or less is required. Within 30 metres of an enemy these percentages are reduced by 10%. Unit commanders raise the percentage needed by 10. Veterans also are less susceptible to rashness and their percentage is raised by 10%.



WEAPONS AND EQUIPMENT

Szithk battledress has mesh armour incorporated in it. Also a cuirass of higher armour is usually worn underneath. Szithk skin is also the equivalent of mesh armour so if the uniform is penetrated, throw again to see if the skin is punctured. The skull is equivalent to higher armour. Their eyesight although poor is capable of seeing into higher spectra than humans and the only affect a flame has is to make them blink.

Their weapons are less accurate than human, but more effective.

Aimed Szithk fire -20%

Snap shots No deduction

All weapons have an extra -1 variation per metre than their human equivalent.

All weapons have a +10 on penetration effect.

Weapons are heavier and bulkier than human types and this must be considered if a less physically strong being attempts to use one (umpire's discretion for penalties).

Szithk do not use lasers.

Note, many Szithk weapons have retracting mono-blade bayonets, some even have force blades.

NON-PENETRATING HITS

Use the table in original Laserburn but deduct 2 from D6 result.

Encounters - Szithk forces are split evenly between veterans and regular soldiers. For every 8 there will be a commander at tens level.

COLOUR

Skin colours run from blue to green to yellow, also patterns of darker hue are common in the form of irregular stripes.

UNIFORM

Each Szithk clan has its own uniform, so pretty much anything goes here. Colours will tend to be bright, combinations of the primary colours being much favoured.



SZITHK TABLES

CCF's	
A) Intelligence	D6 Score 1 2 3 4 5 6 Factor 1 1 2 3 4 5
B) Intuition	D6 Score 1 2 3 4 5 6 Factor 1 2 3 4 5 6
C) Dexterity	D6 Score 1 2 3 4 5 6 Factor 1 1 2 3 4 5
D) Agility	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
E) Vision	D6 Score 1 2 3 4 5 6 Factor 1 1 1 2 3 4
F) Endurance	Same modifier as G)
G) Regenerative Rate (Regenerative Capacity 2)	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
H) Strength	D6 Score 1 2 3 4 5 6 Factor 6 7 8 8 9 9
I) Mass	D6 Score 1 2 3 4 5 6 Factor 4 5 5 6 6 7

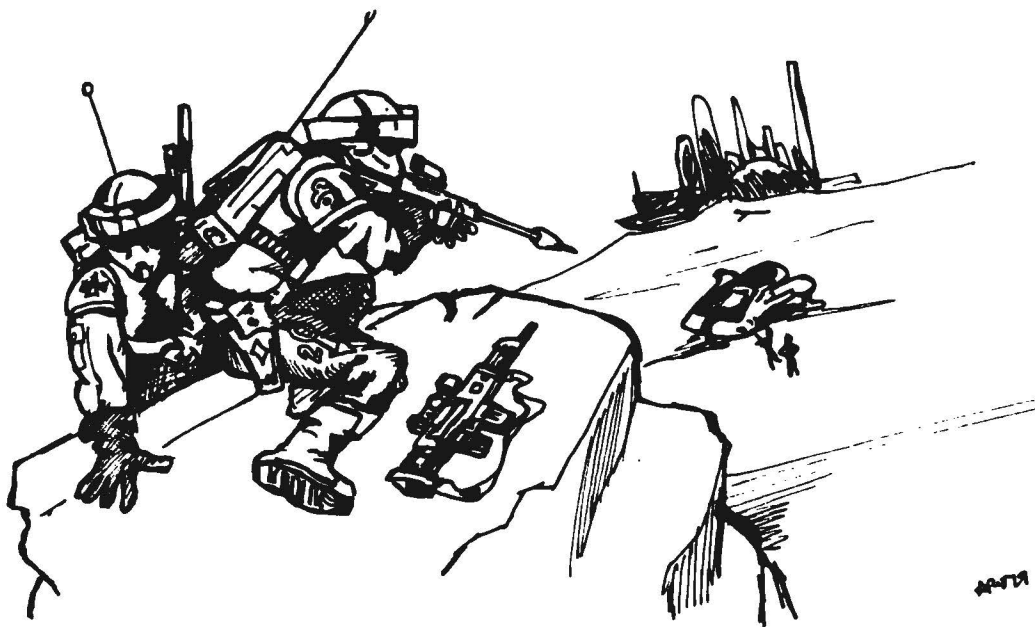
Society Type:

TD 15 SDA D

Xenological Chart Position - L8

BSF	1	2	Metres
"	2	2.3	"
"	3	NA	"
"	4	1.5	"
"	5	3	"

Movement: Walk - 12.5 metres
Run - 20 metres



SZITHK HIT LOCATION TABLE

TARGET ANGLE FACTORS					
Location	1 & 5	2 & 4	3	7	6 & 8
Head	01- 06	01- 08	01- 10	01- 10	01- 08
Right Arm	07- 16	09- 16	11- 14	11- 29	09- 21
Left Arm	17- 26	17- 28	15- 33	30- 33	22- 28
Upper Body	27- 38	29- 39	34- 40	34- 40	29- 39
Middle Body	39- 53	40- 55	41- 55	41- 55	40- 55
Lower Body	56- 70	56- 70	56- 70	56- 70	56- 70
Right Leg	71- 85	71- 82	71- 78	71- 99	71- 88
Left Leg	86-100	83-100	79-100	93-100	89-100

EFFECT OF HIT CHART (THROW D10)

Weapon	Dice Score	Head	Body	Limb
Lasers. Outer Blast Areas. Other Melee Weapons.	1	Dead	Serious	Serious
	2	Blinded		Light
	3	Serious		
	4			
	5			
	6	Light		
	7			
	8			
	9			
	0			
Slug- Throwers. Heavy Lasers. Inner Blast Areas. Mono- Blades.	1	Dead	Dead	Serious
	2		Blinded	
	3			
	4	Serious	Serious	
	5			
	6		Light	
	7			
	8			
	9	Light		
	0			
Incend- iaries. Gyrobolts. Force Blades. Hand Flamers.	1	Dead	Dead	Serious
	2		Blinded	
	3			
	4	Serious	Serious	
	5			
	6		Light	
	7			
	8			
	9			
	0			

NORMAL MODIFIERS

FAILED PENETRATION
MODIFIERS

-1 on all hits

NOTE: Lasers will not have blinding effect, throw D6.

Odd Score - Dead

Even Score - Serious wound



MRURZ

SPECIAL RULES AND TABLES

Mrurz react in a way similar to humans in combat situations, the one thing they will not do is fight their own kind. When two groups with Mrurz mercenaries are in conflict, the Mrurz will engage any non-Mrurz members of the opposition.

WEAPONS AND EQUIPMENT

The favoured weapon of the Mrurz is the 'Augmented Laser'. This weapon fires charged particles along the path of the laser. The effect is similar to being hit by a gyrobolt and laser simultaneously and targets that are hit will dice for the combined effect of both. Accuracy, rate of fire, etc. are similar to standard human lasers. Being large strong beings, the Mrurz make their weapons much heavier and bulkier than their human equivalents. This is also reflected in their effects. A Mrurz pistol would have the effect of a human rifle, a Mrurz rifle the effect of a human heavy weapon, and so on. The effective ranges of these weapons would be the same as their human equivalents. Mrurz grenades have twice the radius of effect that human manufactured types do.



ARMOUR

Most Mrurz armour is limited to upper and middle body protection. This armour will be either of mesh or light armour, but no deductions for initiative should be made as the encumbrance effect on Mrurz Armourplasm and DME shields are frequently carried.

ENCOUNTERS

A D100 should be thrown.

DICE SCORE	CLASS
1 to 10	F
11 to 50	B
51 to 80	C
81 to 100	D

1 in every 5 will be specialist (this is a minimum)

COLOUR

Tawny yellow to red brown occasionally with leopard like spots.

UNIFORM

Not worn, each wears individual dress, favoured colours being reds, yellows, browns and blacks.

MRURZ TABLES

CCF's	
A) Intelligence	D6 Score 1 2 3 4 5 6 Factor 4 5 6 7 7 8
B) Intuition	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
C) Dexterity	D6 Score 1 2 3 4 5 6 Factor 3 4 5 6 7 8
D) Agility	D6 Score 1 2 3 4 5 6 Factor 3 4 5 6 7 8
E) Vision	D6 Score 1 2 3 4 5 6 Factor 3 3 4 5 6 7
F) Endurance	Same modifier as G)
G) Regenerative Rate (Regenerative Capacity 1)	D6 Score 1 2 3 4 5 6 Factor 3 3 4 5 6 6
H) Strength	D6 Score 1 2 3 4 5 6 Factor 3 4 5 6 7 8
I) Mass	D6 Score 1 2 3 4 5 6 Factor 3 4 5 6 7 8

Society Type:

TD 16 SDA C

Xenological Chart Position - I 11

BSF 1 2.5 Metres

" 2 2.8 "

" 3 NA "

" 4 2 "

" 5 3.4 "

Movement: Walk - 15 metres

Run - 35 metres



MRURZ HIT LOCATION TABLE

Location	TARGET ANGLE FACTORS				
	1 & 5	2 & 4	3	7	6 & 8
Head	01- 12	01- 12	01- 12	01- 12	01- 12
Right Arm	13- 22	13- 19	13- 16	13- 31	13- 25
Left Arm	23- 32	20- 32	17- 35	32- 35	26- 32
Upper Body	33- 42	33- 42	36- 42	36- 42	33- 42
Middle Body	43- 57	43- 57	43- 57	42- 57	43- 57
Lower Body	58- 72	58- 72	58- 72	58- 72	58- 72
Right Leg	73- 86	73- 86	73- 79	73- 93	73- 89
Left Leg	87-100	87-100	80-100	94-100	90-100

EFFECT OF HIT CHART (THROW D10)

Weapon	Dice Score	Head	Body	Limb			
Lasers. Outer Blast Areas. Other Melee Weapons	1	Dead	Dead	Serious			
	2	Blinded	Serious	Light			
	3						
	4	Serious	Light				
	5						
	6						
	7						
	8	Light					
	9						
0							
Slug- Throwers. Heavy Lasers. Inner Blast Areas. Mono- Blades	1	Dead	Dead	Serious			
	2		KO'd				
	3						
	4	Blinded	Serious				
	5		Light				
	6	KO'd		Light			
	7	Serious					
	8						
	9						
	0	Light					
Incend- iaries. Gyrobolts. Force Blades. Hand Flamers	1	Dead	Dead	Serious			
	2		KO'd				
	3						
	4		Serious				
	5	Blinded	Light				
	6	KO'd		Light			
	7	Serious					
	8						
	9						
0							

MODIFIERS AS FOR
ORIGINAL LASERBURN

FAILED PENETRATION

-2 on all hits



THULGS

SPECIAL RULES & TABLES

BEHAVIOUR

The main thing about these creatures is their dedication to completing a task. When they agree to do a job they will follow it through with an amazing degree of single mindedness. Nothing ever deters a Thulg from his purpose (except death).

WEAPONS

These huge creatures carry a variety of cut down hvy weapons for their own use. One favourite is a hvy gyrogun modified as a pistol. Such weapons will have the original effects, but have the ranges cut down to what they have been modified into. Grenades used have treble the burst circles of those used by humans. No weapon has any encumbrance value, many carry power packs for force weapons in belt pouches.

ARMOUR

With skin the equivalent of light armour, Thulgs do not really require any additional protection, but it is not rare to encounter these creatures wearing odd plates from old power armour suits. Note: A Thulg's hands always count as armoured fists when striking.

COLOUR

As for Szithk, with the addition of some orange/red skinned individuals.

UNIFORM

None, personal dress usually brightly coloured and very often decorated with intricate swirling patterns.

ENCOUNTERS

Throw a D100 for class.

DICE SCORE	CLASS
1 to 14	F
15 to 57	E
58 to 100	D

THULG TABLES

CCF's	
A) Intelligence	D6 Score 1 2 3 4 5 6 Factor 2 2 2 3 4 5
B) Intuition	D6 Score 1 2 3 4 5 6 Factor 1 1 2 3 4 5
C) Dexterity	D6 Score 1 2 3 4 5 6 Factor 1 1 2 3 4 4
D) Agility	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
E) Vision	D6 Score 1 2 3 4 5 6 Factor 1 1 2 2 3 4
F) Endurance	Same modifier as G)
G) Regenerative Rate (Regenerative Capacity 3)	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
H) Strength	D6 Score 1 2 3 4 5 6 Factor 9 9 10 10 10 11
I) Mass	D6 Score 1 2 3 4 5 6 Factor 8 8 9 9 9 10

Society Type:

TD 4 SDA D

Xenological Chart Position - N2

BSF 1 3.5 Metres

" 2 3.5 "

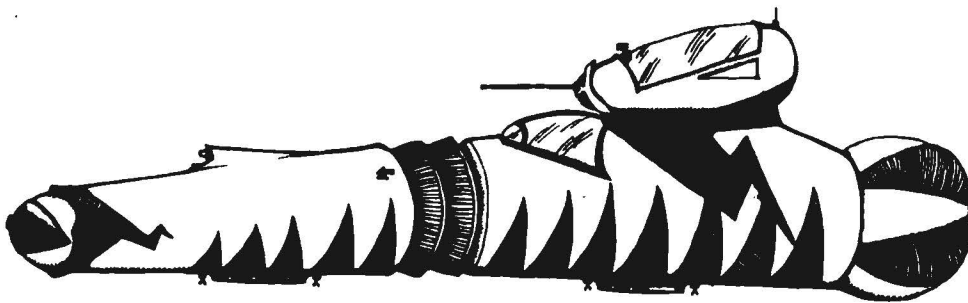
" 3 3 "

" 4 3 "

" 5 4 "

Movement: Walk - 25 metres

Run - 30 metres



THULG HIT LOCATION TABLE

TARGET ANGLE FACTORS								
Location	1	2	3	4	5	6	7	8
Head	01- 06	01- 08	01- 10	01- 08	01- 06	01- 08	01- 10	01- 08
Right Arm	07- 16	09- 16	11- 14	09- 16	07- 16	09- 21	11- 29	09- 21
Left Arm	17- 26	17- 28	15- 33	17- 28	17- 26	22- 28	30- 33	22- 28
Upper Body	27- 38	29- 39	34- 40	29- 39	27- 38	29- 39	34- 40	29- 39
Middle Body	39- 55	40- 55	41- 55	40- 55	39- 55	40- 50	41- 55	40- 55
Lower Body	55- 64	56- 64	56- 62	56- 60	56- 58	56- 60	56- 62	56- 64
Right Leg	65- 78	65- 75	63- 70	61- 66	59- 72	61- 74	63- 78	65- 84
Left Leg	79- 92	76- 95	71- 86	65- 80	73- 86	75- 80	79- 86	85- 95
Tail	93-100	96-100	87-100	81-100	87-100	81-100	87-100	96-100

EFFECT OF HIT CHART (THROW D10)

Weapon	Dice Score	Head	Body	Limb	Tail
Lasers. Inner Blast Areas. Other Melee Weapons	1	Dead	Serious	Serious	Light
	2	Blinded		Light	
	3	Light			
	4				
	5				
	6				
	7				
	8				
	9				
	0				
Slug- Throwers. Heavy Lasers. Inner Blast Areas. Mono- Blades	1	Dead	Dead	Serious	Serious
	2		Serious		
	3				
	4	Blinded	Light	Light	Light
	5	Serious			
	6				
	7				
	8				
	9	Light			
	0				
Incend- iaries. Gyrobolts. Force Blades. Hand Flamers	1	Dead	Dead	Serious	Serious
	2		Serious		
	3				
	4	Blinded	Light	Light	Light
	5	Serious			
	6				
	7				
	8				
	9	Light			
	0				

Wounds to tail have half the effect of a similar leg wound in regard to movement.

NON PENETRATING SHOTS

-3 on all hits

CENTULONS

SPECIAL RULES & TABLES

BEHAVIOUR

No special rules, much like humans.

WEAPONS

Usually use modified human or Mrurz weapons.

ARMOUR

Very rarely worn. Flak or mesh on forebody or mainbody occasionally encountered. Human type force bubbles are however frequently used. In close combat Centalons count as 2 opponents, one fighting to full effect with whatever weapon it is using, and one fighting at half effect with a dagger. This is to take into account the long retractable claws in the forefeet which they use as secondary weapons. Centalons have duplicated organs in the forebody and main body. To kill a Centalon requires a dead result on both body sections, or three dead results in either (see effect of hit table).



WOUNDS ON LEGS

Serious - Foreleg - Reduces speed to 75%
Hindleg - Reduces speed to 50%

Light - Foreleg - Reduces speed to 90%
Hindleg - Reduces speed to 75%

May not run or leap.

COLOUR - Stripes similar to a tiger but colour more subdued. Underbelly white to pale grey. No form of dress worn, equipment and/or armour usually grey, but may also be black or white.

CENTULON TABLES

CCF's	
A) Intelligence	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
B) Intuition	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
C) Dexterity	D6 Score 1 2 3 4 5 6 Factor 2 3 4 5 6 7
D) Agility	D6 Score 1 2 3 4 5 6 Factor 4 4 5 6 7 8
E) Vision	D6 Score 1 2 3 4 5 6 Factor 5 6 7 7 8 9
F) Endurance	Same modifier as G)
G) Regenerative Rate (Regenerative Capacity 1)	D6 Score 1 2 3 4 5 6 Factor 1 2 3 4 5 6
H) Strength	D6 Score 1 2 3 4 5 6 Factor 4 5 5 6 6 7
I) Mass	D6 Score 1 2 3 4 5 6 Factor 6 7 7 7 8 9

ENCOUNTERS

Throw D100 for class

DICE SCORE	CLASS
1 to 20	F
21 to 50	D
51 to 100	C

Society Type:

TD 8 SDA C

Xenological Chart Position - O3

BSF	1	2.3	Metres
"	2	2.3	"
"	3	2.6	"
"	4	2	"
"	5	3.1	"

Movement: 20 metres walk
30 metres run
40 metres leap in straight line

1 turn in 4 must have run for all of previous turn, the last half of which must have been in a straight line.

CENTULON HIT LOCATION TABLE

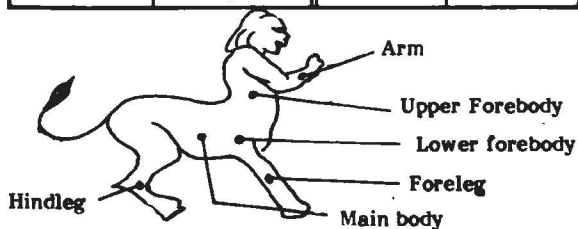
TARGET ANGLE FACTORS								
Location	1	2	3	4	5	6	7	8
Head	01- 10	01- 10	01- 10	01- 10	01- 10	01-10	01- 10	01- 10
Right Arm	11- 20	11- 17	11- 14	11- 17	11- 20	11- 23	11- 29	11- 23
Left Arm	21- 30	18- 30	15- 33	18- 30	21- 30	24- 30	30- 33	34- 30
Upper Forebody	31- 50	31- 50	34- 50	31- 50	31- 50	31- 50	34- 50	31- 50
Lower Forebody	51- 70	51- 60	51- 55				51- 55	51- 60
Main Body		61- 70	56- 70	51- 70	51- 60	51- 70	56- 70	61- 70
Right Foreleg	71- 80	71- 76	71- 75	71- 74	61- 65	71- 76	71- 80	71- 84
Left Foreleg	81- 90	77- 90	76- 85	75- 80	67- 70	77- 80	81- 85	85- 90
Right Hindleg	91- 95	91- 94	86- 90	81- 86	71- 85	81- 94	85- 95	91- 96
Left Hindleg	96-100	95-100	91-100	87-100	86-100	95-100	96-100	97-100

EFFECT OF HIT CHART (THROW D10)

Weapon	Dice Score	Head	Fore Body	Limb	Main Body
Lasers. Outer Blast Areas. Other Melee Weapons	1	Dead	Dead*	Serious	Dead*
	2	Blinded			
	3		Serious		Serious
	4				
	5	Serious		Light	
	6		Light		Light
	7				
	8	Light			
	9				
	0				
Slug- Throwers. Heavy Lasers. Inner Blast Areas. Mono- Blades	1				
	2	Dead	Dead*		Dead*
	3			Serious	
	4	Blinded	KO'd		Serious
	5	KO'd			
	6		Serious		
	7	Serious		Light	
	8				Light
	9	Light	Light		
	0				
Incend- iaries. Gyrobolts. Force Blades Hand Flamers.	1				
	2	Dead	Dead*		Dead*
	3				
	4			Serious	
	5	Blinded			
	6	KO'd			Serious
	7		Serious		
	8	Serious		Light	
	9		Light		Light
	0				



*See special rules.

NORMAL
MODIFIERSNON PENETRATING
HITS

-4 on all hits



**A PRODUCT OF
TABLETOP GAMES**